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ANNUAL REPORT 2013

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

# Form 10-K

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✓ ANNUAL REPORT PURS EXCHANGE ACT OF 193	SUANT TO SECTION 13 O	R 15(d) OF THE SE	CURITIES
	For the fiscal year ended Jul	y 31, 2013	SEC
	OR		Mail Processing
☐ TRANSITION REPORT IS SECURITIES EXCHANG	PURSUANT TO SECTION E ACT OF 1934	13 OR 15(d) OF TH	E Section
	For the transition period from	to	DEC 112013
	Commission File Number	0-6715	Washington DC 404
A	nalogic Corp	oration	104
	(Exact name of registrant as specified		
Massachusetts	, , , , , , , , , , , , , , , , , , , ,	04-24543	372
(State or other jurisdict		(I.R.S. Emp	
incorporation or organi	zation)	Identification	
8 Centennial Drive, Peabody, (Address of principal execut		01960 (Zip Cod	
	(978) 326-4000 (Registrant's telephone number, inclu	uding area code)	
Secu	rities registered pursuant to Sect	ion 12(b) of the Act:	
Title of Each Clas	<u>s</u>	Name of Each Exchange o	n Which Registered
Common Stock, \$0.05 p	oar value	NASDAQ Global S	Select Market
Seci	rities registered pursuant to Sect	ion 12(g) of the Act:	
	None		
Indicate by check mark if the regist Act. Yes 🔽 No 🗌	rant is a well-known seasoned issue	er, as defined in Rule 405 o	f the Securities
Indicate by check mark if the registr Act. Yes $\square$ No $\boxed{\square}$			
Indicate by check mark whether the Securities Exchange Act of 1934 during such reports), and (2) has been subject to	e registrant (1) has filed all reports of the preceding 12 months (or for such such filing requirements for the pa	ch shorter period that the re	gistrant was required to file
Indicate by check mark whether the Interactive Data File required to be subn for such shorter period that the registran	e registrant has submitted electronic nitted and posted pursuant to Rule 4 t was required to submit and post su	05 of Regulation S-T during	ig the preceding 12 months (or
Indicate by check mark if disclosur will not be contained, to the best of regis in Part III of this Form 10-K or any ame	e of delinquent filers pursuant to Ite strant's knowledge, in definitive prondment to this Form 10-K.	em 405 of Regulation S-K i oxy or information statemen	s not contained herein, and its incorporated by reference
Indicate by check mark whether the smaller reporting company. See the defi Rule 12b-2 of the Exchange Act.	e registrant is a large accelerated file nitions of "large accelerated filer", "	er, an accelerated filer, a no "accelerated filer", and "sm	on-accelerated filer, or a naller reporting company" in
Large accelerated filer   ✓  Non-accelerated filer   (Do not check	if a smaller reporting company)		Accelerated filer   Smaller reporting company
Act.) Yes 🗌 No 🗸	e registrant is a shell company (as d		
The aggregate market value of the approximately \$912,972,000. As of Sep	registrant's common stock held by r tember 24, 2013, there were 12,423	non-affiliates of the registra ,079 shares of common sto	ant at January 31, 2013 was ck outstanding.
De	OCUMENTS INCORPORATED	BY REFERENCE:	
Portions of the registrant's definitive Stockholders, are incorporated by refere	we proxy statement, which will be is since in Part III of this Annual Repor	sued in connection with the ton Form 10-K.	e 2013 Annual Meeting of

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### Item 1. Business

Throughout this Annual Report on Form 10-K, unless the context states otherwise, the words "we," "us," "our" and "Analogic" refer to Analogic Corporation and all of its subsidiaries taken as a whole, and "our board of directors" refers to the board of directors of Analogic Corporation. All dollar amounts in Item 1. Business are in thousands, unless otherwise stated.

### **Description of Business**

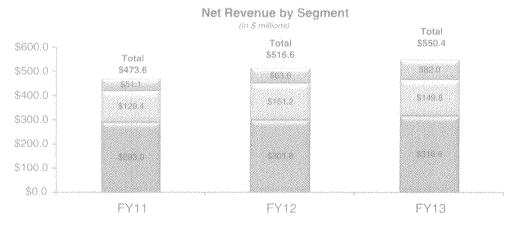
Analogic (NASDAQ:ALOG) provides leading-edge healthcare and security technology solutions to advance the practice of medicine and save lives. We are recognized around the world for advanced imaging systems and technology that enable computed tomography ("CT"), ultrasound, magnetic resonance imaging ("MRI") and digital mammography, as well as automated threat detection for aviation security. Our CT, MRI, digital mammography, and ultrasound transducer products are sold to original equipment manufacturers ("OEMs"), providing state-of-the-art capability and enabling them to enter new markets and expand their existing market presence. Our state-of-the-art ultrasound systems are sold directly to clinical end users through our sales force under the BK Medical and Ultrasonix brands and are primarily used for procedure guidance markets such as urology, surgery, and point-of-care.

We were incorporated in the Commonwealth of Massachusetts in November 1967 and our headquarters is based just north of Boston in Peabody, Massachusetts.

Our business is strategically aligned into three segments: Medical Imaging, Ultrasound, and Security Technology. Our business segments are described as follows:

- Medical Imaging primarily includes systems and subsystems for CT and MRI medical imaging
  equipment as well as state-of-the-art, selenium-based detectors for screening of breast cancer and other
  diagnostic applications in mammography.
- Ultrasound includes ultrasound systems and transducers primarily in the urology, surgery (including robotic assisted surgery), anesthesia, and point-of-care markets.
- Security Technology includes advanced threat detecting CT systems utilizing our expertise in advanced imaging technology and primarily used in the checked baggage screening at airports worldwide.

Refer to Note 18 to the notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for financial information regarding our segments. The following chart shows net revenue by segment in millions for fiscal years 2013, 2012, and 2011, respectively:



### **Medical Imaging**

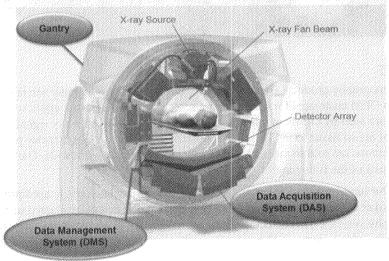
Our Medical Imaging segment, which accounted for approximately 58% of our net revenue in fiscal year 2013, consists primarily of systems and sub-systems for medical imaging that are sold globally to OEM producers of CT, MRI, and digital mammography systems.

# Computed Tomography

Analogic has been at the forefront of developments in computed tomography equipment technology from the introduction of the first single slice CT systems in the early 1970s to today's multi-slice volumetric scanners. We are an industry leader in the development and sale of CT detector systems, data acquisition systems ("DAS"), data management systems ("DMS"), and fully integrated CT systems that drive the image processing in OEM CT imaging scanners sold around the world. Today, our systems and subsystems are used in about half of the CT systems installed at major medical facilities worldwide.

Our CT product portfolio consists primarily of the following:

- 1) Detectors These subsystems convert the x-ray energy in a CT machine to analog signals for further processing in the DAS. The detectors use state-of-the-art scintillator materials and photodiodes coupled with advanced semiconductor technology to process these highly precise signals. These signals are then fed to a computer through a DAS for image reconstruction.
- 2) DAS These subsystems are used to process the signals created by the detectors and feed them as a digital stream to a reconstruction computer to create high resolution images. The DAS is designed with many multi-channel circuit boards that process the analog signals from the detectors and convert them into digital signals through an array of analog to digital ("A/D") converters.
- 3) DMS This is the brains of the CT system and consists of both the detector array and the DAS in one package. This system provides our OEM customers a higher level of integration that allows for lower cost and faster time to market.
- 4) Integrated Systems The components of the CT system (detectors, DAS, x-ray tube and power supplies) are mounted on a rotating ring assembly called a gantry. The ring enables the components of the CT systems to rotate around the patient at speeds up to 200 revolutions per minute for high resolution imaging. We provide integrated gantries with image and iterative reconstruction algorithms to our OEM customers as another level of integration to facilitate a smoother and faster time to market and improve manufacturing efficiency. Our designs include non-contact power, data transfer and other innovative capabilities that we believe will provide breakthrough reliability, lower total cost of ownership and dose reduction/modulation.



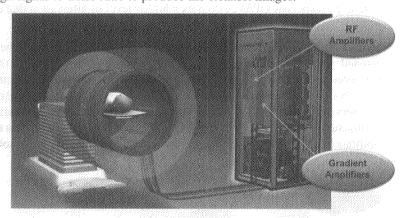
The detector, DAS and DMS products we sell are used in a wide range of CT systems from dual slice count to the most advanced multi-slice (>256 slices) systems enabling advanced diagnostics such as cardiac imaging. Our CT products are designed to allow our customers to remain at the forefront of this rapidly advancing field. Leveraging our experience in integrating CT components and technology, we have also developed higher-level integrated systems for the radiotherapy market primarily used for image guided radiation treatment of cancerous tumors.

### Magnetic Resonance Imaging

For OEM producers of MRI equipment, we are the market leading supplier of two key enabling subsystems: gradient amplifiers and radio frequency ("RF") amplifiers. We have developed a wide range of amplifier solutions for our customers ranging from low-magnetic-field systems (< 0.3 Tesla) to ultra high-magnetic-field systems (> 7.0 Tesla) used in academic research hospitals. Our ability to provide very high power levels with fast response, low noise and industry-leading reliability enables our OEM customers to deliver innovative technologies such as new, wide-bore (i.e. larger opening) MRI scanners addressing growing requirements related to obesity and patient comfort in developed markets such as the U.S.

Our MRI product portfolio consists primarily of the following:

- Gradient Amplifiers These high power systems are used to drive a set of coils located inside the MRI system and around the patient. The coils energize the atomic structure of a patients' anatomy in order to develop tissue and structure images. Gradient amplifiers must be specifically designed for different MRI field strengths ranging from < 0.3 Tesla to >7.0 Tesla.
- 2) RF Amplifiers These power systems are used to control another set of the coils within the MRI system that are used to read-back the signals from the anatomy generated by the gradient coils. These signals are then processed in a reconstruction computer to create images. The RF amplifiers must have a very high signal-to-noise ratio to produce the cleanest images.

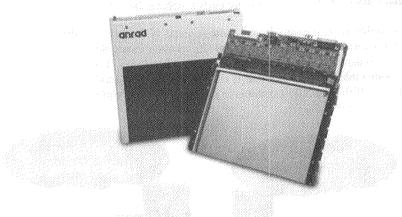


### Digital Mammography

Our digital mammography products consist primarily of digital mammography selenium based detector plates, sold directly to OEM customers for breast cancer screening and diagnostic applications in mammography. These detector plates are used by OEMs in mammography systems to convert x-ray signals into high resolution 2-D and 3-D images of breast tissue to aid in the detection of breast cancer. Our detector plates for mammography applications are sold to medical OEMs for use in products worldwide. Our digital mammography product portfolio consists of the following:

1) LMAM – Our large area detector plate, based on selenium technology, is used primarily for European and U.S. markets. The plate and power supply is designed to be easily adapted to many types of mammography systems. This detector plate is also compatible with systems that can perform tomosynthesis, which creates 3-D images through a series of exposures to more accurately detect lesions in the breast.

 SMAM – our small area detector plate uses the same selenium-based technology as the LMAM detector and is manufactured primarily for the Asian markets.



### Other Products

Within our Medical Imaging segment, we also design and manufacture precision motion control systems, which we supply to OEM customers for use in computer-controlled automation systems primarily in the semiconductor and medical markets.

### Ultrasound

Our Ultrasound segment principally designs and manufactures procedure-driven ultrasound systems and transducers under the BK Medical and Ultrasonix brand names. These products are primarily sold to clinical endusers in urology, surgery and point-of-care and accounted for approximately 27% of our net revenue in fiscal year 2013. Our ultrasound systems use acoustic waves to generate real-time images of the body's internal anatomy that are used for interventional and medical diagnostic procedures, including guiding surgical procedures (including minimally invasive and robotic-assisted procedures) and guiding prostate cancer treatment employing procedures such as brachytherapy. In March 2013, to accelerate our expansion into the growing point-of-care market, we acquired Ultrasonix Medical Corporation ("Ultrasonix"), a supplier of advanced ultrasound systems for point-of-care and general imaging applications. Our Ultrasound segment also manufactures and sells advanced ultrasound probes and transducers to medical OEMs.

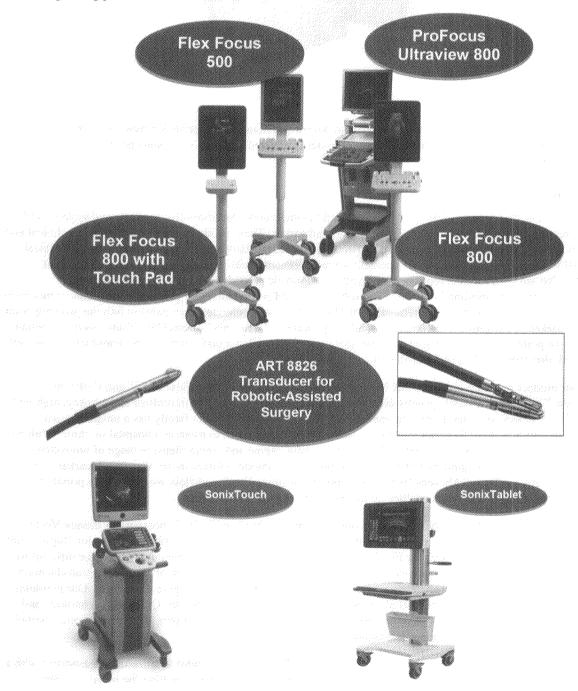
Our product portfolio under the BK Medical brand name consists of the FlexFocus™ and ProFocus Ultraview™ mobile ultrasound systems used primarily for guiding procedures in urology and surgery, high-end point of care as well as general imaging applications. The Flex Focus product family has a unique, award-winning design in a small footprint that can be easily moved from room to room in a hospital or clinic. With its 19-inch high-resolution monitor, high performance imaging engine and comprehensive range of innovative transducers for procedure guidance, the FlexFocus provides a unique solution in the ultrasound market, where premium image quality, highly sensitive color Doppler and streamlined workflow are valued in a portable system. An optional battery pack enables up to four hours of plug-free imaging.

Our high-end FlexFocus systems include our Quantum Technology™ which incorporates unique Vector Flow Imaging™ ("VFI") mode, enabling enhanced visualization of blood flow, with sensitive color Doppler and spatial resolution. Key benefits to our FlexFocus systems also include tissue harmonic imaging for difficult-to-image patients. The ultrasound systems are available with a comprehensive range of specialized transducers that assist in addressing the clinical challenges of surgical, urologic and general imaging procedures. Our premium performance Pro Focus UltraView 800 ultrasound system, which also incorporates Quantum Technology and VFI option, has optional contrast imaging capabilities and is well suited for surgery, including robotic-assisted surgery, high-end urology, and general imaging.

Our Advanced Robotic Ultrasound Technology™ ("ART") system includes an ultrasound transducer with a unique curved linear array designed to be manipulated by a robotic instrument, putting the imaging control into

the surgeon's hands. The standard ART ultrasound solution includes a premium performance FlexFocus system, a high-resolution endocavity transducer and a dedicated robotic transducer. The endocavity transducer is small in diameter for minimal patient discomfort with no moving parts touching the patient.

Our product portfolio under the Ultrasonix brand name consists of the Sonix™ platform of touch screen ultrasound systems used for a variety of point-of-care applications such as needle guidance for biopsies, aspirations and nerve blocks, musculoskeletal, vascular, and general imaging. The Sonix systems have a small footprint and feature a customizable touch screen that is easy to use and designed with an optimized workflow for point-of-care applications. With over 5,000 systems in the field, the Sonix platform accelerates our entry into the faster growing point-of-care market.



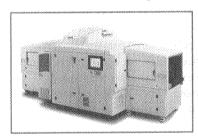
We also design and manufacture advanced ultrasound transducers sold to OEM customers within our Ultrasound segment, for use in ultrasound scanning systems under our Sound Technology brand. Using our advanced acoustic design and manufacturing capability, we provide a variety of transducers to OEMs for both diagnostic and procedure driven applications such as cardiology, radiology, OB/GYN, surgery, and interventional radiology. Our transducer product portfolio includes many types of linear arrays, convex arrays, 3-D/4-D mechanical probes, phased arrays, Doppler transducers and endocavity probes for real time imaging during interventional procedures.

## Security Technology

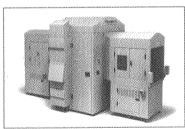
Utilizing our advanced CT technology, the Security Technology segment designs and manufactures airport checked and checkpoint baggage screening systems and accounted for approximately 15% of our net revenue in fiscal year 2013. These systems generate 3-D images of objects contained within baggage and utilize highly sophisticated algorithms to provide threat analysis of materials contained within the bags.

Our checked baggage screening systems are sold through our commercial partners: L-3 Communications Security and Detection Systems ("L-3") and Smiths Detection ("Smiths"), to the Transportation Security Agency ("TSA") for installation in U.S. airports and to international airport authorities for installation at airports around the world.

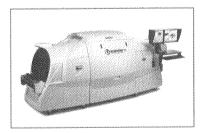
We sell the following checked baggage systems through L-3.



1) eXaminer® XLB (High Speed) – The XLB was the first certified explosives detection system ("EDS") specifically optimized for high speed screening of checked baggage. Capable of scanning up to 1,200 bags per hour, the XLB keeps bags continuously moving through a meter-wide tunnel. Combining high-resolution helical CT with dual-energy imaging, the XLB offers superior detection capabilities and advanced 3-D imaging.



2) **eXaminer 3DX (Medium Speed)** – Our CT technology is utilized in the 3DX, a medium speed EDS that scans up to 550 bags per hour inline and up to 330 bags in standalone configuration. The enhanced speed 3DX-ES scans up to 750 bags per hour in the in-line configuration. Both systems are designed to provide high levels of reliability and low false-alarm rates. With over 1,100 systems installed since 2003, the 3-Dx is one of most widely used checked baggage systems in the U.S.

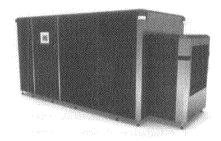


size EDS designed for small and medium-sized airports. Able to scan up to 360 bags per hour in-line and up to 300 bags per hour in standalone configuration, the SX offers customers a reduced footprint system with high resolution 3-D imaging and low-false alarm rates.

eXaminer ® is a registered trademark of L-3.

In our fiscal year ended July 31, 2010 ("fiscal year 2010"), we signed an agreement with Smiths, based in London, England, to develop an advanced imaging subsystem for use in their next-generation baggage screening system. In fiscal year 2012, Smiths announced that its new system, the HI-SCAN 10080 XCT, incorporating

Analogic CT technology, has successfully gained the European Civil Aviation Conference ("ECAC") Standard 3 approval. Standard 3 approval is mandatory for new checked baggage screening systems deployed in Europe beginning in September 2014. In June 2013, Smiths received certification of the HI-SCAN 10080 XCT from the Transportation Security testing laboratory in the U.S., the first step in a process of approval for sales in the U.S. Meeting this certification standard is also expected to benefit international sales of the product. Capable of screening up to 1,800 bags per hour in its approved configuration with a belt speed of 0.5 meters per second, the HI-SCAN 10080 XCT system offers a large one meter wide tunnel that meets the requirements of high speed inline baggage handling systems, and allows rapid, efficient scanning of larger items. The HI-SCAN 10080 XCT tunnel size allows scanning of larger items through automated inline handling systems.



Smiths Detection HI-SCAN 10080 XCT

We also market our COBRA® brand checkpoint system directly to government agencies, and international airports. Our COBRA checkpoint CT system is the first system to achieve ECAC Type-D and D+ Standard-2 approval. Standard 2 is the highest European performance standard for threat detection. The COBRA successfully met Standard-2 in Type-D operations, where liquids, aerosols and gels (LAGs) remain inside passenger carry-on bags, and Type D+ operations, where LAGs and complex electronics, such as laptops, remain inside passenger carry-on bags. The COBRA checkpoint CT system has also been approved by the United Kingdom's Department for Transport as an Advanced Cabin Baggage X-ray system. The COBRA system in its Standard 2 configuration is currently on site at an airport in Europe, being tested for operational effectiveness.



COBRA check-point CT system

### Competition

We are subject to competition based upon product design, performance, pricing, quality, and service. We believe that our innovative engineering and product reliability have been important factors in our historical growth. While we try to maintain competitive pricing on those products that are directly comparable to products manufactured by others, in many instances, our products conform to more exacting specifications and carry a higher price than similar products manufactured by others.

In our Medical Imaging segment, systems and subsystems are customized for the needs of our customers. In many cases, due to the limited number of companies with technology comparable to ours, we consider selection by our OEM customers for the design and manufacture of these products and our other medical products to be due more to the "make-or-buy" decision of the individual OEM customers than a function of other competitors in the field.

The Ultrasound segment participates in markets primarily focused in urology, surgery (including robotic assisted surgery), anesthesia and other point-of-care markets. We compete in these markets based on image quality, ease of use, mobility, reliability, and flexibility with a robust portfolio of specialized ultrasound transducers. Our competitors are companies and business units of large medical device companies, such as General Electric Corporation ("GE") and Koninklijke Philips Electronics N.V. ("Philips"), that primarily focus on the conventional ultrasound markets, as well as smaller business units of large multi-national companies, such as Hitachi Medical Corporation and Fujifilm that sell under brands such as Aloka and SonoSite in our target markets.

In our Security Technology segment, competition is limited due to the high barriers of entry resulting from the cost of developing the design and manufacturing know-how of CT technology. Our primary competitors in the Security Technology segment for CT-level threat detection systems are divisions of a small number of large companies, such as Morpho Detection (formerly GE's security business), and Science Applications International Corp. (which acquired Reveal Imaging).

### **Marketing and Distribution**

Our Medical Imaging and Security Technology segments directly sell to OEM customers, both domestically and abroad, primarily through our headquarters in the U.S. We also sell products through our subsidiaries in Canada, China, and the U.S.

Our Ultrasound segment globally distributes its products to end users both through a direct sales force and through a network of independent sales representatives and distributors located around the world. Our direct sales force, located in the U.S., Canada, Germany, Belgium, United Kingdom, Italy, and Scandinavia, accounted for approximately 55% of our Ultrasound revenue in fiscal year 2013 generated from product sales, service and application support. Our remaining Ultrasound revenue was generated through a network of generally non-exclusive, independent distributors in more than 60 other countries and sales of transducers to OEM customers both domestically and abroad.

# **Seasonal Aspect of Business**

There are no material seasonal elements to our Medical Imaging or Security Technology segments, although plant closings in the summer, particularly in Europe, tend to decrease the procurement activities of certain customers during the first quarter of our fiscal year. Customer purchases in our Ultrasound segment have historically been higher in the second and fourth quarters of our fiscal year due in part to the timing of customer budgeting cycles.

### **Material Customers**

We had three customers, as set forth in the table below, who accounted for 10% or more of our net revenue during fiscal years 2013, 2012, and 2011.

	I cui I	Jiide G G G	J,
	2013	2012	2011
Philips	15%	14%	13%
L-3	12%	12%	*
Toshiba Corporation ("Toshiba")	10%	10%	11%

**Vear Ended July 31.** 

Note (\*): Total net revenue was less than 10% in this fiscal year.

Philips' and Toshiba's revenues are in the Medical Imaging segment and L-3's revenue is in the Security Technology segment.

Our ten largest customers as a group accounted for 68%, 68%, and 64% of our net product and engineering revenue for fiscal years 2013, 2012, and 2011, respectively. The loss of any one of these customers could have a material adverse effect on our business. Philips accounted for 18% and 13% of net accounts receivable at July 31, 2013 and 2012, respectively. GE accounted for 7% and 10% of net accounts receivable at July 31, 2013 and 2012, respectively. L-3 accounted for 16% and 18% of net accounts receivable at July 31, 2013 and 2012, respectively.

### **Backlog**

Our OEM business involves large customers whose placement of large orders can vary based on timing. Our backlog, which consists of cancellable and non-cancellable orders primarily shippable within twelve months, was \$157,000 and \$197,700 as of July 31, 2013 and July 31, 2012, respectively. The decrease in backlog was primarily due to timing of OEM customer orders in our Medical Imaging segment, where backlog decreased by \$33,000 to \$114,500. Our Ultrasound segment backlog decreased by \$8,000 to \$18,000, and our Security Technology segment remained flat at \$24,000.

### **Government Contracts**

We do a significant amount of business with agencies of the U.S. Federal Government through our Security Technology segment, either directly or as a subcontractor. Our contracts with government agencies, and the government contracts of other parties under which we serve as a subcontractor, are subject to termination at the election of the government agency. While none of our government contracts or subcontracts provide for renegotiation of profits at the election of the government, it is possible that the government agency could request, and that we could under certain circumstances agree to, the renegotiation of the payments provided for under such contracts. However, we have not in the past renegotiated significant payment terms under our government contracts or subcontracts.

### **Sources of Raw Materials and Components**

In general, our products are composed of internally-designed electronic and mechanical elements, including proprietary integrated circuits, printed circuit boards, detectors, power supplies, and displays manufactured by us and others in accordance with our specifications. We order raw materials and components to complete our customers' orders, and some of these raw materials and components are ordered from sole-source suppliers. We believe that most items procured from third-party suppliers are available from more than one source. However, if a given component ceases to be available, it might become necessary for us to modify a product design to adapt to a substitute component, or to purchase new tooling to enable a new supplier to manufacture the component, either of which could result in additional expense and/or delay in product sales. Also, from time to time the availability of certain electronic components has been disrupted. Accordingly, we carry a safety stock of raw materials and components in an effort to ensure our ability to make timely delivery to our customers.

## **Patents and Licenses**

We hold patents of varying duration issued in the U.S., which cover technologies that we have developed. In many instances, we hold corresponding foreign patents. We regularly file U.S. patent applications and, where appropriate, foreign patent applications. We also file continuations to cover both new and improved methods, apparatus, processes, designs, and products.

We rely on a combination of trade secret, copyright, and trademark laws, as well as contractual agreements to safeguard our proprietary rights in technology and products. In seeking to limit access to sensitive information to the greatest practical extent, we routinely enter into confidentiality and assignment of invention agreements with each of our employees, and confidentiality agreements with our key customers and vendors.

We believe that any legal protection afforded by patent and copyright laws is of secondary importance as a factor in our ability to compete. Future prospects are more a function of the continuing level of excellence and creativity of our engineers in developing products that satisfy customer needs, and the marketing skills and

managerial competence of our personnel in selling those products. Moreover, we believe that market positioning and rapid market entry are important to the success of our products. Our management believes that the loss of any individual patent would not have a material effect on our competitive position.

### **Research and Product Development**

Research and product development ("R&D") is a significant element of our business. We maintain a constant and comprehensive R&D program directed toward the creation of new products, the improvement and refinement of our present products, and the expansion of their applications. Certain R&D projects are funded by our customers, typically OEM customers, and such funding is generally treated as engineering revenue, with the associated costs classified as engineering cost of sales. The costs of internally-funded R&D efforts are included within operating expenses.

We evaluate developing technologies in areas where we have technological or marketing expertise for possible investment or acquisition. We intend to continue to invest in R&D and focus our internal and external investments in fields that we believe will offer the greatest potential for near and long-term growth. We are committed to investing in products that have a demonstrable clinical impact and value to the healthcare system and through which we can benefit from our core competencies and global infrastructure.

The cost of customer-funded R&D, which is classified as engineering cost of sales, amounted to:

	Yea	ır Ended July	Ended July 31, 2012 2011		
	2013	2012	2011		
Customer-funded R&D	\$20,226	\$21,099	\$22,479		

The cost of internally-funded R&D included in operating expenses amounted to:

	Yea	ir Ended July	31,
	2013	2012	2011
Internally-funded R&D	\$63,990	\$57,230	\$63,125

# Environment

Our manufacturing facilities are subject to numerous environmental laws and regulations, particularly with respect to industrial waste and emissions. Compliance with these laws and regulations has not had a material impact on our capital expenditures, earnings, or competitive position.

### **Employees**

As of July 31, 2013, we employed approximately 1,700 employees. A limited number of employees at our Denmark facility are covered by a works council. We consider our relations with our employees to be generally good.

# Financial Information about Foreign and Domestic Operations and Export Revenue

Revenues are attributed to countries based on the location of our customers. For OEM sales, our customer's location may differ from the location of where the ultimate completed systems are sold by the OEM into the market.

		Year Ended July 31,					
	2013	2012	2011				
Net Revenue:							
Domestic	\$209,594	38% \$199,518	39% \$161,720	34%			
Foreign	340,769	62% 317,053	61% 311,875	66%			
Total net revenue	\$550,363	\$516,571	\$473,595				

Refer to Note 18 to the notes to Consolidated Financial Statements included in this Annual Report on Form 10-K for financial information regarding our domestic and foreign revenue and long lived assets.

### **Available Information**

Our website address is www.analogic.com. The information on our website is not incorporated by reference into this document and should not be considered to be a part of this document. Our website address is included in this document as an inactive textual reference only.

We make available free of charge through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to the reports as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission ("SEC").

### Item 1A. Risk Factors

This Annual Report on Form 10-K contains statements, which, to the extent that they are not a recitation of historical facts, constitute "forward-looking statements" pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In some cases these forward-looking statements can be identified by the use of words such as "may," "could," "should," "would," "expect," "project," "predict," "potential" or the negative of these words or comparable words. Investors are cautioned that all forward-looking statements, including without limitation, statements about product development, market and industry trends, strategic initiatives, regulatory approvals, sales, profits, expenses, price trends, R&D expenses and trends, and capital expenditures, involve risk and uncertainties, and actual events and results may differ materially from those indicated in any forward-looking statement as a result of a number of important factors, including those discussed below and elsewhere in this Form 10-K.

You should carefully consider the risks described below before making an investment decision with respect to our common stock. Additional risks not presently known to us, or that we currently deem immaterial, may also impair our business. Any of these could have a material and negative effect on our business, financial condition, or results of operations.

Because a significant portion of our revenue currently comes from a small number of customers, any decrease in revenue from these customers could harm our operating results.

We depend on a small number of customers for a large portion of our business, and changes in our customers' orders could have a significant impact on our operating results. If a major customer significantly reduces the amount of business it does with us, there would be an adverse impact on our operating results.

We had three customers, as set forth in the table below, who accounted for 10% or more of our net revenue during fiscal years 2013, 2012, and 2011.

		Diluca Ju	., J.,
	2013	2012	2011
Philips	15%	14%	13%
L-3	12%	12%	*
Toshiba Corporation ("Toshiba")	10%	10%	11%

Veer Ended July 31

Note (\*): Total net revenue was less than 10% in this fiscal year.

Philips' and Toshiba's revenues are in the Medical Imaging segment and L-3's revenue is in the Security Technology segment.

Our ten largest customers as a group accounted for 68%, 68%, and 64% of our net revenue for fiscal years 2013, 2012, and 2011, respectively. The loss of any one of these customers could have a material adverse effect on our business. Philips accounted for 18% and 13% of net accounts receivable at July 31, 2013 and 2012, respectively. GE accounted for 7% and 10% of net accounts receivable at July 31, 2013 and 2012, respectively. L-3 accounted for 16% and 18% of net accounts receivable at July 31, 2013 and 2012, respectively.

Although we seek to broaden our customer base, we will continue to depend on sales to a relatively small number of major customers. Because it often takes significant time to replace lost business, it is likely that our operating results would be adversely affected if one or more of our major customers were to cancel, delay, or reduce significant orders in the future. Our customer agreements typically permit the customer to discontinue future purchases after timely notice.

In addition, we generate significant accounts receivable in connection with the products we sell and the services we provide to our major customers. Although our major customers are large corporations, if one or more of our customers were to become insolvent or otherwise be unable to pay for our products and services, our operating results and financial condition could be adversely affected.

Competition from existing or new companies in the medical imaging and security technology industries could cause us to experience downward pressure on prices, fewer customer orders, reduced margins, loss of new business opportunities, and the loss of market share.

We operate in a highly competitive industry. We are subject to competition based on product design, performance, pricing, quality, and service offerings, and we believe our innovative engineering and product reliability have been important factors in our historical growth. While we try to maintain competitive pricing on those products which are directly comparable to products manufactured by others, in many instances our products conform to more exacting specifications and may carry a higher price than analogous products manufactured by others.

Our competitors include divisions of larger, more diversified organizations as well as specialized companies. Some of them have greater resources and larger staffs than we have. A number of our existing and potential OEM customers have the ability to design and manufacture internally the products that we manufacture for them. We face competition from the R&D groups and manufacturing operations of our existing and potential customers, who continually compare the benefits of internal research, product development, and manufacturing with the costs and benefits of outsourcing.

We depend on our suppliers, some of which are the sole-source for certain components, and our production could be substantially curtailed if these suppliers were not able to meet our demands and alternative sources were not available.

We order raw materials and components to complete our customers' orders, and some of these raw materials and components are ordered from sole-source suppliers. Although we work with our customers and suppliers to minimize the impact of shortages in raw materials and components, we sometimes experience short-term adverse effects due to price fluctuations and delayed shipments. In the past, there have been industry-wide shortages of electronics components. If a significant shortage of raw materials or components were to occur, we might have to delay shipments or pay premium pricing, which could adversely affect our operating results. In some cases, supply shortages of particular components could substantially curtail our production of products using these components. We are not always able to pass on price increases to our customers. Accordingly, some raw material and component price increases could adversely affect our operating results. We also depend on a small number of suppliers to provide many of the other raw materials and components that we use in our business. Some of these suppliers are affiliated with customers or competitors, and others are small companies. If we were unable to continue to purchase these raw materials and components from our suppliers, our operating results could be adversely affected. Because many of our costs are fixed, our margins depend on the volume of output at our facilities, and a reduction in volume could adversely affect our margins.

# We rely on successful performance by and relationships with suppliers. This reliance could have a material adverse effect on our results of operations and financial condition.

We have formed arrangements with suppliers for various services and components. We have formed these arrangements because it is commercially more efficient to outsource these services and purchase these components than it would be for us to perform these services or manufacture these components, which in some cases require, among other things, a high degree of technical skill and advanced equipment that is not practical or cost-effective for us to develop or acquire. As a result, if one of our suppliers were to experience quality problems, capacity constraints, decreased yields, or delivery delays, or were to raise prices significantly, we could face product liability claims, product shortages, decreased revenues or lost customers, which could adversely affect our operating results.

# If we were to be left with excess inventory, our operating results could be adversely affected.

Because of long lead times and specialized product designs, in certain cases we purchase components and manufacture products in anticipation of customer orders based on customer forecasts. For a variety of reasons, such as decreased end-user demand for our products, inadequate or inaccurate forecasts, or other issues that might impact production planning, our customers might not purchase all the products that we have manufactured or for which we have purchased components. In any such event, we would attempt to recoup material and manufacturing costs by means such as returning components to our vendors, disposing of excess inventory through other channels, or requiring our OEM customers to purchase or otherwise compensate us for such excess inventory. Some of our significant customer agreements do not give us the ability to require our OEM customers to do this. To the extent that we were unsuccessful in recouping our material and manufacturing costs, our gross margin and operating results could be adversely affected. Moreover, carrying excess inventory would reduce the working capital we have available to continue to operate and grow our business.

# Uncertainties and adverse trends affecting our industry or any of our major customers could adversely affect our operating results.

Our business operates primarily within three business segments: Medical Imaging, Ultrasound, and Security Technology. The medical and security technology equipment markets in which our segments operate are subject to changes in technology, pricing, and profit margins and have been historically subject to cyclical downturns characterized by diminished product demand, rapid declines in average selling prices, and production overcapacity. In addition, changes in government policy relating to the purchase or use of medical and security-related capital equipment could also affect our sales. Our customers' markets are also subject to economic cycles and are likely to experience recessionary periods in the future. The economic conditions affecting our industry in general or any of our major customers in particular, might adversely affect our operating results.

In Security Technology, our OEM customers' purchasing dynamics are generally affected by the level of government funding, the expansion and/or upgrade of airport terminals and the fluctuations in airline passenger volume.

# Our customers' or our delay in obtaining or inability to obtain any necessary U.S. or foreign regulatory clearances or approvals for products could have a material adverse effect on our business.

Our products in the Medical Imaging and Ultrasound segments are finished medical devices or are components used by our customers in the production of finished medical devices that are subject to a high level of regulatory oversight. A delay in obtaining or inability to obtain any necessary U.S. or foreign regulatory clearances or approvals for products could have a material adverse effect on our business. The process of obtaining clearances and approvals can be costly and time-consuming. There is a further risk that any approvals or clearances, once obtained, might be withdrawn or modified. Medical devices cannot be marketed in the U.S. without clearance from the U.S. Food and Drug Administration (the "FDA"). Medical devices sold in the U.S.

must also be manufactured in compliance with FDA rules and regulations, which regulate the design, manufacturing, packing, storage, and installation of medical devices. Moreover, medical devices are required to comply with FDA regulations relating to investigational research and labeling. States may also regulate the manufacturing, sale, and use of medical devices. Medical devices are also subject to approval and regulation by foreign regulatory and safety agencies. Our products must also meet the requirements of these governments and agencies for approval and distribution. As with the U.S., foreign governments or agencies can withdraw or modify their approvals.

Our business strategy includes the pursuit of acquisitions or business combinations, which, if consummated, could be difficult to integrate, disrupt our business, dilute stockholder value, or divert management attention.

As part of our business strategy, we may seek attractive acquisitions and other business combinations. Acquisitions are typically accompanied by a number of risks, including the difficulty of integrating the operations and personnel of the acquired companies, the potential disruption of our ongoing business and distraction of management, expenses related to the acquisition, and potential unknown or underestimated liabilities associated with acquired businesses. If we do not successfully complete acquisitions, we could incur substantial expenses and devote significant management time and resources without generating any benefit to us. In addition, substantial portions of our available cash might be utilized as consideration for these acquisitions.

# Our annual and quarterly operating results are subject to fluctuations, which could affect the market price of our common stock.

Our annual and quarterly results could vary significantly depending on various factors, many of which are beyond our control, and may not meet the expectations of securities analysts or investors. If this occurs, the price of our common stock could decline. These factors include:

- variations in the timing and volume of customer orders;
- introduction and market acceptance of our customers' or our own new products;
- · changes in demand for our customers' or our own existing products;
- the timing of our expenditures in anticipation of future orders;
- effectiveness in managing our manufacturing processes;
- changes in competitive and economic conditions generally in our or our customers' markets;
- changes in the cost or availability of components or skilled labor;
- changes in our effective tax rate;
- fluctuations in manufacturing yields;
- foreign currency and commodity price exposures;
- investor and analyst perceptions of events affecting us, our competitors, and/or our industry; and
- changes in laws affecting the health care industry.

A delay in anticipated sales beyond the end of a particular quarter could have a significant effect on our operating results for that quarter. In addition, most of our operating expenses do not vary directly with net revenue and are difficult to adjust in the short term. As a result, if revenue for a particular quarter was below our expectations, we could not proportionately reduce operating expenses for that quarter. Hence, the revenue shortfall could have a disproportionate adverse effect on our operating results for that quarter.

# Loss of any of our key personnel could hurt our business because of their industry experience and their technological expertise.

We operate in a highly competitive industry and depend on the services of our key senior executives and our technological experts. The loss of the services of one or several of our key employees or an inability to attract, train, and retain qualified and skilled employees, specifically engineering and operations personnel, could result in the loss of customers or otherwise inhibit our ability to operate and grow our business successfully.

# If we fail to effectively manage our growth or, alternatively, our spending during economic downturns, our business could be disrupted, which could harm our operating results.

Our ability to offer our products and implement our business plan in evolving markets successfully requires an effective planning and management process. We must effectively manage our spending and operations to ensure our competitive position during economic downturns, and must preserve our future opportunities when the economy improves. A failure to manage our spending and operations effectively could disrupt our business and harm our operating results. A growth in sales, combined with the challenges of managing geographically dispersed operations, can place a significant strain on our management systems and resources, and growth in future operations could continue to place such a strain. The failure to manage our growth effectively could disrupt our business and harm our operating results.

# If we are unable to maintain our expertise in research and product development, manufacturing processes, and marketing new products, we might not be able to compete successfully.

We believe that our future success depends upon our ability to provide research and product development, provide manufacturing services that meet the changing needs of our customers, and market new products. This requires that we successfully anticipate and respond to technological changes in design and manufacturing processes in a cost-effective and timely manner. As a result, we continually evaluate the advantages and feasibility of new product designs and manufacturing processes. We may not be able to develop and introduce new and improved products in a timely or efficient manner. New and improved products, if developed, may not achieve price and profitability targets or market acceptance. Commercialization of new products may prove challenging, and we may be required to invest more time and money than expected to introduce these products into the market successfully. Once introduced, new products may adversely impact orders and sales of our existing products, or make them less desirable or even obsolete.

### Major terrorist attacks and threats have increased financial expectations that may not materialize.

Major terrorist attacks and threats have created increased interest in our security and inspection systems. However, the level of demand for our products is not predictable and may vary over time. We do not know what solutions will continue to be adopted by the U.S. Department of Homeland Security as a result of terrorism and whether our products will continue to be a part of the solutions. Additionally, should our products be considered as a part of future security solutions, it is unclear what the level of purchases may be and how quickly funding to purchase our products may be made available. These factors could adversely impact us and create unpredictability in our revenues and operating results.

### We are exposed to risks associated with international operations and markets.

We source and manufacture certain components and systems outside the U.S., we market and sell products in international markets, and we have established offices and subsidiaries in Europe, Canada, and Asia. Our foreign revenue accounted for 62%, 61%, and 66% of our total net revenue for fiscal years 2013, 2012, and 2011, respectively. There are inherent risks in transacting business internationally, including:

- changes in applicable laws and regulatory requirements;
- export and import restrictions;

- export controls relating to technology;
- · tariffs and other trade barriers;
- intellectual property laws that offer less protection for our proprietary rights;
- · difficulties in staffing and managing foreign operations;
- problems in collecting accounts receivable and longer payment cycles;
- political instability;
- fluctuations in currency exchange rates;
- difficulties in managing employee relations;
- difficulties in maintaining uniform standards, controls, procedures and policies across our global operations, including inventory management and financial consolidation;
- · expatriation controls; and
- potential adverse tax consequences.

There is significant uncertainty about the stability of global credit and financial markets. These economic uncertainties affect businesses such as ours in a number of ways, making it difficult to accurately forecast and plan our future business activities. Various macroeconomic factors such as unemployment rates, availability of credit, strength or weakness of real estate markets and other such factors may cause our customers to cancel, decrease or delay their existing or future orders for our products. We are unable to predict the impact of this instability and if economic conditions deteriorate, our business and results of operations could be materially and adversely affected.

We must comply with the U.S. Foreign Corrupt Practices Act and antitrust, anti-competition and similar laws in other jurisdictions and our failure to do so could lead to substantial liability. We could also face investigations by one or more government agencies that could be costly to respond to and divert the attention of key personnel from our business operations. An adverse outcome from any such investigation could subject us to fines or other penalties, which could adversely affect our business, financial condition and results of operations.

Any one or more of these factors may have a material adverse effect on our future international activities and, consequently, on our business and results of operations.

# There are risks associated with our operations in China.

We conduct certain manufacturing operations at, and are transitioning additional manufacturing to, our facility in Shanghai, China in order to reduce costs and streamline our manufacturing operations. There are administrative, legal, and governmental risks to operating in China that could result in increased operating expenses or could hamper us in the development of our operations in China. The risks from operating in China that could increase our operating expenses and adversely affect our operating results, financial condition and ability to deliver our products and grow our business include, without limitation:

- difficulties in staffing and managing foreign operations, particularly in attracting and retaining personnel qualified to design, sell, test and support our products;
- difficulties in managing employee relations;
- increases in the value of the Chinese Yuan, or CNY;
- · difficulties in coordinating our operations in China with those in the U.S., Canada, and Europe;
- difficulties in enforcing contracts in China;
- difficulties in protecting intellectual property;

- diversion of management attention;
- imposition of burdensome governmental regulations;
- difficulties in maintaining uniform standards, controls, procedures and policies across our global operations, including inventory management and financial consolidation;
- regional political and economic instability, which could have an adverse impact on foreign exchange rates in Asia and impair our ability to conduct our business in China; and
- inadequacy of the local infrastructure to support our operations.

# Our operations are vulnerable to interruption or loss due to natural disasters, epidemics, terrorist acts and other events beyond our control, which would adversely affect our business.

Although we perform manufacturing in multiple locations, we generally do not have redundant manufacturing capabilities in place for any particular product or component. As a result, we depend on our current facilities for the continued operation of our business. A natural disaster, pandemic, terrorist act, act of war, or other natural or manmade disaster affecting any of our facilities could significantly disrupt our operations, or delay or prevent product manufacturing and shipment for the time required to repair, rebuild, or replace our manufacturing facilities. This delay could be lengthy and we could incur significant expenses to repair or replace the facilities. Any similar natural or manmade disaster that affects a key supplier or customer could lead to a similar disruption in our business.

# Our business could be harmed if we are unable to protect our intellectual property or if we become subject to intellectual property infringement claims.

We rely on a combination of trade secrets, patents, trademarks, copyrights and confidentiality procedures to protect our technology. Despite our efforts, the steps we have taken to protect our technology may be inadequate. Existing trade secret, patent, trademark and copyright laws offer only limited protection. Our patents could be invalidated or circumvented. In addition, others may develop substantially equivalent or superseding proprietary technology, or competitors may offer similar competing products, thereby substantially reducing the value of our proprietary rights. The laws of some foreign countries in which our products are or may be manufactured or sold may not protect our products or intellectual property rights to the same extent as do the laws of the U.S. The steps we have taken to protect our intellectual property may not be adequate to prevent misappropriation of our technology. Our inability to protect our intellectual property could have a negative impact on our operations and financial results.

We may also become subject to claims that we infringe the intellectual property rights of others in the future. We cannot ensure that, if made, these claims will not be successful. Any claim of infringement could cause us to incur substantial costs defending against the claim even if the claim is invalid, and could distract management from other business. Any judgment against us could require substantial payment in damages and could also include an injunction or other court order that could prevent us from offering certain products.

# We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology could harm our ability to operate our business effectively.

We rely extensively on information technology systems to interact with our employees and our customers and to run our business effectively. These interactions include ordering and managing materials from suppliers, converting materials to finished products, shipping product to customers, processing transactions, summarizing and reporting results of operations, complying with regulatory, legal and tax requirements, and other processes necessary to manage our business. Our systems could become damaged or cease to function properly due to any number of causes, including issues caused by ongoing projects to improve our information technology systems and the delivery of services, failures of third-party service providers, catastrophic events, power outages, and

security breaches. Any failure or malfunctioning of our information technology systems, errors or misuse by system users, or inadequacy of the systems in addressing the needs of our operations, could disrupt our ability to timely and accurately manufacture and ship products, which could have a material adverse effect on our business, financial condition and results of operations. Any such failure, errors, misuse or inadequacy could also disrupt our ability to timely and accurately process, report and evaluate key operations metrics and key components of our results of operations, financial position and cash flows. Any such disruptions would likely divert our management and key employees' attention away from other business matters. Any disruptions or difficulties that may occur in connection with our information technology systems could also adversely affect our ability to complete important business processes such as the evaluation of our internal control over financial reporting and attestation activities.

We may be subject to information security breaches caused by illegal hacking, computer viruses, or acts of vandalism or terrorism. Our security measures or those of our third-party service providers may not detect or prevent such breaches. Any such compromise to our information security could result in an interruption in our operations, the unauthorized publication of our confidential business or proprietary information, the unauthorized release of customer, vendor, or employee data, the violation of privacy or other laws, and the exposure to litigation, any of which could harm our business and operating results.

If our security and inspection systems fail to detect weapons, explosives or other devices that are used to commit a terrorist act, we could be exposed to product liability and related claims for which we may not have adequate insurance coverage.

Our business exposes us to potential product liability risks that are inherent in the development, manufacturing, sale and service of security inspection systems. Our customers use our security and inspection systems to help them detect items that could be used in performing terrorist acts or other crimes. The training, reliability and competence of the customers' operators are crucial to the detection of suspicious items. In addition, our security and inspection systems are not designed to work under all circumstances. We test the reliability of our security and inspection systems during both their development and manufacturing phases. We also perform such tests if we are requested to perform installation, warranty or post-warranty servicing. However, our security inspection systems are advanced mechanical and electronic devices and therefore can malfunction.

As a result of the September 11, 2001, and 1993 World Trade Center terrorist attacks, and the potential for future attacks, product liability insurance coverage for such threats is extremely difficult and costly to obtain. It is possible, subject to the applicability of the Support Anti-terrorism by Fostering Effective Technologies Act of 2002 (the "SAFETY Act"), that if we were found liable following a major act of terrorism, our insurance might not fully cover the claims for damages.

The SAFETY Act is a Federal law in the U.S. enacted to provide certain legal liability protections for providers of certain anti-terrorism technologies. If applicable to claims against Analogic, the SAFETY Act could mitigate some of this risk.

Our Security Technology segment depends in part on purchases of products and services by the U.S. Federal Government and its agencies, which purchases may be only partially funded, and are subject to potential termination and reductions and delays in government spending.

As an indirect subcontractor or team member with prime contractors and in other cases directly to the U.S. Federal Government and its agencies, our security and inspection systems are included in many different domestic programs. Over the lifetime of a program, the award of many different individual contracts and subcontracts could impact our products' requirements. The funding of U.S. Federal Government programs are subject to Congressional appropriations. Although multiple-year contracts may be planned in connection with major procurements, Congress generally appropriates funds only on a single fiscal year basis. Consequently, programs are often only partially funded initially, and additional funds are committed only as Congress makes

further appropriations and prime contracts receive such funding. The reduction or delay in funding or termination of a government program in which we are involved could result in a loss of or delay in receiving anticipated future revenues attributable to that program and contracts or orders received. The U.S. Federal Government could reduce or terminate a prime contract under which we are a subcontractor or team member irrespective of the quality of our products or services. The termination of a program or reduction in, or failure to commit additional funds to, a program in which we are involved could negatively impact our revenue and have a material adverse effect on our financial condition and results of operations.

# Changes in laws affecting the health care industry could adversely affect our business, operations and financial condition.

In recent years, the healthcare industry has undergone significant changes driven by various efforts to reduce costs, including increased levels of managed care, cuts in Medicare, consolidation of healthcare distribution companies and collective purchasing arrangements by office-based healthcare practitioners. In addition, numerous governments have undertaken efforts to control healthcare costs through legislation and regulation. In the U.S. in March 2010, President Obama signed into law health care reform legislation in the form of the Patient Protection and Affordable Care Act, ("PPACA"). One of the components of the PPACA is a 2.3% excise tax on the sales of most medical devices, starting in 2013. The Congressional Budget Office estimates that the total cost to the medical device industry will be approximately \$29.1 billion over ten years. This tax may put increased pressure on medical device manufacturers and purchasers, and may lead our customers to reduce their orders for products we produce or to request that we reduce the prices we charge for our products in order to offset the tax. Other elements of the PPACA, such as comparative effectiveness research, an independent payment advisory board, payment system reforms, including shared savings pilots, and the reporting of certain payments by us to healthcare professionals and hospitals under a portion of PPACA known as the Physician Payment Sunshine Act could meaningfully change the way healthcare is developed, marketed and delivered, and may materially impact numerous aspects of our business, results of operations and financial condition, Many significant parts of the law will be phased in over the next decade and require further guidance and clarification in the form of regulations. As a result, many of the impacts of the law will not be known until those regulations are enacted, which we expect to occur over the next several years.

We anticipate that the current administration, Congress and certain state legislatures will continue to review and assess alternative healthcare delivery systems and payment methods with an objective of ultimately reducing healthcare costs and expanding access. Public debate of these issues will likely continue in the future. The implementation of health care reform and medical cost containment measures in the U.S. and in foreign countries in which we operate could:

- limit the use of our products and adversely affect the use of new therapies for which our products may be targeted;
- reduce reimbursement available to our customers for using our products; and
- decrease the price we might establish for our products and products that we may develop, which would result in lower product revenues to us.

In addition, because we operate in a highly regulated industry, other governmental actions may adversely affect our business, operations and financial condition, including:

- changes in FDA and foreign regulations that may require additional safety monitoring, labeling changes, restrictions on product distribution or use, or other measures after the introduction of our products to market, which could increase our costs of doing business, or otherwise adversely affect the market for our products;
- new laws, regulations and judicial decisions affecting pricing or marketing practices; and
- changes in the tax laws relating to our operations.

We have identified transactions involving our Danish subsidiary BK Medical ApS ("BK Medical") and certain of its distributors with respect to which we have raised questions as to compliance with the law, and we may incur ongoing inquiry-related costs and/or governmental sanctions in connection with the matter.

As initially disclosed in our annual report on Form 10-K for the fiscal year ended July 31, 2011, we identified certain transactions involving BK Medical and certain of its foreign distributors, with respect to which we have raised questions concerning compliance with law, including Danish law and the U.S. Foreign Corrupt Practices Act, and our business policies. These have included transactions in which the distributors paid BK Medical amounts in excess of amounts owed and BK Medical transferred the excess amounts, at the direction of the distributors, to third parties identified by the distributors. We have been unable to ascertain with certainty the ultimate beneficiaries or the purpose of these transfers. We have voluntarily disclosed this matter to the Danish Government, the U.S. Department of Justice, which we refer to as the DOJ, and the SEC and are cooperating with inquiries by the Danish Government, the DOJ and the SEC. We are unable to estimate the potential penalties and/or sanctions, if any, that might be assessed in connection with these matters. We have concluded that the transactions identified to date have been properly accounted for in our reported financial statements in all material respects. During fiscal year 2013, we incurred inquiry-related costs of approximately \$1,211 in connection with this matter, as compared to \$1,288 in fiscal year 2012. We have terminated the employment of certain BK Medical employees and have wound down the relationships with the BK Medical distributors that were involved in the transactions. We incurred employee termination costs of \$0 and \$400, respectively, in connection with this matter in fiscal years 2013 and 2012. Revenue from sales to the BK Medical distributors with whom we wound down BK Medical's relationship represented less than 0.2% of our total revenue in fiscal year 2013, as compared to less than 1.3% of our total revenue in fiscal year 2012.

# Compliance or the failure to comply with current and future environmental regulations could cause us significant expense.

We are subject to various environmental regulations. From time to time new regulations are enacted, and it is difficult to anticipate how such regulations will be implemented and enforced. We continue to evaluate the necessary steps for compliance with environmental regulations as they are enacted. These regulations include, for example, the Registration, Evaluation, Authorization and Restriction of Chemical substances ("REACH"), the Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive ("RoHS") and the Waste Electrical and Electronic Equipment Directive ("WEEE") enacted in the European Union which regulate the use of certain hazardous substances in, and require the collection, reuse and recycling of waste from, certain products we manufacture. This and similar legislation that has been or is in the process of being enacted in Japan, China, Korea and various states of the U.S. may require us to redesign our products to ensure compliance with the applicable standards, for example by requiring the use of different types of materials. These redesigns or alternative materials may detrimentally impact the performance of our products, add greater testing lead-times for product introductions or have other similar effects. We believe we comply with all such legislation where our products are sold and we will continue to monitor these laws and the regulations being adopted under them to determine our responsibilities. In addition, we are monitoring legislation relating to the reduction of carbon emissions from industrial operations to determine whether we may be required to incur any material, additional material costs, or expenses associated with our operations. Our failure to comply with any of the foregoing regulatory requirements could result in our being directly or indirectly liable for costs, fines or penalties and third-party claims, and could jeopardize our ability to conduct business in the U.S. and foreign countries.

### Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. *Properties*As of July 31, 2013, we owned or leased the primary facilities described below:

Location	Approximate Sq. Ft.		Principal Use(s)	Principal Segment(s)	
Peabody, MA (1)	Owned	514,000	Executive and administrative offices, manufacturing, R&D, customer service, and sales	All segments	
State College, PA	Owned	66,000	Administrative offices, manufacturing, R&D, customer service, and sales	Ultrasound	
Canton, MA	Leased	33,000	R&D, customer service, and sales	Medical Imaging	
Denver, CO (2)	Leased	33,000	Manufacturing, sales, and customer service	Ultrasound	
Herlev, Denmark (3)	Owned	135,000	Administrative offices, R&D, customer service, and sales	Ultrasound	
Shanghai, China (4)	Owned	145,000	Administrative offices, manufacturing, customer service, and sales	Medical Imaging and Ultrasound	
Montreal, Canada	Leased	54,000	Administrative offices, manufacturing, R&D, customer service, and sales	Medical Imaging	
Vancouver, Canada (5)	Leased	31,000	Administrative offices, manufacturing, R&D, customer service, and sales	Ultrasound	

<sup>(1)</sup> We own approximately 58 acres of land at this location, which can accommodate future expansion as required.

We lease a number of other smaller facilities in locations such as the United Kingdom, Germany, Italy, France, Sweden and Belgium.

We believe that our existing facilities are generally adequate to meet our current needs, and that suitable additional or substitute space will be available on commercially reasonable terms when needed. Refer to Note 13 to the Consolidated Financial Statements included in this report for further information concerning certain leases.

# Item 3. Legal Proceedings

For a discussion of legal matters as of July 31, 2013, please read Note 12 to our Consolidated Financial Statements included in this report, which is incorporated into this item as reference.

# Item 4. Mine Safety Disclosure

Not applicable

<sup>(2)</sup> On May 13, 2013, we announced a plan of restructuring involving the closure of the Denver, Colorado facility and to consolidate those activities with our facility in State College, PA.

<sup>(3)</sup> We are not currently utilizing all the space of this facility. We have subleased a portion of this facility and are currently in process of exploring various uses for this unused space.

<sup>(4)</sup> Our Shanghai, China facility opened in April 2012 and we are currently in the process of ramping up production at this site.

<sup>(5)</sup> This property was assumed as part of the acquisition of Ultrasonix in March 2013.

## **Executive Officers of the Registrant**

Our current executive officers are:

Name	Age	Position	Date Since Office Has Been Held
James W. Green	55	President and Chief Executive Officer	2007
Michael L. Levitz	40	Senior Vice President, Chief Financial Officer, and Treasurer	2009
John J. Fry	51	Senior Vice President, General Counsel, and Secretary	2007
		Senior Vice President and General Manager Medical Imaging Business	2010
Farley Peechatka Jr	51	Senior Vice President and General Manager Ultrasound Segment	2011

Our executive officers are elected annually by our board of directors and hold office until their successors are chosen and qualified, subject to earlier removal by the board of directors.

There are no arrangements or understandings between any of our executive officers and any other person(s) pursuant to which such executive officer was selected as an officer.

James W. Green has been our President and Chief Executive Officer since 2007. From 2005 to 2007, Mr. Green was Regional Vice President, California Division, of Quest Diagnostics Incorporated, a leading provider of diagnostic testing, information, and services. Before joining Quest, Mr. Green served as Senior Vice President & General Manager of Computed Tomography for Philips Medical Systems, a global leader in the business of developing, manufacturing, marketing, and servicing medical computed tomography systems.

Michael L. Levitz is our Senior Vice President, Chief Financial Officer, and Treasurer. Mr. Levitz joined us in July 2009. From October 2007 to July 2009, Mr. Levitz was Vice President and Controller of the Cytyc business unit of Hologic Inc., a developer, manufacturer, and supplier of premium diagnostic products, medical imaging systems, and surgical products focused on the healthcare needs of women. From September 2002 until Cytyc Corporation's merger with Hologic Inc. in October 2007, Mr. Levitz served in various capacities at Cytyc Corporation, including Vice President and Corporate Controller. Mr. Levitz began his career in the audit practice of Arthur Andersen LLP and is a certified public accountant.

John J. Fry is our Senior Vice President, General Counsel, and Secretary. He joined us in November 2007. From April 2005 until joining us, Mr. Fry was a principal of the law firm Driggs, Hogg, & Fry Co., L.P.A. (formerly Driggs, Lucas, Brubaker & Hogg Co., L.P.A.), where his practice focused primarily on technology and intellectual property law. From August 1995 to April 2005, he held various legal positions at Philips Medical Systems (formerly Marconi Medical Systems and Picker International), including Senior Corporate Counsel and Intellectual Property Manager and counsel to Philips' computed tomography business.

Mervat Faltas has served as Senior Vice President and General Manager of our Medical Imaging Segment since May 2010. She joined ANRAD Corporation, our Canadian subsidiary now known as Analogic Canada Corporation, in July 2005 as Vice President of Operations and was named President of Analogic Canada in January 2006. From May 2000 until June 2005, Mrs. Faltas served in various capacities at ITF Optical Technologies, a Montreal-based provider of fiber optic components for terrestrial and undersea communication networks, including as President and CEO. From 1990 to 2000, Mrs. Faltas held various positions at PerkinElmer Corporation, including General Manager of PerkinElmer's Montreal operation.

Farley Peechatka Jr. has served as Senior Vice President and General Manager of our Ultrasound segment since May 2011. Mr. Peechatka joined us in November of 2002 as Vice President of Operations of our Sound Technology, Inc. ("STI") subsidiary upon our acquisition of STI from Siemens Medical. Mr. Peechatka became President of STI in October 2008. Mr. Peechatka is a co-founder of Sound Technology, a leading provider of medical ultrasound transducers, and held multiple positions in the company, most recently as the Vice President of Operations and President. Prior to founding Sound Technology in 1987, he held engineering positions with Johnson & Johnson and GE ultrasound.

### PART II

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

Our common stock trades on the NASDAQ Global Select Market under the symbol: ALOG. The following table sets forth the high and low sales prices per share of our common stock, as reported by the NASDAQ Global Select Market, for each quarterly period indicated in the table below:

Fiscal Year	<u> High</u>	Low
2013		
First Quarter	\$84.71	\$62.49
Second Quarter	79.85	66.05
Third Quarter	81.55	71.64
Fourth Quarter	82.87	68.86
2012		
First Quarter	\$56.49	\$42.90
Second Quarter	59.61	49.83
Third Quarter	69.72	53.68
Fourth Quarter	68.56	59.22

As of August 31, 2013, there were approximately 670 holders of record of our common stock. Because many of the shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of individual stockholders represented by these holders of record. Our board of directors declared cash dividends of \$0.10 per share for each of the quarters of fiscal years 2013 and 2012. We intend to pay a regular quarterly cash dividend subject to, among other things, our results of operations, cash balances, future cash requirements, financial condition, and other factors that our board of directors may deem relevant. Our policy is to retain sufficient earnings to provide funds for the operation and expansion of our business.

The following table contains information about our purchases of our equity securities during the three months ended July 31, 2013.

<u>Period</u>	Total Number of Shares Purchased (1) (2)	Average Price Paid per Share (3)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (3)	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (000's)
5/1/2013-5/31/2013		<b>\$</b> —	_	\$15,533
6/1/2013-6/30/2013	9,759	75.17	9,059	14,854
7/1/2013-7/31/2013	18,973	71.39	<u>17,430</u>	13,607
Total	28,732	72.68	<u> 26,489</u>	13,607

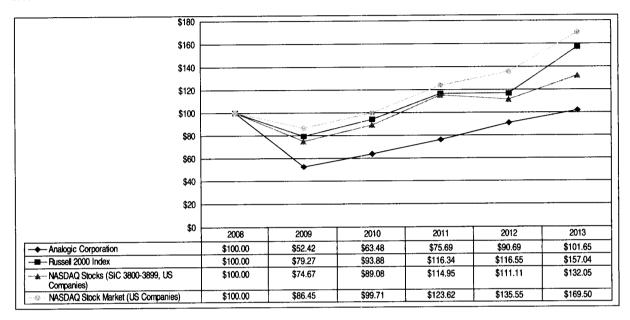
<sup>(1)</sup> Includes 700 and 1,543 shares of our common stock surrendered by employees in order to meet tax withholding obligations in connection with the vesting of restricted stock awards and units in June and July 2013, respectively.

<sup>(2)</sup> For purposes of determining the number of shares to be surrendered in order to meet tax withholding obligations, the price per share deemed to be paid was the closing price of our common stock on the NASDAQ Global Select Market on the vesting date.

<sup>(3)</sup> Represents our common stock purchased by us in open-market transactions in June 2013 and July 2013, respectively. These shares were purchased pursuant to a repurchase program authorized by our board of directors that was announced on December 8, 2011 to repurchase up to \$30,000 of our common stock. During the fourth quarter of fiscal year 2013, we repurchased 26,489 shares of our common stock under this repurchase program for \$1,925 at an average purchase price of \$72.68 per share. The repurchase program does not have a fixed expiration date.

**Comparison of Five-Year Cumulative Total Returns** 

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return of the Center for Research in Security Prices of the University of Chicago ("CRSP") Total Return Index for the NASDAQ Stock Market (US Companies), the Russell 2000 Index, and the CRSP Total Return Index for all NASDAQ stocks with SIC Codes related to our business in the areas of measuring instruments, photo goods, medical goods, optical goods, and timepieces. The graph assumes \$100 invested on July 31, 2007, in our common stock and \$100 invested at that time in each of the indexes. The comparison assumes that all dividends are reinvested.



The stock price performance included in this graph is not necessarily indicative of future stock price performance.

### Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data are derived from our audited Consolidated Financial Statements and the notes thereto and should be read in connection with, and are qualified in their entirety by, our audited Consolidated Financial Statements and the notes thereto and other financial information included elsewhere in this Annual Report on Form 10-K.

	(In thousands, except per share data)					
	Year Ended July 31,					
	2013		2012	2011	2010	2009
Total net revenue	\$550,36	3 \$	516,571	\$473,595	\$414,813	\$386,860
Total cost of sales	333,68	4	323,387	300,632	266,916	264,255
Gross profit	216,67	9	193,184	172,963	147,897	122,605
Income (loss) from operations (A)	45,37	5	39,963	20,736	21,320	(4,496)
Income from continuing operations before discontinued						
operations (B) (D)	31,12	1	43,071	16,620	15,799	3,517
Income (loss) from discontinued operations, net of tax	_		_	289	(244)	188
Gain on disposal of discontinued operations, net of tax (C)			_	924	_	
Net income (D)	\$ 31,12	1 \$	43,071	\$ 17,833	\$ 15,555	\$ 3,705
Basic net income per share:						
Income from continuing operations	\$ 2.54	1 \$	3.51	\$ 1.33	\$ 1.26	\$ 0.27
Income (loss) from discontinued operations, net of tax	_		_	0.02	(0.02)	•
Gain on disposal of discontinued operations, net of tax				0.08	_	_
Basic net income per share	\$ 2.5	1 \$	3.51	\$ 1.43	\$ 1.24	\$ 0.29
Diluted net income per share:					,	
Income from continuing operations	\$ 2.48	3 \$	3.42	\$ 1.33	\$ 1.25	\$ 0.27
Income (loss) from discontinued operations, net of tax	_		_	0.02	(0.02)	0.02
Gain on disposal of discontinued operations, net of tax			_	0.07	`— ´	
Diluted net income per share	\$ 2.48	3 \$	3.42	\$ 1.42	\$ 1.23	\$ 0.29
Cash dividends declared per common share	\$ 0.40	) \$	0.40	\$ 0.40	\$ 0.40	\$ 0.40
Weighted average shares outstanding:	*			•	* ****	* ****
Basic	12,247	7	12,265	12,491	12,584	12,835
Diluted	12,569		12,576	12,572	12,655	12,932
Cash, cash equivalents, and marketable securities	\$113,033				\$169,254	
Working capital	269,519		308,856	294,387	281,727	264,140
Total assets	587,784		557,996	521,552	485,776	464,114
Long-term liabilities	10,494		11,738	9,254	6,665	6,444
Stockholders' equity	486,396		446,319	423,472	409,042	397,519
1 7	,		, ,	,	,	•

<sup>(</sup>A) In fiscal year 2013, we recorded acquisition-related expenses associated with the acquisition of Ultrasonix in the amount of approximately \$5,600. During fiscal year 2013, we also recorded pre-tax restructuring charges of \$3,519 primarily for severance and personnel related costs for 137 involuntarily terminated employees as well as for facility exit costs, all of which were recognized in our Consolidated Statement of Operation under restructuring. We expect to record additional pre-tax restructuring charges of up to approximately \$1,500 as we complete the transitions associated with these restructuring activities by the fourth quarter of our fiscal year ending July 31, 2014 ("fiscal year 2014").

In fiscal year 2011, we recorded a pre-tax restructuring charge of \$7,066 primarily for severance and personnel related costs for 155 employees that were involuntarily terminated, all of which were recognized in our Consolidated Statement of Operations under restructuring. Also, in fiscal year 2011, we recorded a net of tax bargain purchase gain of \$1,042 in operating expenses related to the acquisition of an OEM ultrasound transducer and probe business in November 2010.

In the fiscal year ended July 31, 2009, which we refer to as fiscal year 2009, we recorded a pre-tax restructuring charges of \$6,619 for the severance and personnel related costs for 201 employees that were involuntarily terminated as well as for facility exit costs, all of which were recognized in our Consolidated Statement of Operations under restructuring. Also, in fiscal year 2009, we recorded \$811 in general and administrative expenses for a settlement of a dispute with a customer.

- (B) In fiscal year 2012, we recorded a gain on the sale of other investments on a pre-tax basis of \$2,500 related to the sale of our remaining 25% equity interest in a China-based affiliate.
- (C) In fiscal year 2011, we recorded a gain of \$924, net of taxes, in discontinued operations, for the sale of our hotel.
- (D) In fiscal year 2012, we received a refund of \$12,007 as a result of the completion of an U.S. Internal Revenue Service ("IRS") audit of U.S. Federal income tax returns for the fiscal years ended July 31, 2003, 2005, and 2008. The refund was largely the result of Federal research and experimentation credits that carryover from the fiscal years 1991 through 2000 into the audited returns. We recorded a tax benefit for this refund, including the related interest, in the Consolidated Statement of Operations of \$10,025 in the fiscal year ended July 31, 2012. Related to the refund and interest were contingent professional fees of \$2,714 that were recorded in general and administrative expenses in the Consolidated Statement of Operations in the fiscal year ended July 31, 2012. In connection with the conclusion of the IRS audit, we recorded a benefit from the reversal and re-measurement of related tax reserves of \$2,308 in the Consolidated Statement of Operations in the fiscal year ended July 31, 2012.

In fiscal year 2009, we had an income tax benefit of \$4,915, which was due primarily to IRS refunds of \$8,143 received in that year. The impact of these refunds, which included \$1,262 of interest, was a reduction of previously unrecognized tax benefits of approximately \$3,280, of which \$1,356 was recorded as a tax benefit in fiscal year 2009. Also contributing to the income tax benefit for fiscal year 2009 was \$1,820 for the reversal of a valuation allowance on Belgium net operating loss carryforwards that our management determined were more likely than not to be recognized. Related to the refund and interest received in fiscal year 2009, we recorded contingent professional fees of \$1,160 in general and administrative expenses.

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

The following discussion provides an analysis of our financial condition and results of operations and should be read in conjunction with the audited Consolidated Financial Statements and notes thereto included elsewhere in this Annual Report on Form 10-K. The discussion contains statements, which, to the extent that they are not a recitation of historical facts, constitute "forward-looking statements" pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including statements about product development, market and industry trends, strategic initiatives, regulatory approvals, sales, profits, expenses, price trends, R&D expenses and trends, and capital expenditures, we make in this document or in any document incorporated by reference are forward-looking. Such forward-looking statements involve known and unknown risks, uncertainties, and other factors, which may cause our actual results, performance, or achievements to differ from the projected results. Refer to "Risk Factors" in Item 1A for a discussion of the primary risks and uncertainties known to us at this time.

Our Management's Discussion and Analysis is presented in six sections as follows:

- Business Overview
- Fiscal Year 2013 Financial Highlights
- Results of Operations
- Liquidity and Capital Resources
- Recent Accounting Pronouncements
- Critical Accounting Policies

We report our financial condition and results of operations on a fiscal year basis ending July 31. All dollar amounts in this Item 7 are in thousands except per share data.

### **Business Overview**

Analogic is a high technology company that designs and manufactures advanced medical imaging, ultrasound and security systems and subsystems sold to original equipment manufacturers, or OEMs, and end users primarily in the healthcare and airport security markets.

Our business is strategically aligned into three segments: Medical Imaging, Ultrasound, and Security Technology. Our business segments are described as follows:

- Medical Imaging primarily includes systems and subsystems for CT and MRI medical imaging
  equipment as well as state-of-the-art, selenium-based detectors for screening of breast cancer and other
  diagnostic applications in mammography.
- *Ultrasound* includes ultrasound systems and transducers primarily in the urology, surgery (including robotic assisted surgery), anesthesia, and point-of-care markets.
- Security Technology includes advanced threat detecting CT systems utilizing our expertise in advanced imaging technology and primarily used in the checked baggage screening at airports worldwide.

The following table sets forth the percentage of total net revenue by reporting segment for fiscal years 2013 and 2012.

	Year Ende	d July 31,
	2013	2012
Medical Imaging	58%	59%
Ultrasound	27%	29%
Security Technology	15%	12%
Total net revenue	100%	100%

## Fiscal Year 2013 Financial Highlights

The following table is a summary of our financial results for the fiscal years ended July 31, 2013 and 2012. This summary is not a substitute for the detail provided in the following pages or for the audited Consolidated Financial Statements and notes that appear elsewhere in this document.

	Year Ended July 31,		Percentage
	2013	2012	Change
Total net revenue	\$550,363	\$516,571	7%
Gross profit	\$216,679	\$193,184	12%
Gross margin	39%	37%	)
Income from operations	\$ 45,375	\$ 39,963	14%
Operating margin	8%	8%	,
Net income	\$ 31,121	\$ 43,071	-28%
Diluted net income per share	\$ 2.48	\$ 3.42	-27%

During fiscal year 2013 our total net revenue increased by 7% as compared to the prior year due primarily to growth in sales in our Medical Imaging and Security Technology segments of 6% and 29% respectively, offset in part by Ultrasound revenues which decreased 1% in fiscal year 2013.

Gross margin improved in fiscal year 2013 versus the prior year was due to higher volume, more efficient global manufacturing processes and cost reductions.

Income from operations increased 14% in fiscal year 2013 from the prior year due primarily to our revenue growth and gross margin improvement along with overall cost control. These results included expenses related to our acquisition of Ultrasonix as well as restructuring expenses.

During March 2013, we completed our acquisition of (i) all of the issued and outstanding shares of capital stock of Ultrasonix Medical Corporation, a Nevada corporation, and customer lists and intangibles related solely to sales destined to the U.S. and (ii) all of the outstanding equity securities of Ultrasonix Medical Corporation ("Ultrasonix"), a privately held company located in Vancouver, Canada, pursuant to a "plan of arrangement" under Canadian law. Ultrasonix is a supplier of advanced ultrasound systems for point-of-care and general imaging applications with over 5,000 systems installed worldwide. We undertook the acquisition to accelerate our expansion into the point-of-care ultrasound market. The purchase price, net of cash acquired, of \$79,932, was finalized in July 2013. The acquisition was funded from our existing cash on hand and has been accounted for as an acquisition of a business.

During fiscal year 2013, we incurred pre-tax charges of \$3,519, primarily relating to severance and personnel related costs of 137 involuntarily terminated employees, as well as for facility exit costs associated with restructuring activities, including the consolidation of manufacturing and certain support activities currently conducted at the Ultrasonix facility in Vancouver, into operations at our existing facilities, closure of the Ultrasonix sales subsidiary in Paris, France, the transition costs associated with the planned closure of our Englewood, Colorado facility, as we consolidate manufacturing and development activities into our State College, Pennsylvania facility, and optimization of our operations in Montreal, Canada and Peabody Massachusetts, all of which were recognized in our Consolidated Statement of Operation under restructuring. Our pre-tax charges were included in our operating results of our Medical Imaging segment, Ultrasound segment and Security Technology segment. We expect to record additional pre-tax restructuring charges of up to approximately \$1,500 as we complete the transitions associated with these other restructuring activities by the fourth quarter of our fiscal year 2014.

### **Results of Operations**

# Fiscal Year 2013 Compared to Fiscal Year 2012

Net Revenue

Product Revenue

Product revenue for fiscal year 2013 as compared with fiscal year 2012 is summarized in the table below.

	Year Ended July 31,		Percentage
	2013	2012	Change
Product Revenue:			
Medical Imaging	\$305,573	\$290,665	5%
Ultrasound	149,597	151,201	-1%
Security Technology	71,555	52,809	35%
Total product revenue	\$526,725	\$494,675	6%

## **Medical Imaging**

During fiscal year 2013, as compared to the prior year, product revenue increased largely due to growing global demand for high-power MRI subsystems. Product revenue from our other product lines in this segment was flat overall compared to the prior year, as a slight decrease in CT sales was offset by increased sales of our mammography detectors.

### Ultrasound

During fiscal year 2013, as compared to the prior year, product revenue decreased slightly on lower OEM transducer sales, partially offset by higher sales through our direct sales channel. Sales in our direct channel included \$10,095 of revenue from our Ultrasonix products following the March 2013 acquisition of Ultrasonix. Apart from the incremental revenues following the Ultrasonix acquisition, revenue in our direct channel was lower as compared to the prior year due to weakness in the ultrasound market as well as the temporary disruption in our sales force related to our continued sales force expansion and channel integration following the acquisition of Ultrasonix.

### **Security Technology**

During fiscal year 2013, as compared to the prior year, product revenue increased significantly due to strong shipments of high-speed threat detection systems as demand for CT-based explosives threat detection grew outside the U.S. These shipments included both increased sales of high-speed systems to L-3 as well as initial shipments of high-speed systems to Smiths following regulatory approval in fiscal year 2013 of their high-speed system incorporating our CT-based detection technology.

### Engineering Revenue

Engineering revenue for fiscal year 2013 as compared with fiscal year 2012 is summarized in the table below.

	Year Ended July 31,		Percentage
	2013	2012	Change
<b>Engineering Revenue:</b>			
Medical Imaging	\$12,974	\$11,101	17%
Ultrasound	206	·	n/a
Security Technology	10,458	10,795	-3%
Total engineering revenue	\$23,638	\$21,896	8%

Our business model includes customer-funded engineering projects that integrate our core technologies within our customer's product portfolios. These projects vary substantially from period to period in terms of resource requirements, type, size, length of project, and profitability.

### **Medical Imaging**

The increase for fiscal year 2013 versus the prior year was primarily due to increased work on customer-funded engineering projects.

#### Ultrasound

The increase for fiscal year 2013 versus the prior year was primarily due to work on a customer-funded engineering project.

## Security Technology

The decrease for fiscal year 2013 versus the prior year was due primarily to the timing of work performed on our Security Technology development projects.

### Gross Margin

### Product Gross Margin

Product gross margin for fiscal year 2013, as compared with fiscal year 2012, is summarized in the table below.

	Year Ended	Year Ended July 31,	
	2013	2012	Percentage Change
Product gross profit	<del>+</del>	\$192,387	10.9%
Product gross margin	40.5%	38.9%	

Product gross profit increased significantly in fiscal year 2013, versus the prior year, due to higher volume along with global manufacturing process and cost improvements in all three of our business segments. The increased product gross profit was driven by increased gross profit on higher product revenue of approximately \$12,500, lower scrap and production rework costs from improved vendor component quality inspection process in our digital mammography product line of approximately \$4,100, lower manufacturing costs following the consolidation of our manufacturing operations of approximately \$3,900, and cost savings of approximately \$3,000 as we ramp up production at our Shanghai operation, which opened in the latter half of fiscal 2012. Partially offsetting the lower costs were the amortization of intangible assets and the fair value inventory step-up adjustment of \$3,033 relating to our acquisition of Ultrasonix.

# Engineering Gross Margin

Engineering gross margin for fiscal year 2013, as compared with fiscal year 2012, is summarized in the table below.

	Year Ended July 31,		Percentage	
	2013	2012	Change	
Engineering gross profit	\$3,412 14.4%	\$797 3.6%	328.1%	
Engineering gross margin	14.4%	3.0%		

The increase in the engineering gross margin in fiscal year 2013, versus the prior year was primarily due to the mix of engineering projects worked on during each period as well as the impact of cash incentive compensation, directly related to changes in operating results.

## Operating Expenses

Operating expenses increased \$18,083, or 11.8%, in fiscal year 2013 as compared with fiscal year 2012 as shown in the table below.

	Year Ended July 31,		Percentage of Net Revenue	
	2013	2012	2013	2012
Operating Expenses:				
Research and product development	\$ 63,990	\$ 57,230	11.6%	11.1%
Selling and marketing	51,268	44,238	9.3%	8.6%
General and administrative	52,527	51,753	9.5%	10.0%
Restructuring	3,519		0.6%	0.0%
Total operating expenses	\$171,304	\$153,221	31.1%	29.7%

Research and product development expenses increased in fiscal year 2013, versus the prior year primarily due to approximately \$5,300 of incremental internal and contract personnel related expenses on internally-funded research and product development projects, and the addition of approximately \$1,500 of research and development costs from Ultrasonix following the March 2013 acquisition.

Selling and marketing expenses increased in fiscal year 2013, versus the prior year primarily as a result of the acquisition of Ultrasonix in March 2013. The acquisition of Ultrasonix added approximately \$5,300 of selling and marketing expenses in fiscal year 2013. We also added selling and marketing expenses of approximately \$1,700 related to expansion of our existing sales force in North America.

General and administrative expenses increased in fiscal year 2013, versus the prior year due primarily to approximately \$1,100 of partial-year operating expenses in the Ultrasonix Vancouver, Canada facility following the March 2013 acquisition, \$1,210 of acquisition-related expenses, \$1,000 of incremental audit costs, and \$400 associated with the medical device tax under the Patient Protection and Affordable Care Act that went into effect in fiscal year 2013, partially offset, by a decrease of approximately \$2,700 in contingent consulting related to the income tax refund received in fiscal year 2012.

Please refer to the Fiscal Year 2013 Financial Highlights section above for further information regarding the restructuring charge for our manufacturing consolidation and other restructuring efforts as we seek to optimize our overall operational footprint.

During March 2013, we completed our acquisition of (i) all of the issued and outstanding shares of capital stock of Ultrasonix Medical Corporation, a Nevada corporation, and customer lists and intangibles related solely to sales destined to the U.S. and (ii) all of the outstanding equity securities of Ultrasonix Medical Corporation, which we refer to as Ultrasonix, a privately held company located in Vancouver, Canada, pursuant to a "plan of arrangement" under Canadian law. Ultrasonix is a supplier of advanced ultrasound systems for point-of-care and general imaging applications with over 5,000 systems installed worldwide. We undertook the acquisition to accelerate our expansion into the point-of-care ultrasound market. The purchase price, net of cash acquired, of \$79,932, was finalized in July 2013. During fiscal year 2013, we incurred pre-tax charges of \$3,519, primarily relating to severance and personnel related costs of 137 involuntarily terminated employees, as well as for facility exit costs associated with restructuring activities, including the consolidation of manufacturing and certain support activities currently conducted at the Ultrasonix facility in Vancouver, into operations at our existing facilities, closure of the Ultrasonix sales subsidiary in Paris, France, the transition costs associated with the planned closure of our Englewood, Colorado facility, as we consolidate manufacturing and development activities into our State College, Pennsylvania facility, and optimization of our operations in Montreal, Canada and Peabody Massachusetts, all of which were recognized in our Consolidated Statement of Operation under restructuring. Our pre-tax charges were included in our operating results of our Medical Imaging segment, Ultrasound segment and Security Technology segment.

Restructuring and related charges, including actions associated with acquisitions, by segment are as follows:

Year Ended July 31	
2013	2012
\$1,099	\$
2,209	
211	
\$3,519	<b>\$</b> —
	\$3,519

We expect to record additional pre-tax restructuring charges of up to approximately \$1,500 as we complete the transitions associated with these other restructuring activities by the fourth quarter of our fiscal year 2014. Of the total pre-tax charges of up to approximately \$1,500, we expect approximately \$1,300, \$130, and \$0 will be included in the operating results of our Ultrasound, Medical Imaging and Security Technology segments, respectively.

Other (Expense) Income, Net

	Year Ended July 31,	
	2013	2012
Other (expense) income, net:		
Interest income, net	\$ 371	\$ 532
Gain on sale of investments	_	2,500
Other	(1,649)	1,204
Total other (expense) income, net	\$(1,278)	\$4,236

Total other (expense) income, net in fiscal year 2013 consisted primarily of foreign currency transaction exchange losses by our foreign subsidiaries of \$1,546.

Total other income (expense), net in fiscal year 2012 consisted of income of approximately \$350 from the resolution of obligations for a former facility in the third quarter of fiscal year 2012. The gain on sale of other investments in fiscal year 2012 was due to \$2,500 from the sale of our 25% equity interest in our China-based affiliate. The book value of this investment was written down to \$0 in fiscal year ended July 31, 2006, which we refer to as our fiscal year 2006. The other income of \$1,204 consisted primarily of foreign currency transaction exchange gains by our foreign subsidiaries.

Provision for Income Taxes

	I cui ziiucu	I can Emaca gang ca,	
	2013	2012	
Provision for income taxes	\$12,976	\$1,128	
Effective tax rate	29%	3%	

Year Ended July 31.

Voor Ended July 31

The effective tax rate for fiscal year 2013 was lower than the statutory rate of 35% due primarily to the reversal of tax reserves on U.S. federal and state tax returns as a result of the expiration of applicable statutes of limitations of \$638 including interest, the impact from retroactive extension of the U.S. R&D credit of \$466, ongoing benefits of U.S. R&D credits, U.S. deductions for manufacturing activity, and lower foreign tax rates as compared to the U.S. statutory rate of 35%.

The effective tax rate for fiscal year 2012 of 3% was due primarily to a discrete benefit of \$10,025 from the completion of an IRS tax audit that resulted in a refund, including the related interest, and reversal and re-measurement of related tax reserves of \$2,308. The decrease in the effective rate in fiscal year 2012 from these benefits was partially offset by the unfavorable impact of the expiration of the U.S. R&D credit on December 31, 2011.

Income from Continuing Operations and Diluted Net Income Per Share From Continuing Operations

Income from operations and diluted net income per share from operations for fiscal years 2013 and 2012 were as follows:

	rear Ended July 31,		
	2013		2012
Income from continuing operations	\$31,121	\$4	13,071
% of net revenue	5.7	%	8.3%
Diluted net income per share from continuing operations	\$ 2.48	\$	3.42

The decrease in net income for fiscal year 2013 versus the prior year was primarily due to income in fiscal year 2012 related to the benefit from an IRS refund of \$7,311, net of associated costs, and a pre-tax gain of \$2,500 from sale of an equity investment in fiscal year 2012, which offset improvements in our operating results in fiscal year 2013.

## Fiscal Year 2012 Compared to Fiscal Year 2011

#### Net Revenue

#### Product Revenue

Product revenue for fiscal year 2012 as compared with fiscal year 2011 is summarized in the table below.

	Year Ended July 31,		Percentage
	2012	2011	Change
Product Revenue:			
Medical Imaging	\$290,665	\$283,615	2%
Ultrasound	151,201	129,313	17%
Security Technology	52,809	34,694	52%
Total product revenue	\$494,675	\$447,622	11%

### **Medical Imaging**

The increase for fiscal year 2012 versus the prior year primarily reflects growth in our MRI and digital mammography product lines driven by higher sales volume of existing products. This increase was offset in part by fewer shipments in our CT product line due primarily to customer ordering patterns and lower sales of our motion control products, reflecting a decline in the semiconductor market and the sale of a subsidiary of our motion control business in the fourth quarter of fiscal year 2011.

#### Ultrasound

The increase for fiscal year 2012 versus the prior year was due primarily to increased sales of our Flex Focus platform of products in the U.S. through our expanded sales force and internationally through both our direct sales force and our distributor network. Also contributing to the increase was the acquisition of an OEM ultrasound transducer business in the second quarter of fiscal year 2011.

### **Security Technology**

The increase for fiscal year 2012 versus the prior year was due primarily to increased sales of baggage scanners, driven by demand for our new high speed and small footprint systems as well as growth in demand for our medium speed systems.

### Engineering Revenue

Engineering revenue for fiscal year 2012 as compared with fiscal year 2011 is summarized in the table below.

	Year End	Year Ended July 31,	
	2012	2011	Percentage Change
Engineering Revenue:	<del> </del>		-
Medical Imaging	\$11,101	\$ 9,417	18%
Ultrasound	<del>_</del>	124	-100%
Security Technology	10,795	16,432	-34%
Total engineering revenue	\$21,896	\$25,973	-16%

# **Medical Imaging**

The increase in fiscal year 2012 versus the prior year was due primarily to increased work on customer funded engineering projects and the timing of project milestones being completed.

### **Security Technology**

The decrease for fiscal year 2012 versus the prior year was due primarily to the timing of work performed on a significant development project for a large OEM customer.

### Gross Margin

### **Product Gross Margin**

Product gross margin for fiscal year 2012 as compared with fiscal year 2011 is summarized in the table below.

	Year Ende	Year Ended July 31,		
	2012	2011	Percentage Change	
Product gross profit	\$192,387	\$169,469	13.5%	
Product gross margin	38.9%	37.9%		

Product gross margin increased in fiscal year 2012 versus the prior year due primarily to improved gross margin in our Ultrasound and Security Technology segments, partially offset by a decline in gross margin in our Medical Imaging segment. The improvement in our Ultrasound segment was driven by cost savings following consolidation of our manufacturing operations at the end of fiscal year 2011, growth in overall sales volume, as well as an increase in shipments of higher-margin premium systems, while the improvement in our Security Technology segment was driven by favorable product mix and higher sales volume. The Medical Imaging segment decline was driven by vendor component quality issues in our digital mammography business and unfavorable product mix.

#### Engineering Gross Margin

Engineering gross margin for fiscal year 2012, as compared with fiscal year 2011, is summarized in the table below.

	Year Ende	Percentage	
	2012	2011	Change
Engineering gross profit Engineering gross margin	\$797 3.6%	\$3,494 13.5%	-77.2%

The decreases in the engineering gross profit and engineering gross margin in fiscal year 2012 versus the prior year were due primarily to the mix of engineering projects we worked on in our Security Technology segment in fiscal year 2012 as compared to the prior year. Also contributing to the decrease in gross margin was an increase in share-based and cash-based incentive compensation on improved operating results.

### Operating Expenses

Operating expenses increased \$994, or less than 1%, in fiscal year 2012 as compared with fiscal year 2011 as shown below.

Year Ended July 31,		Percentage of 1	f Net Revenue	
2012	2011	2012	2011	
\$ 57,230	\$ 63,125	11.1%	13.3%	
44,238	41,413	8.6%	8.7%	
51,753	40,623	10.0%	8.6%	
<u></u>	7,066	0.0%	1.5%	
\$153,221	\$152,227	29.7%	32.1%	
	\$ 57,230 44,238 51,753	2012     2011       \$ 57,230     \$ 63,125       44,238     41,413       51,753     40,623       —     7,066	2012     2011     2012       \$ 57,230     \$ 63,125     11.1%       44,238     41,413     8.6%       51,753     40,623     10.0%       —     7,066     0.0%	

Research and product development costs included in operating expenses are related to projects not funded by our customers. These expenses decreased \$5,895 in fiscal year 2012 versus the prior year due primarily to cost savings from work force reductions made throughout fiscal year 2011 as well as decreases in consulting and material costs and less investment in internally funded research and product development projects.

Selling and marketing expenses increased \$2,825 in fiscal year 2012 versus the prior year due primarily to new product launches and increased trade show activity in the Ultrasound segment.

General and administrative expenses increased \$11,130 in fiscal year 2012 versus the prior year due primarily to the impact of contingent consulting fees of \$2,714 in fiscal year 2012 related to the income tax refund and related interest received in that period, as well as increased share-based and cash-based incentive compensation costs of \$3,530, on improved operating results. Also contributing to the increase was inquiry costs of \$1,288 in fiscal year 2012 related to a distributor matter at BK Medical and the favorable impact in fiscal year 2011 of an acquisition bargain purchase gain included in general and administrative expenses of \$1,042. These increases were partially offset by \$386 of amortization for the intangible assets and inventory fair value adjustment associated with this acquisition.

Restructuring charges in fiscal year 2011 included severance and personnel related costs for our plan to reduce our headcount by 155 employees worldwide.

Restructuring and related charges, including actions associated with acquisitions, by segment are as follows:

	Fiscal Year Ende	
	2012	2011
Medical Imaging	\$ <del></del>	\$2,829
Ultrasound	_	3,668
Security Technology		569
Total restructuring and related charges	\$	\$7,066

Other Income (Expense), Net

	Year Ended July 31		
	2012	2011	
Other income (expense), net:			
Interest income, net	\$ 532	\$ 711	
Gain on sale of investments	2,500	_	
Other, net	1,204	(515)	
Total other income (expense), net	\$4,236	\$ 196	

The gain on sale of other investments for fiscal year 2012 was due to \$2,500 from the sale of our 25% equity interest in a China-based affiliate. The book value of this investment was written down to \$0 in fiscal year 2006.

Other income (expense), net during fiscal years 2012 and 2011 consisted primarily of foreign currency exchange gains (losses) from our foreign subsidiaries in Denmark and Canada. Also contributing to fiscal year 2012 was income of approximately \$350 from the resolution of obligations for the fit out of a former facility.

Provision for Income Taxes

	Year Endec	Year Ended July 31,		
	2012	2011		
Provision for income taxes	\$1,128	\$4,312		
Effective tax rate	3%	21%		

Our effective income tax rate on continuing operations is based upon income for the year, the composition of the income in different countries, and adjustments, if any, in the applicable quarterly periods for the potential tax consequences, benefits, resolutions of tax audits or other tax contingencies.

The effective tax rate for fiscal year 2012 of 3% was due primarily to a discrete benefit of \$10,025 from the completion of an IRS tax audit that resulted in a refund, including the related interest, and reversal and re-measurement of related tax reserves of \$2,308. The decrease in the effective rate in fiscal year 2012 from these benefits was partially offset by the unfavorable impact of the expiration of the U.S. R&D credit on December 31, 2011.

For fiscal year 2011, the effective tax rate of 21% as compared to the U.S. statutory rate of 35% was due primarily to the full year benefit of the federal research and experimentation credit, the discrete tax benefit of \$536 for the reinstatement of the federal research and experimentation credit back to January 1, 2010, lower foreign tax rates as compared to the U.S statutory rate of 35%, the discrete benefit of \$599 from the reversal of tax reserves as a result of the expiration of the statute of limitations for the fiscal year ended July 31, 2007, which we refer to as fiscal year 2007, and settlements with various taxing authorities. In addition, taxes of \$621 related to the bargain purchase gain from the acquisition of an OEM ultrasound transducer and probe business were recorded in operating expenses in fiscal year 2011.

Income from continuing operations and diluted net income per share from continuing operations

Income from continuing operations and diluted net income per share from continuing operations for fiscal years 2012 and 2011 were as follows:

	Year Ended July 31,			
	2	012	2	2011
Income from continuing operations % of net revenue Diluted net income per share from continuing operations	•	3,071 8.3% 3.42	•	6,620 3.5% 1.33

The increase in income from continuing operations and diluted net income per share from continuing operations for fiscal year 2012 versus the prior year was due primarily to cost savings following consolidation of our manufacturing operations and from other operational headcount reductions in fiscal year 2011. Also contributing to the increase was gross profit from an increase in sales volume in fiscal year 2012, declines in research and product development costs and restructuring charges, an income tax benefit from the refund and related interest in fiscal year 2012, and a gain on sale of an equity interest in fiscal year 2012. These items were partially offset by the increases in selling and marketing and general and administrative expenses.

#### **Discontinued Operations**

Discontinued operations for fiscal year 2012 as compared with fiscal year 2011 is summarized in the table below.

	Year Ende	d July 3 <u>1,</u>
	2012	2011
Income from discontinued operations, net of tax	<b>\$</b> —	\$289

During the first quarter of fiscal year 2011, we sold our hotel business. Refer to Note 2 to the Consolidated Financial Statements included in this report for details.

### **Liquidity and Capital Resources**

Key liquidity and capital resources information is summarized in the table below.

	<u>July 31, 2013</u>	July 31, 2012
Cash and cash equivalents (A)	\$113,033	\$187,011
Working capital	269,519	308,856
Long-term debt	·	_
Stockholders' equity	486,396	446,319

<sup>(</sup>A) Includes approximately \$49,700 and \$26,500 of cash and cash equivalents held outside the U.S. as of July 31, 2013 and 2012, respectively.

The decrease in cash and cash equivalents from July 31, 2012 to July 31, 2013 was due primarily to our purchase of Ultrasonix in March 2013 for approximately \$79,273.

The decrease in working capital from July 31, 2012 to July 31, 2013 was primarily driven by a decrease in cash resulting from the acquisition of Ultrasonix. This decrease was partially offset by an increase in accounts receivable of \$10,523 and decreases in accounts payable and deferred revenue of \$11,991 and \$2,445, respectively. The increase in accounts receivable is associated with the sales growth of the company in fiscal year 2013. The decrease in accounts payable was primarily due to timing of payments. The decrease in deferred revenue was a result of the timing of milestone payments on engineering products in the Medical Imaging and Security Technology segments.

Cash and cash equivalents at July 31, 2013 primarily consisted of demand deposits at highly rated banks and financial institutions. We periodically review our investment portfolio to determine if any investments are impaired due to changes in credit risk or other potential valuation concerns. We believe that our cash equivalents were appropriately valued at July 31, 2013 and July 31, 2012 and we are not aware of any market events that would impact their valuation. This could change in the future should new developments arise in the credit markets.

The carrying amounts reflected in the Consolidated Balance Sheets of cash and cash equivalents, trade receivables, and trade payables approximate fair value at July 31, 2013, due to the short maturities of these instruments.

#### **Cash Flows**

The following table summarizes our sources and uses of cash over the periods indicated:

	Year Ended July 31,			
	2013	2012	2011	
Net cash provided by continuing operations for operating activities	\$ 41,443	\$ 73,710	\$ 30,228	
Net cash used for investing activities	(104,678)	(27,899)	(10,986)	
Net cash used for financing activities	(12,107)	(26,527)	(20,152)	
Net cash used for discontinued operations			(335)	
Effect of exchange rate changes on cash	1,364	(1,929)	1,647	
Net (decrease) increase in cash and cash equivalents	\$ (73,978)	\$ 17,355	\$ 402	

The cash flows provided by continuing operations for operating activities in fiscal year 2013 primarily reflects our income from continuing operations of \$44,097, non-cash charges for depreciation and amortization expenses of \$17,275 and share based compensation of \$11,601. The cash provided by continuing operations for operating activities was largely offset by an increase in inventory of \$2,127, an increase in accounts receivable of

\$10,523 and a decrease in accounts payable of \$11,991. The increase in inventory was partially attributable to our acquisition of Ultrasonix. The increase in accounts receivable was due primarily to higher sales volumes in the three months ended July 31, 2013 as compared to the same period of fiscal year 2012. The decrease in accounts payable was primarily due to timing of payments.

The cash flows provided by continuing operations for operating activities in fiscal year 2012 primarily reflects our income from continuing operations of \$44,199, which included non-cash charges for depreciation and amortization of \$17,775 and share-based compensation expense of \$13,396. Also contributing to the increase were a tax refund of \$12,007, increases in advance payments and deferred revenue of \$5,471, increase in accrued income taxes of \$3,850 and an increase in accrued liabilities of \$3,948. The positive impact of our operating earnings on cash flows was partially offset by increases in accounts receivables and inventories of \$8,258 and \$7,206, respectively. The increase in advance payments and deferred revenue was primarily due to the timing of milestone payments on engineering products in the Medical Imaging and Security Technology segments. The increase in accrued income taxes was primarily due to increased pre-tax earnings from continuing operations in the fourth quarter of fiscal year 2012 as compared to the fourth quarter of fiscal year 2011. The increase in accrued liabilities was primarily due to the increase in accrued cash-based incentive compensation due to our improved operating results. The increase in accounts receivable was due primarily to increased revenue in the fourth quarter of fiscal year 2012 as compared to the fourth quarter of fiscal year 2011. The increase in inventories was primarily due to the increased demand across all of our segments.

The cash flows provided by continuing operations for operating activities in fiscal year 2011 primarily reflects our income from continuing operations of \$20,932, which included depreciation and amortization expenses of \$17,798, and non-cash share-based compensation expense of \$9,638. The positive impact of our operating earnings on cash flows, excluding the non-cash acquisition-related bargain purchase gain of \$1,042, was partially offset by increases in inventories and accounts receivable of \$20,550 and \$17,099, respectively, which were net of increases in accounts payable and accrued liabilities of \$12,490 and \$4,078, respectively, as well as a decrease in other assets of \$2,578. The increase in inventories of \$20,550 was due primarily to demand-related inventory increases and planned increases in Ultrasound and Medical Imaging inventories associated with the shift in production from Denmark to the U.S. and China. The increase in accounts receivable of \$17,099 was due primarily to growth in net revenue as well as an increase in unbilled receivables of \$5,578 on engineering projects due to the timing of completing milestones. The increase in accounts payable of \$12,490 was due primarily to the timing of vendor payments and increased inventory purchases. The increase in accrued liabilities of \$4,078 was due primarily to the restructuring charges of \$7,066 partially offset by payments made for the restructuring charges.

The net cash used by continuing operations for investing activities in fiscal year 2013 was driven by our March 2013 acquisition of Ultrasonix of \$79,273 and purchases of property, plant, and equipment of \$25,551 for our facility in State College, Pennsylvania, as well as global manufacturing and test capacity and other infrastructure investments to support our growth.

The net cash used by continuing operations for investing activities in fiscal year 2012 was due primarily to purchases of property, plant, and equipment of \$30,606, of which approximately \$15,629 relates to the construction of a manufacturing facility in Shanghai, China and the purchase of a facility in State College, Pennsylvania. The capital spending was partially offset by the proceeds of \$2,500 received from the sale of our 25% equity interest in our China-based affiliate during fiscal year 2012.

The net cash used by continuing operations for investing activities in fiscal year 2011 was due primarily to purchases of property, plant, and equipment of \$22,430, of which approximately \$6,200 relates to the construction of a manufacturing facility in Shanghai, China. These uses of cash were partially offset by the net proceeds of \$10,467 from the sale of our hotel business.

The net cash used for financing activities in fiscal year 2013 primarily reflects \$7,945 used to repurchase common stock, \$4,661 of shares surrendered for taxes paid related to vested employee restricted stock, and

\$5,114 of dividends paid to shareholders, partially offset by \$4,684 of proceeds related to the issuance of stock primarily from the exercise of employee stock options and \$2,053 excess tax benefit from share-based compensation.

The net cash used for financing activities in fiscal year 2012 primarily reflected \$23,260 used to repurchase common stock and \$4,980 of dividends paid to stockholders.

The net cash used for financing activities in fiscal year 2011 primarily reflected \$15,187 used to repurchase common stock and \$5,154 of dividends paid to stockholders.

We believe that our balances of cash and cash equivalents and cash flows expected to be generated by future operating activities will be sufficient to meet our cash requirements for at least the next 12 months.

#### Commitments, Contractual Obligations and Off-Balance Sheet Arrangements

Our contractual obligations at July 31, 2013, and the effect such obligations are expected to have on liquidity and cash flows in future periods are as follows:

Contractual Obligation	Total	2014	2015	2016	2017	2018	Thereafter
Operating leases	\$ 8,483	\$ 2,790	\$1,762	\$1,131	\$ 879	\$ 718	\$1,203
Purchasing obligations	61,371	61,072	212	50	4	33	· <u> </u>
Pension	3,892	253	272	293	301	314	2,459
Total contractual obligations	\$73,746	\$64,115	\$2,246	\$1,474	\$1,184	\$1,065	\$3,662

#### Restructuring

During fiscal year 2013 we incurred restructuring charges for our manufacturing consolidation and other restructuring efforts as we seek to optimize our overall operational footprint. For a more detailed description of our restructuring efforts, including our plan to consolidate facilities, please refer to Note 5 to the Consolidated Financial Statements included in this report.

#### Related Party Transactions

On July 25, 2011, we entered into an agreement to sell our 25% interest in a China-based affiliate for \$2,500. The book value of the interest in the China-based affiliate was written down to \$0 in fiscal year 2006, and we, upon final approval of the transaction by the Chinese government and receipt of the proceeds, recorded a gain on sale of other investments of \$2,500 in fiscal year 2012. At July 31, 2011, we had a net advance payment and deferred revenue balance of \$474 from our former China-based affiliate. Sales to this China-based affiliate for fiscal years 2012, and 2011 were approximately \$0 and \$2,808, respectively.

In April 2010, we invested \$1,900 in PocketSonics, a start-up company with proprietary ultrasound technology. We have expensed \$898, \$1,547, and \$2,438 for engineering services from this start-up company during fiscal years 2013, 2012, and 2011, respectively.

### Financing Arrangements

On October 11, 2011, we entered into a \$100 million five-year, revolving credit agreement ("Credit Agreement") with the financial institutions identified therein as lenders, which included Sovereign Bank, TD Bank, N.A., and HSBC Bank USA, National Association. The Credit Agreement is guaranteed by our material domestic subsidiaries as designated by us from time to time or as required under the Credit Agreement, and is supported by a pledge of 65% of the capital stock and equity equivalents of our principal international subsidiary. The credit facility does not require amortization of principal and may be reduced before maturity in whole or in part at our option without penalty.

Borrowings under the Credit Agreement may be used for general corporate purposes, including permitted acquisitions. The amount of the facility can be increased under specified circumstances up to \$150,000 in aggregate. We are the sole borrower under the Credit Agreement.

Interest rates on borrowings outstanding under the credit facility would range from 1.25% to 2.00% above the LIBOR rate, or, if we do not elect the LIBOR rate, from 0.00% to 1.00% above the defined base rate (which is the highest of (1) the prime rate, (2) the federal funds rate plus 0.50% or (3) one-month LIBOR plus 1%, in each case based upon our leverage ratio. A quarterly commitment fee ranging from 0.20% to 0.35% per annum is applicable on the undrawn portion of the credit facility, based upon our leverage ratio.

The Credit Agreement limits us and our subsidiaries' ability to, among other things: incur additional indebtedness; incur liens or guarantee obligations; pay dividends or make other distributions; make investments; dispose of assets; and engage in transactions with affiliates except on an arms-length basis. In addition, the Credit Agreement requires us to maintain the following financial ratios:

- A leverage ratio, defined as consolidated funded indebtedness to consolidated trailing four quarters EBITDA of no greater than 2.75:1.00 at any time; and
- An interest coverage ratio, defined as the ratio of consolidated trailing four quarters EBITDA to
  consolidated interest charges of no less than 3.00:1.00 at any time.

At July 31, 2013, our leverage ratio was 0.005 and our interest coverage ratio was not applicable as we had no attributable interest expense. As of July 31, 2013, we were in full compliance with all financial and operating covenants.

Any failure to comply with the financial or operating covenants of the credit facility would prevent us from being able to borrow and would also constitute a default, permitting the lenders to, among other things, accelerate repayment of outstanding borrowings, including all accrued interest and fees, and to terminate the credit facility. A change in control of us, as defined in the Credit Agreement, would also constitute an event of default, permitting the lenders to accelerate repayment and terminate the Credit Agreement.

In connection with the entering into this facility, we incurred approximately \$500 of transactions costs, which are being expensed over the five-year life of the credit facility.

## Other funding commitments

We currently also have approximately \$12,025 in other revolving credit facilities with banks available for direct borrowings. In connection with our acquisition of Ultrasonix, we assumed \$784 of debt under a certain credit facility, all of which was paid as of July 31, 2013. In addition to the debt assumed, we borrowed \$2,230 under this credit facility during the fiscal year 2013, all of which was paid as of July 31, 2013. We did not have any borrowings outstanding under credit facilities as of July 31, 2013 and July 31, 2012.

## Tax related obligations

We have \$7,256 of unrecognized tax benefits for uncertain tax positions and \$682 million of related accrued interest and penalties. We are unable to reasonably estimate the amount and period in which these liabilities might be paid. Note 16 to our consolidated financial statements provide additional information regarding matters relating to income taxes, including unrecognized tax benefits.

#### **Impact of Investigation Regarding our Danish Subsidiary**

As initially disclosed in our annual report on Form 10-K for the fiscal year ended July 31, 2011, we identified certain transactions involving BK Medical and certain of its foreign distributors, with respect to which we have raised questions concerning compliance with law, including Danish law and the U.S. Foreign Corrupt

Practices Act, and our business policies. These have included transactions in which the distributors paid BK Medical amounts in excess of amounts owed and BK Medical transferred the excess amounts, at the direction of the distributors, to third parties identified by the distributors. We have been unable to ascertain with certainty the ultimate beneficiaries or the purpose of these transfers. We have voluntarily disclosed this matter to the Danish Government, the U.S. Department of Justice, which we refer to as the DOJ, and the SEC and are cooperating with inquiries by the Danish Government, the DOJ and the SEC. We are unable to estimate the potential penalties and/or sanctions, if any, that might be assessed in connection with these matters. We have concluded that the transactions identified to date have been properly accounted for in our reported financial statements in all material respects. During fiscal year 2013, we incurred inquiry-related costs of approximately \$1,211 in connection with this matter, as compared to \$1,288 in fiscal year 2012. We have terminated the employment of certain BK Medical employees and have wound down the relationships with the BK Medical distributors that were involved in the transactions. We incurred employee termination costs of \$0 and \$400, respectively, in connection with this matter in fiscal years 2013 and 2012. Revenue from sales to the BK Medical distributors with whom we wound down BK Medical's relationship represented less than 0.2% of our total revenue in fiscal year 2013, as compared to less than 1.3% of our total revenue in fiscal year 2012.

## **Recent Accounting Pronouncements**

## Recently adopted

Presentation of comprehensive income

In June 2011, the Financial Accounting Standards Board, or the "FASB", issued an update to the accounting on comprehensive income to increase the prominence of items reported in other comprehensive income and to facilitate convergence of U.S. GAAP, and International Financial Reporting Standards, or "IFRS". This update requires that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This update does not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. Furthermore, this update does not affect how earnings per share is calculated or presented. This update is effective for annual periods beginning after December 15, 2011, and all periods thereafter and is applied retrospectively. The adoption of this update did not have an impact on our financial condition or results of operations.

#### Comprehensive income

In January 2013, the FASB issued an update which seeks to improve the reporting of reclassifications out of accumulated other comprehensive income by requiring an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under U.S. GAAP to be reclassified in its entirety to net income. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under U.S. GAAP that provide additional detail about those amounts. This update is effective for the annual or interim reporting periods beginning after December 15, 2012. We adopted this standard in the third quarter of fiscal year 2013 and this information is presented in Note 21 in our annual report on this Form 10-K. The adoption of this standard did not have an impact on our financial condition or results of operations.

### Not yet effective

Testing indefinite-lived intangible assets for impairment

In July 2012, the FASB issued an update regarding testing indefinite-lived intangible assets for impairment. This update gives an entity the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events and circumstances, an entity concludes that it is not more likely

than not that the indefinite-lived intangible asset is impaired, then the entity is not required to take further action. However, if an entity concludes otherwise, then it is required to determine the fair value of the indefinite-lived intangible asset and perform the quantitative impairment test by comparing the fair value with the carrying amount. An entity also has the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test. An entity will be able to resume performing the qualitative assessment in any subsequent period. The guidance is effective for our interim period ending October 31, 2013, and is not expected to have an impact on our financial condition or results of operations. Early adoption is permitted.

#### Foreign currency matters

In March 2013, the FASB issued an update which amends guidance on foreign currency matters and consolidations to address diversity in practice related to the release of cumulative translation adjustments, or "CTA", into earnings upon the occurrence of certain derecognition events. The update reflects a compromise between the CTA release guidance included within foreign currency matters and the loss of control concepts included within consolidation guidance. It precludes the release of CTA for derecognition events that occur within a foreign entity, unless such events represent a complete or substantially complete liquidation of the foreign entity. Derecognition events related to investments in a foreign entity result in the release of all CTA related to the derecognized foreign entity, even when a noncontrolling financial interest is retained. The update also amends guidance on business combinations and for transactions that result in a company obtaining control of a business in a step acquisition by increasing an investment in a foreign entity from one accounted for under the equity method to one accounted for as a consolidated investment. The update is effective for fiscal years beginning after December 15, 2013. This update should be applied prospectively and prior periods should not be adjusted. This update is not expected to have an impact on our financial condition or results of operations. Early adoption is permitted as of the beginning of an entity's fiscal year.

### Presentation of unrecognized tax benefits

In July 2013, the FASB issued an update which is intended to eliminate the diversity that is in practice with regard to the financial statement presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The guidance is effective for our interim period ending January 31, 2014. The adoption of this update is not expected to have a material impact on our consolidated financial statements.

#### **Critical Accounting Policies**

Management's discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. Our most critical accounting policies, and the estimates involved in their application, have a significant impact on the preparation of these Consolidated Financial Statements. These policies involve significant estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expense, and related disclosures of contingent assets and liabilities. We continue to evaluate our estimates and judgments on an on-going basis. By their nature, the policies discussed below require management to make its most difficult and subjective estimates and judgments, often on matters that are inherently uncertain. Our estimates and judgments are based on our historical experience, terms of existing contracts, our observance of trends in the industry, information provided by our customers, and information available from other outside sources, as appropriate.

For a complete discussion of our significant accounting policies, refer to Note 1, Summary of business operations and significant accounting policies, of the notes to Consolidated Financial Statements, included in Item 15, Exhibits and Financial Statements Schedule, of this Annual Report on Form 10-K. We believe the following accounting policies require management to make the most difficult estimates and judgments in the preparation of our Consolidated Financial Statements and accordingly are critical to an understanding of our financial statements.

#### Revenue Recognition

We provide engineering services to some of our customers on a contractual basis and recognize revenue using the percentage of completion method. We estimate the progress towards completion on contracts with a fixed-fee arrangement on a monthly basis utilizing costs incurred to date as a percentage of total estimated costs at completion of the project or on a milestone basis based on contractual terms, as appropriate. When total cost estimates exceed revenues, we accrue for the estimated losses immediately.

Our revenue recognition accounting methodology for engineering services with a fixed fee arrangement involves uncertainties because it requires management to make estimates of our total estimated costs at completion of projects. The timing of when revenue, profits, and loss reserves are recognized may fluctuate if changes to the estimates of costs at completion of projects are needed.

### Allocation of Consideration in Multiple Element Revenue Arrangements

We allocate arrangement consideration to each deliverable in an arrangement based on its relative selling price. We determine selling price using vendor specific objective evidence ("VSOE"), if it exists, and otherwise third party evidence ("TPE"). If neither VSOE nor TPE of selling price exists for a unit of accounting, we use estimated selling price ("ESP"). We generally expect that we will not be able to establish TPE due to the nature of the markets in which we compete, and, as such, we typically will determine selling price using VSOE or if not available, ESP. If we are unable to establish selling price using VSOE or TPE, and the order was received or materially modified after July 31, 2009, we use ESP in the allocation of arrangement consideration. The objective of ESP is to determine the price at which we would transact if the product or service were sold by us on a standalone basis.

Our determination of ESP involves a weighting of several factors based on the specific facts and circumstances of the arrangement. Specifically, we will consider the cost to produce the deliverable, the anticipated margin on that deliverable, the selling price and profit margin for similar parts, our ongoing pricing strategy and policies (as evident in the price list as established and updated on a regular basis), the value of any enhancements that have been built into the deliverable and the characteristics of the varying markets in which the deliverable is sold.

#### Inventory

We value our inventory at the lower of the cost of the inventory or market in a manner that approximates the first-in first-out method. Management assesses the recoverability of inventory based on types and levels of inventory held, product life cycles, and changes in technology. A variety of methodologies are used to determine the amount of inventory write-downs necessary to adjust excess and obsolete inventory. Write-downs are based upon the age of the inventory, lower of cost or market, along with significant management judgments concerning future demands for the inventory and technological obsolescence. If actual demand for our products is less than our estimates, or we experience a higher incidence of inventory obsolescence because of rapidly changing technology and customer requirements, additional write-downs for existing inventories might be recorded in future periods. Once recorded, inventory adjustments are not subsequently reversed until the inventory is used or disposed of. Inventory includes demo equipment utilized by the sales force in the field.

Our inventory write-downs involve uncertainties because the calculation requires management to make assumptions and to apply judgment regarding inventory aging, forecasted customer demand, and technological obsolescence.

## Share-based compensation

We have share-based compensation plans, which include stock options, restricted stock awards, and an employee stock purchase plan. We estimate the fair value of stock options using the Black-Scholes valuation model and the fair value of our restricted stock awards, which include shares of restricted stock and restricted stock units, based on the quoted market price of our common stock or the use of a Monte-Carlo Simulation Model.

We recognize the associated share-based compensation expense for time-based awards on a straight-line basis over the vesting periods of the awards, net of estimated forfeitures. Forfeiture rates are estimated based on historical pre-vesting forfeitures and are updated on the vesting dates to reflect actual forfeitures. The amount of share-based compensation expense for performance-based unvested restricted stock awards that is recognized on a straight-line basis over the performance period is based upon the number of shares that management ultimately expects to vest.

For performance-based awards with an earnings per share related target, management evaluates the probability of meeting the performance criteria at each balance sheet date and related compensation cost is amortized over the performance period on a straight-line basis because such awards vest only at the end of the measurement period. Changes to the probability assessment and the estimate of shares expected to vest will result in adjustments to the related share-based compensation expense that will be recorded in the period of the change. If the performance is not achieved, no compensation cost is recognized and any previously recognized compensation cost is reversed. For performance-based awards with a market condition related target, related compensation cost is amortized over the performance period on a straight-line basis, net of estimated forfeitures, regardless of whether the awards are ultimately earned.

Option-pricing models and generally accepted valuation techniques to value restricted stock awards with market conditions require management to make assumptions and to apply judgment to determine the fair value of our awards. These assumptions and judgments include estimating the future volatility of our stock price, expected dividend yield, future employee turnover rates and future employee stock option exercise behaviors. Performance-based non-vested restricted stock awards require management to make assumptions regarding the likelihood of achieving future company financial targets or personal performance goals. Changes in these assumptions can materially affect the fair value estimate and the amount of compensation expense we recognize.

#### Warranty Reserves

We estimate the costs of product warranties based on specific warranty claims, historical data, and engineering estimates, where applicable. Our warranty reserve involves uncertainties because the calculation requires management to make assumptions based on specific warranty claims, historical data, and engineering estimates, where applicable.

#### **Business Combinations**

We account for acquired businesses using the acquisition method of accounting, which requires, with limited exceptions, that assets acquired and liabilities assumed be recognized at their estimated fair values as of the acquisition date. Transaction costs are expensed as incurred. Any excess of the consideration transferred over the fair values of the net assets acquired is recorded as goodwill.

Our methodology involves uncertainties because it requires management to make assumptions and to apply judgment to estimate the fair value of acquired assets and liabilities. Management estimates the fair value of assets and liabilities based upon widely accepted valuation techniques, including discounted cash flows and market multiple analyses. Unanticipated events or circumstances may occur which could affect the accuracy of our fair value estimates, including assumptions regarding industry economic factors and business strategies.

## Impairment of Goodwill and Indefinite Lived Intangible Assets

We evaluate goodwill and indefinite lived intangible assets for impairment annually and whenever events or changes in circumstances indicate the carrying value of the goodwill or other intangible assets may not be recoverable. We conduct our impairment evaluation by performing internal valuation analyses, which

consider both the market approach and income approach for goodwill and the relief from royalty approach for the indefinite lived intangible assets Under the market approach, the fair value of the reporting unit is based on trading and acquisition multiples. Under the income approach, the fair value of the reporting unit is based on the present value of estimated future cash flows. Under the relief from royalty approach, the fair value of the indefinite lived intangible asset is based on after tax royalty rate and discount rate applied to future forecasted sales. In the second quarter of fiscal year 2013, we completed our annual impairment testing of goodwill and indefinite lived intangible assets using the methodologies described herein, and determined there was no impairment.

The valuation analyses described above involve uncertainties because they require management to make assumptions and to apply judgment to estimate industry economic factors and the profitability of future business strategies. It is our policy to conduct impairment testing based on our current business strategy in light of present industry and economic conditions, as well as our future expectations.

#### **Income Tax Contingencies**

Our income tax returns, like those of most companies, are periodically audited by domestic and foreign tax authorities. These audits include questions regarding our tax filing positions, including the timing and amount of deductions and the allocation of income among various tax jurisdictions. At any one time, multiple tax years are subject to audit by the various tax authorities. In evaluating the exposures associated with our various tax filing positions, we record a liability for exposures subject to a minimum threshold of more likely than not before any benefit is recognized. A number of years may elapse before a particular matter, for which we have established a liability, is audited and fully resolved or clarified. We adjust our liability for unrecognized tax benefits and income tax provision in the period in which an uncertain tax position is effectively settled, the statute of limitations expires for the relevant taxing authority to examine the tax position or when more information becomes available.

Our liability for unrecognized tax benefits involves uncertainties because management is required to make assumptions and to apply judgment to estimate the exposures associated with our various filing positions.

## **Deferred Tax Valuation Allowances**

We are required to estimate our income taxes in each of the jurisdictions within which we operate. This process involves assessing temporary differences resulting from different treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within the balance sheet. We must then assess the likelihood that the deferred tax assets will be recovered from future taxable income and, to the extent it is more likely than not that some portion or all of the deferred tax assets will not be realized, a valuation allowance must be established.

Our effective income tax rate is affected by changes in tax law, the tax jurisdiction of new business ventures, the level of earnings and where they came from, and the results of tax audits. Our deferred tax valuation allowances involve uncertainties because the calculations require management to make assumptions based on historical data, future book income, and tax-planning strategies.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

All dollar amounts in Item 7A are in thousands.

Certain of our foreign operations enter into transactions in currencies other than their functional currency, primarily the U.S. dollar and the Euro. We also have foreign currency exposure arising from the translation of our net equity investment in our foreign operations to U.S. dollars. We generally view our investments in foreign operations with functional currencies other than the U.S. dollar as long-term. The currencies to which we are exposed are the British pound, Canadian dollar, Chinese yuan, Danish kroner, Euro, and Japanese yen. A 10% depreciation in the July 31, 2013 and 2012 functional currencies, relative to the U.S. dollar, would result in a reduction of stockholders' equity of approximately \$1,155 and \$697, respectively.

As of July 31, 2013, we had forward contracts outstanding with notional amounts totaling \$6,720 in the Canadian dollar. These contracts have been designated as cash flow hedges, and the unrealized loss of \$104, net of tax, on these contracts is reported in accumulated other comprehensive income (loss). Liability and asset derivatives designated as hedging instruments are presented in other assets and other liabilities, respectively, on our consolidated balance sheets. Realized (gains) losses on the cash flow hedges are recognized in income in the period when the payment of expenses is recognized. During fiscal year 2013 and 2012, we recorded approximately \$80 and \$70 of realized losses included in cost of revenues and operating expenses in our Consolidated Statements of Operations. We expect all contracts currently outstanding to settle as of January 31, 2014 and any amounts in accumulated other comprehensive income (loss) to be reported as an adjustment to operating expenses.

We place our cash and cash equivalents in high quality financial instruments and, by policy, limit the amount of credit exposure to any one financial institution. Our cash includes cash equivalents, which we consider to be investments purchased with original maturities of three months or less. Investments having original maturities in excess of three months are stated at amortized cost, which approximates fair value, and are classified as held to maturity. Total net interest income for fiscal year 2013 and fiscal year 2012 was \$371 and \$532, respectively. A 10% change in interest income or interest rate would not have a material impact on the fair value of our portfolio or on future earnings.

#### Item 8. Financial Statements and Supplementary Data

The financial statements and supplementary data are listed under Part IV, Item 15 in this Annual Report on Form 10-K and are included at the end of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure
Not applicable.

#### Item 9A. Controls and Procedures

## **Disclosure Controls and Procedures**

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of July 31, 2013. The term "disclosure controls and procedures", as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by us in the reports that its files or submits under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including its principal executive officer and principal financial officer, as appropriate, to allow timely decisions to be made regarding required disclosure. It should be noted that any system of controls and procedures, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met and that management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of July 31, 2013, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

### Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). 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. Internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) 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 (iii) 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 interim or annual Consolidated 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.

Our management, with the participation of our chief executive officer and chief financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting as of July 31, 2013, based on the framework in *Internal Control Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Our assessment did not include evaluating the effectiveness of internal control over financial reporting of recently acquired Ultrasonix Medical Corporation (Ultrasonix) or Ultrasonix's subsidiaries, the consolidated results of which are included in our fiscal year 2013 consolidated financial statements and constituted 13% of total assets as of July 31, 2013 and 2% of revenue for the year then ended. Based on this assessment, our management concluded that, as of July 31, 2013, our internal control over financial reporting was effective based on those criteria.

The effectiveness of our internal control over financial reporting as of July 31, 2013 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

### **Changes in Internal Control Over Financial Reporting**

There were no changes to our internal control over financial reporting during the fourth quarter ended July 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Not applicable.

#### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance

We will file with the SEC a definitive proxy statement for our 2014 Annual Meeting of Stockholders not later than 120 days after the close of fiscal year 2013 (the "Proxy Statement"). Certain information required by this item is incorporated herein by reference to the Proxy Statement under the captions "Proposal 1—Election of Directors", "Corporate Governance" and "Section 16(a) Beneficial Ownership Reporting Compliance". Also refer to "Executive Officers of the Registrant" in Part I of this Annual Report on Form 10-K.

We have a code of ethics that applies to all of our employees and directors. This code (available on our website) satisfies the requirements set forth in Item 406 of Regulation S-K and applies to all relevant persons set forth therein. We intend to disclose on our website at www.analogic.com amendments to, and, if applicable, waivers of, our code of ethics.

#### Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to the Proxy Statement under the captions "Executive Compensation", "Director Compensation", "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report".

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

The information required by this item is incorporated herein by reference to the Proxy Statement under the captions "Security Ownership of Certain Beneficial Owners, Directors, and Management" and "Securities Authorized for Issuance Under Equity Compensation Plans".

## Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference to the Proxy Statement under the captions "Corporate Governance" and "Certain Relationships and Related Transactions".

## Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to the Proxy Statement under the caption "Independent Registered Public Accounting Firm's Fees".

## **PART IV**

## Item 15. Exhibits and Financial Statement Schedules

			Page Number
(a)			
	1.	Consolidated Financial Statements	
		Report of Independent Registered Public Accounting Firm	52
		Consolidated Balance Sheets at July 31, 2013 and 2012	53
		Consolidated Statements of Operations for the years ended July 31, 2013, 2012, and 2011 Consolidated Statements of Comprehensive Income for the years ended July 31, 2013, 2012,	54
		and 2011	55
		Consolidated Statements of Changes in Stockholders' Equity for the years ended July 31,	
		2013, 2012, and 2011	56
		Consolidated Statements of Cash Flows for the years ended July 31, 2013, 2012, and 2011	57
		Notes to Consolidated Financial Statements	58
	2.	Financial Statement Schedule II — Valuation and Qualifying Accounts	100
		Other schedules have been omitted because they are not required, not applicable, or the	
		required information is furnished in the Consolidated Statements or notes hereto	

<sup>(</sup>b) The Index to Exhibits immediately following our Financial Statements and Financial Statement Schedule II is incorporated herein by reference.

## **SIGNATURES**

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

## ANALOGIC CORPORATION

	By /s/ James W. Green
Date: September 30, 2013	James W. Green
•	President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Name	<u>Title</u>	Date
/s/ JAMES. W. GREEN  James W. Green	President and Chief Executive Officer (Principal Executive Officer) and Director	September 30, 2013
/s/ MICHAEL L. LEVITZ  Michael L. Levitz	Senior Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)	September 30, 2013
/s/ GINA R. CONSYLMAN Gina R. Consylman	Vice President - Corporate Controller (Principal Accounting Officer)	September 30, 2013
/s/ Edward F. Voboril	Chairman of the Board	September 30, 2013
Edward F. Voboril  /s/ BERNARD C. BAILEY  Bernard C. Bailey	Director	September 30, 2013
/s/ Jeffrey P. Black	Director	September 30, 2013
Jeffrey P. Black /S/ JAMES J. JUDGE	Director	September 30, 2013
James J. Judge		<b>20F</b>
/s/ KEVIN C. MELIA  Kevin C. Melia	Director	September 30, 2013
/s/ MICHAEL T. MODIC  Michael T. Modic	Director	September 30, 2013
/s/ Fred B. Parks Fred B. Parks	Director	September 30, 2013
/s/ SOPHIE V. VANDEBROEK  Sophie V. Vandebroek	Director	September 30, 2013

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Analogic Corporation

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of Analogic Corporation and its subsidiaries at July 31, 2013 and July 31, 2012, and the results of their operations and their cash flows for each of the three years in the period ended July 31, 2013 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of July 31, 2013, based on criteria established in Internal Control-Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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 described in Management's Annual Report on Internal Control over Financial Reporting, management has excluded Ultrasonix Medical Corporation from its assessment of internal control over financial reporting as of July 31, 2013 because it was acquired by the Company in a purchase business combination during 2013. We have also excluded Ultrasonix Medical Corporation from our audit of internal control over financial reporting. Ultrasonix Medical Corporation is a wholly-owned subsidiary whose total assets and total revenues represent 13% and 2%, respectively, of the related consolidated financial statement amounts as of and for the year ended July 31, 2013.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts September 30, 2013

# CONSOLIDATED BALANCE SHEETS (In thousands, except per share data)

	July 31, 2013	July 31, 2012
Assets		
Current assets:  Cash and cash equivalents  Accounts receivable, net of allowance for doubtful accounts of \$598 and \$344 as of	\$113,033	\$187,011
July 31, 2013 and July 31, 2012, respectively	113,150	96,117
Inventory	116,280	108,944
Refundable and deferred income taxes	7,803	9,786
Other current assets	10,147	6,937
Total current assets	360,413	408,795
Property, plant, and equipment, net	110,983	96,769
Intangible assets, net	55,525	34,340
Goodwill	50,073	1,849
Deferred income taxes	5,439	10,749
Other assets	5,351	5,494
Total Assets	\$587,784	\$557,996
Liabilities and Stockholders' Equity		
Current liabilities:	¢ 22 120	¢ 20 200
Accounts payable	\$ 32,138 22,264	\$ 38,200 25,153
Accrued employee compensation and benefits  Accrued warranty	6,501	5,634
Accrued restructuring charges	2,848	277
Deferred revenue	9,218	11,551
Customer deposits	3,256	2,772
Accrued income taxes	4,091	5,670
Other current liabilities	10,578	10,682
Total current liabilities	90,894	99,939
Long-term liabilities:		
Accrued income taxes	5,031	4,675
Other long-term liabilities	5,463	7,063
Total long-term liabilities	10,494	11,738
Commitments and guarantees (Note 12)		
Stockholders' equity:  Common stock, \$0.05 par value; 30,000,000 shares authorized and 12,235,416 shares issued and outstanding as of July 31, 2013; 30,000,000 shares authorized		
and 12,162,724 shares issued and outstanding as of July 31, 2012	612	608
Capital in excess of par value	114,381	100,222
Retained earnings	362,255	343,186
Accumulated other comprehensive income	9,148	2,303
Total stockholders' equity	486,396	446,319
Total Liabilities and Stockholders' Equity	\$587,784	\$557,996

## CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

	Yea	y 31,	
	2013	2012	2011
Net revenue:			****
Product	\$526,725	\$494,675	\$447,622
Engineering	23,638	21,896	25,973
Total net revenue	550,363	516,571	473,595
Cost of sales:			
Product	313,458	302,288	278,153
Engineering	20,226	21,099	22,479
Total cost of sales	333,684	323,387	300,632
Gross profit	216,679	193,184	172,963
Operating expenses:			
Research and product development	63,990	57,230	63,125
Selling and marketing	51,268	44,238	41,413
General and administrative	52,527 3,519	51,753	40,623 7,066
Restructuring		152 221	
Total operating expenses	171,304	153,221	152,227
Income from operations	45,375	39,963	20,736
Other income (expense):	271	522	711
Interest income, net	371	532 2,500	711
Gain on sale of other investments Other, net	(1,649)		(515)
			196
Total other (expense) income, net	(1,278)		
Income from continuing operations before income taxes	44,097 12,976	44,199 1,128	20,932 4,312
Provision for income taxes			
Income from continuing operations Income from discontinued operations (net of income tax provision of \$168 for fiscal year	31,121	43,071	16,620
2011)	_	_	289
Gain on disposal of discontinued operations (net of income tax provision of \$505 for			
fiscal year 2011)			924
Net income	\$ 31,121	\$ 43,071	\$ 17,833
Basic net income per common share:			
Income from continuing operations	\$ 2.54	\$ 3.51	\$ 1.33
Income from discontinued operations, net of tax		_	0.02
Gain on disposal of discontinued operations, net of tax			0.08
Basic net income per share	\$ 2.54	\$ 3.51	\$ 1.43
Diluted net income per common share:			
Income from continuing operations	\$ 2.48	\$ 3.42	\$ 1.33
Income from discontinued operations, net of tax	_		0.02
Gain on disposal of discontinued operations, net of tax			0.07
Diluted net income per share	\$ 2.48	\$ 3.42	\$ 1.42
Weighted average shares outstanding:			
Basic	12,247	12,265	12,491
Diluted	12,569	12,576	12,572
Dividends declared and paid per share:	\$ 0.40	\$ 0.40	\$ 0.40

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (In thousands, except per share data)

	Year Ended July 31,		31,
	2013	2012	2011
Net income	\$31,121	\$43,071	\$17,833
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	4,582	(7,605)	7,568
Unrecognized gain (loss) on pension benefits, net of tax	2,409	(1,632)	(793)
Unrealized (losses) gains on foreign currency forward contracts, net of tax	(146)	43	
Total other comprehensive income (loss), net of tax	6,845	(9,194)	6,775
Total comprehensive income	\$37,966	\$33,877	\$24,608

## CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

Years Ended July 31, 2013, 2012, and 2011

(In thousands, except share data)

	Common	Stock	Capital in Excess	Retained	Accumulated Other ained Comprehensive	Total Stockholders'
	Shares	Amount	of Par Value	Earnings	Income	Equity
Balance, July 31, 2010	12,884,708	\$645	\$ 77,085	\$326,590	\$ 4,722	\$409,042
Shares issued for:						
Stock options exercised	26,173	1	1,121			1,122
Stock grants and vesting of restricted stock units	14,079	1	392	_		393
Restricted stock cancellations and shares traded for taxes	(98,585)	(5)	(1,169)			(1,174)
Stock purchase plan	8,921		368			368
Tax provision for share-based compensation	_		(184)	_	_	(184)
Share-based compensation expense			9,638		<del></del>	9,638
Repurchase of common stock	(300,289)	(15)	(1,844)	(13,328)	_	(15,187)
Dividends paid (\$0.40 per share)		_		(5,154)	_	(5,154)
Net income for the year			_	17,833	. <del></del> .	17,833
Other comprehensive income, net of tax			_		6,775	6,775
Balance, July 31, 2011	12,535,007	627	85,407	325,941	11,497	423,472
Shares issued for:						
Stock options exercised	35,922	2	1,624		_	1,626
Stock grants and vesting of restricted stock units	53,094	2	2,475	_	_	2,477
Restricted stock cancellations and shares traded for taxes	(45,075)	(2)	(471)		<del></del>	(473)
Stock purchase plan	7,757		375		_	375
Tax benefit from share-based compensation			67	_	_	67
Share-based compensation expense	<del>-</del>	_	13,396	<del></del> .	_	13,396
Repurchase of common stock	(423,981)	(21)	(2,651)	(20,588)		(23,260)
Dividends paid (\$0.40 per share)				(5,238)		(5,238)
Net income for the year	_	_	_	43,071	<del></del>	43,071
Other comprehensive (loss), net of tax					(9,194)	(9,194)
Balance, July 31, 2012	12,162,724	608	100,222	343,186	2,303	446,319
Shares issued for:						
Stock options exercised	72,259	4	4,255	_	_	4,259
Stock grants and vesting of restricted stock units	228,979	11	1,545			1,556
Restricted stock cancellations and shares traded for taxes	(124,218)	(6)	(4,671)	_	_	(4,677)
Stock purchase plan	7,488	_	431		<del></del>	431
Tax benefit from share-based compensation	<del></del>		1,919		_	1,919
Share-based compensation expense			11,601		_	11,601
Repurchase of common stock	(111,816)	(5)	(921)	(7,019)	_	(7,945)
Dividends paid (\$0.40 per share)		_	_	(5,033)		(5,033)
Net income for the year	_		-	31,121		31,121
Other comprehensive income, net of tax					6,845	6,845
Balance, July 31, 2013	12,235,416	\$612	\$114,381	\$362,255	\$ 9,148	\$486,396

## CONSOLIDATED STATEMENTS OF CASH FLOWS Years Ended July 31, 2013, 2012, and 2011

(In thousands, except share data)

	Year	31,	
	2013	2012	2011
OPERATING ACTIVITIES: Net income	\$ 31,121	\$ 43,071	\$ 17,833
Less: Income from continuing operations		_	289 924
Gain on disposal of discontinued operations			
Income from continuing operations	31,121	43,071	16,620
Adjustments to reconcile income from continuing operations to net cash provided by operating activities:	1 006	(3,050)	(1,646)
Provison for (benefit from) deferred income taxes Depreciation and amortization	1,006 17,275	17,775	17,798
Bargain purchase gain		_	(1,042)
Fair value adjustment of contingent consideration	(25)	120	0.629
Share-based compensation expense  Excess tax benefit from share-based compensation	11,601 (2,053)	13,396 (184)	9,638 132
Other	1,188	<u>`</u> _ ′	
Write-down of inventory to net realizable value	4,726	2,441	3,729
Allowance for doubtful accounts	345	200 (2,500)	_26
Gain on sale of other investments (Gain) Loss on sale of property, plant and equipment	(58)	(14)	170
Net changes in operating assets and liabilities, exclusive of acquisition related assets and liabilities:	(/	` '	
Accounts receivable	(10,523)	(8,258)	(17,099)
Inventory	(2,127) 42	(7,206) 312	(20,550) (315)
Refundable income taxes Other current assets	(123)	2,525	2,578
Accounts payable	(11,991)	1,548	12,490
Accrued liabilities	(305)	3,948	4,078
Advance payments and deferred revenue	(2,445) 854	5,471 3,850	(54) 1,298
Accrued income taxes Other liabilities	2,935	265	2,377
NET CASH PROVIDED BY CONTINUING OPERATIONS FOR OPERATING ACTIVITIES NET CASH USED FOR DISCONTINUED OPERATIONS FOR OPERATING ACTIVITIES	41,443 —	73,710 —	30,228 (335)
NET CASH PROVIDED BY CONTINUING OPERATIONS FOR OPERATING ACTIVITIES	41,443	73,710	29,893
INVESTING ACTIVITIES:			
Proceeds from sale of discontinued operations, net	(05.551)	(20 (0()	10,467
Additions to property, plant, and equipment Acquisition of business, net of cash acquired	(25,551) (79,273)	(30,606)	(22,430) (346)
Proceeds from the sale of other investments	(,, <u>,,,,,,,</u>	2,500	_
Proceeds from the sale of property, plant, and equipment and other assets	146	207	1,323
NET CASH USED FOR INVESTING ACTIVITIES	(104,678)	(27,899)	(10,986)
FINANCING ACTIVITIES:			
Issuance of stock pursuant to exercise of stock options, employee stock purchase plan, restricted stock	4,684	2,000	1,490
plans, and non-employee director stock plan Shares repurchased for taxes for vested employee restricted stock grants	(4,661)	(471)	(1,169)
Repayments of other credit facilities	(3,014)		· —
Borrowing of other credit facilities	2,230 (340)		_
Contingent consideration payment  Excess tax benefit from share-based compensation	2,053	184	(132)
Repurchase of common stock	(7,945)	(23,260)	(15,187)
Dividends paid to shareholders	(5,114)	(4,980)	(5,154)
NET CASH USED FOR FINANCING ACTIVITIES	(12,107)	(26,527)	(20,152)
EFFECT OF EXCHANGE RATE CHANGES ON CASH	1,364	(1,929)	1,647
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(73,978)	17,355	402
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	187,011	169,656	169,254
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 113,033	\$187,011	\$169,656
Supplemental disclosures of cash flow information: Income taxes paid, net of refunds	\$ 11,339	\$ (935)	\$ 8,643

Supplemental disclosure of non-cash investing activities:

We accrued milestone payments towards the construction of manufacturing facilities in Shanghai, China, and State College, PA, of \$620, \$1,755, and \$1,785 at July 31, 2013, 2012, and 2011, respectively. We also had approximately \$1,000 of other property, plant, and equipment that was included in accounts payable at July 31, 2013. There was no other property, plant, and equipment that was received in accounts payable at July 31, 2012 or July 31, 2011.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Summary of business operations and significant accounting policies:

#### **Business operations:**

Analogic Corporation is a high technology company that designs and manufactures advanced medical imaging and security systems and subsystems sold to original equipment manufacturers, or OEMs, and end users primarily in the healthcare and airport security markets. We were incorporated in the Commonwealth of Massachusetts in November 1967 and are recognized worldwide for advancing state-of-the-art technology in the areas of medical computed tomography, or CT, ultrasound, magnetic resonance imaging, or MRI, digital mammography, and CT-based automated explosive detection systems for airport security. Our OEM customers incorporate our technology into systems they in turn sell for various medical and security applications. We also sell our ultrasound products directly into clinical end-user markets through our direct worldwide sales force under the brand names BK Medical and Ultrasonix.

We report our financial condition and results of operations on a fiscal year basis ending on July 31st of each year. All dollar amounts presented are in thousands, except per share data.

#### Significant accounting policies:

#### (a) Consolidation:

Our consolidated financial statements include the accounts of us and our subsidiaries, all of which are wholly owned. Investments in companies in which ownership interests range from 10 to 50 percent and for which we exercise significant influence over the investee's operating and financial policies, are accounted for using the equity method. All intercompany accounts and transactions have been eliminated in consolidation.

In determining whether we are the primary beneficiary of an entity and therefore required to consolidate, we apply a qualitative approach that determines whether we have both (1) the power to direct the economically significant activities of the entity and (2) the obligation to absorb losses of, or the right to receive benefits from, the entity that could potentially be significant to that entity. We have not been required to consolidate the activity of any entity due to these considerations.

#### (b) Inventories:

We value inventory at the lower of cost or market using the first-in, first-out (FIFO) method. Management assesses the recoverability of inventory based on types and levels of inventory held, product life cycle, and changes in technology. A variety of methodologies are used to determine the amount of inventory write-downs necessary for excess and obsolete inventory. The write-downs are based upon the age of the inventory, lower of cost or market, along with other significant management judgments concerning future demands for the inventory. Once write-downs are recorded, they are not subsequently reversed, unless the inventory is used or disposed of. Inventory includes demo equipment utilized by the sales force in the field.

### (c) Property, plant, and equipment:

Property, plant, and equipment is recorded at cost and depreciated using the straight-line method over their estimated useful lives. Leasehold improvements are amortized over the shorter of their estimated useful lives or the term of the respective leases. Upon retirement or disposal, the cost of the asset disposed of and the related accumulated depreciation are removed from the accounts and any gain or loss is reflected in our Consolidated Statement of Operations. Expenditures for maintenance and repairs are charged to expense when incurred while the costs of significant improvements, which extend the life of the underlying asset, are capitalized.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We review property, plant, and equipment for impairment whenever events or changes in circumstances indicate that the carrying amount of assets may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to the future undiscounted cash flows the assets are expected to generate over their remaining economic lives. If such assets are considered to be impaired, the impairment to be recognized in earnings equals the amount by which the carrying value of the assets exceeds their fair market value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. If such assets are not impaired, but their useful lives have decreased, the remaining net book value is amortized over the revised useful life.

Property, plant, and equipment consisted of the following:

	Estimated Useful Lives	July	31,	
	(Years)	2013	2012	
Property, plant, and equipment:				
Land and land improvements	N/A	\$ 7,431	\$ 7,209	
Building and improvements	35 to 40	82,966	74,954	
Leasehold and capital lease improvements	lesser of useful life or the lease term	10,739	11,147	
Manufacturing and engineering equipment	4 to 7	103,434	82,380	
Furniture, fixtures, and computer equipment	3 to 7	22,861	17,478	
Motor vehicles	3 to 5	1,996	1,405	
		229,427	194,573	
Less accumulated depreciation and				
amortization		(118,444)	(97,804)	
Total property, plant and equipment		\$ 110,983	\$ 96,769	

Total depreciation of property, plant, and equipment was \$12,973, \$13,439, and \$12,770 for fiscal years 2013, 2012, and 2011, respectively. We did not capitalize any interest in fiscal years 2013, 2012, or 2011.

#### (d) Revenue recognition and accounts receivable:

We recognize revenue related to product sales upon shipment provided that title and risk of loss have passed to the customer, there is persuasive evidence of an arrangement, the sales price is fixed or determinable, collection of the related receivable is reasonably assured and customer acceptance criteria, if any, have been successfully demonstrated. For product sales with acceptance criteria that are not successfully demonstrated upon shipment, revenue is recognized upon customer acceptance, provided all other revenue recognition criteria have been met. Our sales contracts generally provide for the customer to accept title and risk of loss when the product leaves our facilities. When shipping terms or local laws do not allow for passage of title and risk of loss at the shipping point, we defer recognizing revenue until title and risk of loss transfer to the customer. We classify shipping and handling invoiced to customers as revenue and the related costs in cost of sales. Sales and other taxes collected from customers and subsequently remitted to government authorities are recorded as accounts receivable with a corresponding offset recorded to sales taxes payable. These balances are removed from the consolidated balance sheet when the cash is remitted to the tax authority. We include service revenue, related primarily to extended warranty contracts and repairs, in the product revenue line item of our Consolidated Statement of Operations, as it is deemed immaterial for separate classification.

Our transactions sometimes involve multiple elements (i.e., products and services). We do not recognize revenue for our product sales under industry specific software accounting guidance since our products contain

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

both software and non-software components that function together to deliver the tangible product's essential functionality. At the inception of an agreement, we allocate arrangement consideration to each deliverable qualifying as a separate unit of accounting in an arrangement based on its relative selling price. We determine selling price using vendor specific objective evidence ("VSOE"), if it exists, and otherwise third party evidence ("TPE"). If neither VSOE nor TPE of selling price exists for a unit of accounting, we use estimated selling price ("ESP"). We generally expect that we will not be able to establish TPE due to the nature of the markets in which we compete, and, as such, we typically will determine selling price using VSOE or if not available, ESP.

VSOE is generally limited to the price charged when the same or similar product or service is sold separately or, if applicable, the stated substantive renewal rate in the agreement. If a product or service is seldom sold separately, it is unlikely that we can determine VSOE for the product or service. We define VSOE as a median price of recent standalone transactions that are priced within a narrow range, as defined by us, or stated renewal rates in contracts.

TPE is determined based on the prices charged by competitors of us for a similar deliverable when sold separately. As noted above, we typically are not able to use TPE, as we are usually not able to obtain sufficient information on competitor pricing to substantiate TPE.

If we are unable to establish selling price using VSOE or TPE, we use ESP in our allocation of arrangement consideration. The objective of ESP is to determine the price at which we would transact if the product or service were sold by us on a standalone basis.

Our determination of ESP involves a weighting of several factors based on the specific facts and circumstances of the arrangement. Specifically, we consider the cost to produce the deliverable, the anticipated margin on that deliverable, the selling price and profit margin for similar parts and our ongoing pricing strategy and policies.

We determine ESP for deliverables in future agreements based on the specific facts and circumstances of the arrangement. We analyze the selling prices used in our allocation of arrangement consideration at least annually. Selling prices are analyzed on a more frequent basis if a significant change in our business necessitates a more timely analysis or if we experience significant variances in our selling prices.

Maintenance or service revenues are recognized ratably over the term of the contract.

We provide engineering services to some of our customers on a contractual basis and recognize revenue using the percentage of completion method or the completed contract method. We estimate the progress towards completion on contracts with a fixed-fee arrangement on a monthly basis utilizing costs incurred to date as a percentage of total estimated costs at completion of the project or on a milestone basis based on contractual terms, as appropriate. Short-term unbilled receivables are included in accounts receivable and long-term unbilled receivables are included in noncurrent other assets in the consolidated balance sheet. Total unbilled receivables at July 31, 2013 and 2012 were \$4,949 and \$7,653, respectively. At July 31, 2013 and 2012, the long-term portion of unbilled receivables of \$1,806 and \$2,678, respectively, was included in non-current other assets. When total cost estimates exceed revenues, we accrue for the estimated losses immediately.

Deferred revenue is primarily comprised of maintenance and other service revenues for which payment has been received and for which services have not yet been performed. Revenue is also deferred in situations where collection of the receivable at the time of shipment is not reasonably assured. In situations where collection of the receivable is not reasonably assured, the inventory is expensed upon shipment and the revenue is deferred and

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

recognized as the cash is received. Total deferred revenue at July 31, 2013 and 2012 was \$10,584 and \$12,267, respectively. At July 31, 2013 and 2012, the long-term portion of deferred revenue of \$1,366 and \$716, respectively, was included in non-current other liabilities.

We grant credit to domestic and foreign original equipment manufacturers, distributors, and end users, and perform ongoing credit evaluations of our customers' financial condition. We continuously monitor collections and payments from our customers and maintain a provision for estimated credit losses based upon specific customer collection issues that have been identified.

### (e) Warranty costs:

We provide for the estimated cost of product warranties at the time products are shipped. Although we engage in extensive product-quality programs and processes, our warranty obligations are affected by product failure rates and service delivery costs incurred to correct product failures. Should actual product failure rates or service delivery costs differ from our estimates (which are based on specific warranty claims, historical data, and engineering estimates, where applicable), revisions to the estimated warranty liability would be required. Such revisions could adversely affect our operating results. Generally, we warrant that our products will perform in all material respects in accordance with our standard published specifications in effect at the time of delivery of the products to our customer for a period ranging from 12 to 36 months from the date of delivery.

### (f) Derivative instruments and hedging activities:

We recognize all derivative instruments as either assets or liabilities at fair value in our consolidated balance sheets. Changes in the fair value of derivatives are recorded each period in current earnings or accumulated other comprehensive income (loss), depending on whether a derivative is designated as part of a hedge transaction. We classify the cash flows from these instruments in the same category as the cash flows from the hedged items. We do not enter into derivative transactions for trading or speculative purposes.

We assess, both at inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting the changes in cash flows or fair values of the hedged items. We also assess hedge ineffectiveness on a quarterly basis and record the gain or loss related to the ineffective portion to current earnings. If we determine that a forecasted transaction is no longer probable of occurring, we discontinue hedge accounting for the affected portion of the hedge instrument, and any related unrealized gain or loss on the contract is recognized in current earnings.

#### (g) Research and product development and capitalized software development costs:

Research and product development costs are expensed as incurred and include primarily engineering salaries, incentive compensation, including share-based compensation, overhead and materials used in connection with research and product development activities. Research and product development costs related to non-recurring engineering projects funded by customers are included within engineering cost of sales if the project is accounted for under the percentage of completion method or under the completed contract method.

Software development costs incurred subsequent to establishing technological feasibility are capitalized through the general release of the products that contain the embedded software elements. Technological feasibility is demonstrated by the completion of a detailed program design. Capitalized costs are amortized on a straight-line basis over the economic lives of the related products, generally three years. Amortization expense of software development expense was \$187, \$1,273, and \$1,940 in fiscal years 2013, 2012, and 2011, respectively, and is included in product cost of sales.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### (h) Income taxes:

We account for income taxes under the asset and liability method, which requires recognition of deferred tax assets, subject to valuation allowances, and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of asset and liabilities for financial reporting and income tax purposes. A valuation allowance is established if it is more likely than not that all or a portion of the net deferred tax assets will not be realized. We do not provide for U.S. Federal income taxes on undistributed earnings of all consolidated foreign subsidiaries as such earnings are considered to be indefinitely reinvested in those operations. For disclosure purposes, calculations of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances existing if and when remittance occurs.

#### (i) Net income per share:

Basic net income per share is computed using the weighted average number of common shares outstanding during the period. Diluted net income per share is computed using the weighted average number of common and diluted common equivalent shares outstanding during the period. Dilutive common equivalent shares consist of stock options and restricted stock.

#### (j) Cash and cash equivalents:

We consider all highly liquid investments with a maturity of three months or less at acquisition date to be cash equivalents.

#### (k) Concentration of credit risk:

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash and cash equivalents, derivative instruments and accounts receivable. Cash and cash equivalents not required for working capital purposes are placed primarily in short-term bank deposits, money market funds, or demand notes of financial institutions or banks that meet stringent credit rating requirements or are collateralized by securities issued by the U.S. government or government agencies. We grant credit to domestic and foreign original equipment manufacturers, distributors, and end users, and perform ongoing credit evaluations on our customers' financial condition. We do not require collateral or other security to be furnished by the counterparties to our derivative instruments.

#### (l) Use of estimates:

The preparation of our consolidated financial statements, in conformity with accounting principles generally accepted in the United States of America, requires us to make estimates and assumptions that may affect the reported amounts of assets, liabilities, equity, revenue and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates and judgments and methodologies. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which forms the basis for making judgments about the carrying value of assets and liabilities. Our estimates include estimates of percentage of completion of contracts and the allocation of consideration in multiple-element arrangements; allowances for doubtful accounts receivable; inventory write-downs to reflect net realizable value; estimates used in the calculation and recognition of share-based compensation; accruals for product warranty; estimates of fair value of acquired assets and liabilities; estimates for goodwill and indefinite lived intangible asset impairment testing; valuation allowances against deferred tax assets; and other liabilities. Actual results may differ from those estimates under different assumptions or conditions.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### (m) Advertising:

Advertising costs are expensed when incurred and included in selling, general and administrative expenses.

#### (n) Share-based compensation:

We account for share-based compensation expense for equity instruments exchanged for employee and director services. Share-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as an expense over the employee's requisite service period (generally the vesting period of the equity grant).

We estimate the fair value of stock options using the Black-Scholes valuation model and the fair value of our restricted stock awards, which include shares of restricted stock and restricted stock units, based on the quoted market price of our common stock or the use of a Monte-Carlo simulation model. For time or service-based awards, we recognize the associated share-based compensation expense on a straight-line basis over the vesting periods of the awards, net of estimated forfeitures. Forfeiture rates are estimated based on historical pre-vesting forfeitures and are updated on the vesting dates to reflect actual forfeitures.

For performance-based awards with an earnings per share related target, we evaluate the probability of meeting the performance criteria at each balance sheet date and if probable, related compensation cost is amortized over the performance period on a straight-line basis because such awards vest only at the end of the measurement period. Changes to the probability assessment and the estimate of shares expected to vest will result in adjustments to the related share-based compensation expense that will be recorded in the period of the change. If the earnings per share related target performance is not achieved, no compensation cost is recognized and any previously recognized compensation cost is reversed. For market-based awards, the compensation cost is amortized over the performance period on a straight-line basis because the awards vest only at the end of the measurement period and the probability of actual shares expected to be earned is considered in the grant date valuation, therefore the expense is not adjusted to reflect the actual units earned.

#### (o) Fair value of financial instruments:

The carrying amounts of cash equivalents and receivables approximate fair value due to their short-term nature. The fair values of marketable securities, if any, are estimated based on quoted market price for these securities. We did not have any marketable securities at July 31, 2013 and 2012.

#### (p) Impairment of long-lived assets:

We evaluate the recoverability of our long-lived assets, recognizing the impairment of long-lived assets in the event the net book value of such assets exceeds the estimated future undiscounted cash flows attributable to such assets. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis or the market value. We review long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the estimated undiscounted cash flows of the asset group as compared to the recorded value of the asset group.

## (q) Segment information:

We have three reportable segments: Medical Imaging, Ultrasound, and Security Technology. Medical Imaging consists primarily of electronic systems and subsystems for CT and MRI medical imaging equipment

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

and direct conversion digital x-ray detectors for mammography sold primarily through OEM customers. Ultrasound consists of ultrasound systems and transducers for the urology, ultrasound-guided surgery and point-of-care markets sold primarily through our direct sales force. Security Technology consists of advanced weapon and threat detection aviation security systems and subsystems sold primarily through OEM customers.

### (r) Translation of foreign currencies:

The assets and liabilities of our foreign subsidiaries, whose cash flows are primarily in their local currency, have been translated into U.S. dollars using the current exchange rates at each balance sheet date. The operating results of these foreign subsidiaries have been translated at average exchange rates that prevailed during each reporting period. Adjustments resulting from translation of foreign currency financial statements are reflected as accumulated other comprehensive income in the consolidated balance sheet. We had foreign currency translation adjustments of \$4,582, (\$7,605) and \$7,568, respectively included within the Consolidated Statement of Comprehensive Income in fiscal years 2013, 2012, and 2011, respectively. Exchange gains and losses resulting from foreign currency transactions (transactions denominated in a currency other than of the entity's primary functional currency), excluding long-term intercompany receivables, payables, and investments, are included in operations in the period in which they occur and are reflected in the results of operations under the caption ("Other, net"). We had foreign exchange (losses) gains included within the Consolidated Statement of Operations totaling (\$1,546), \$668, and (\$678) in fiscal years 2013, 2012, and 2011, respectively.

#### (s) Business combinations:

In accordance with the acquisition method of accounting, the fair values of assets acquired and liabilities assumed are determined and recorded as of the date of the acquisition. Costs to acquire the business are expensed as incurred. Any excess of the purchase price over the estimated fair value of the net assets acquired is recorded as goodwill. Any excess of the fair value of assets acquired over the purchase price is recorded as a bargain purchase gain in general and administrative expenses.

#### (t) Intangible assets and goodwill:

Intangible assets consist of intellectual property, licenses, capitalized software, and certain identifiable intangible assets resulting from business combinations, including trade names, customer relationships, backlog, and developed technology. These assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of assets may not be recoverable. Recoverability of these assets is measured by comparison of their carrying value to future undiscounted cash flows the assets are expected to generate over their remaining economic life. If such assets are considered to be impaired, the impairment to be recognized in earnings equals the amount by which the carrying value of the assets exceeds their fair value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. Evaluation of impairment of long-lived assets requires estimates of future operating results that are used in the preparation of the expected future undiscounted cash flows. Actual future operating results and the remaining economic lives of long-lived assets could differ from the estimates used in assessing the recoverability of these assets. These differences could result in impairment charges, which could have a material adverse impact on our results of operations.

We perform annual reviews in our second quarter of each fiscal year for impairment of goodwill and indefinite lived intangible assets related to our acquisitions or more frequently whenever events or changes in circumstances indicate that the carrying values may not be recoverable. Goodwill may be considered to be impaired if we determine that the carrying value of the reporting unit, including goodwill, exceeds the reporting unit's fair value. Assessing the impairment of goodwill requires us to make assumptions and judgments regarding

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

the fair value of the net assets of our reporting units. We estimate the fair value of our reporting units using a combination of valuation techniques, including discounted cash flows and cash earnings multiples, and compare the values to our estimated overall market capitalization.

An indefinite lived intangible asset may be considered to be impaired if we determine that the carrying value exceeds the assets' fair value. Assessing the impairment of an indefinite lived intangible asset requires us to make assumptions and judgments regarding the fair value of the asset using the relief from royalty approach valuation technique.

### (u) New accounting pronouncements:

#### Recently adopted

Presentation of comprehensive income

In June 2011, the Financial Accounting Standards Board, or the "FASB", issued an update to the accounting on comprehensive income to increase the prominence of items reported in other comprehensive income and to facilitate convergence of U.S. GAAP, and International Financial Reporting Standards, or "IFRS". This update requires that all non-owner changes in stockholders' equity be presented either in a single continuous statement of comprehensive income or in two separate but consecutive statements. This update does not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. Furthermore, this update does not affect how earnings per share is calculated or presented. This update is effective for annual periods beginning after December 15, 2011, and all periods thereafter and is applied retrospectively. The adoption of this update did not have an impact on our financial condition or results of operations.

## Comprehensive income

In January 2013, the FASB issued an update which seeks to improve the reporting of reclassifications out of accumulated other comprehensive income by requiring an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under U.S. GAAP to be reclassified in its entirety to net income. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under U.S. GAAP that provide additional detail about those amounts. This update is effective for the annual or interim reporting periods beginning after December 15, 2012. We adopted this standard in the third quarter of fiscal year 2013 and presented this information in Note 21. The adoption of this standard did not have an impact on our financial condition or results of operations.

## Not yet effective

Testing indefinite-lived intangible assets for impairment

In July 2012, the FASB issued an update regarding testing indefinite-lived intangible assets for impairment. This update gives an entity the option first to assess qualitative factors to determine whether the existence of events and circumstances indicates that it is more likely than not that the indefinite-lived intangible asset is impaired. If, after assessing the totality of events and circumstances, an entity concludes that it is not more likely than not that the indefinite-lived intangible asset is impaired, then the entity is not required to take further action. However, if an entity concludes otherwise, then it is required to determine the fair value of the indefinite-lived

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

intangible asset and perform the quantitative impairment test by comparing the fair value with the carrying amount. An entity also has the option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test. An entity will be able to resume performing the qualitative assessment in any subsequent period. The guidance is effective for the interim period ended October 31, 2013, and is not expected to have an impact on our financial condition or results of operations. Early adoption is permitted.

#### Foreign currency matters

In March 2013, the FASB issued an update which amends guidance on foreign currency matters and consolidations to address diversity in practice related to the release of cumulative translation adjustments, or "CTA", into earnings upon the occurrence of certain derecognition events. The update reflects a compromise between the CTA release guidance included within foreign currency matters and the loss of control concepts included within consolidation guidance. It precludes the release of CTA for derecognition events that occur within a foreign entity, unless such events represent a complete or substantially complete liquidation of the foreign entity. Derecognition events related to investments in a foreign entity result in the release of all CTA related to the derecognized foreign entity, even when a noncontrolling financial interest is retained. The update also amends guidance on business combinations and for transactions that result in a company obtaining control of a business in a step acquisition by increasing an investment in a foreign entity from one accounted for under the equity method to one accounted for as a consolidated investment. The update is effective for fiscal years beginning after December 15, 2013. This update should be applied prospectively and prior periods should not be adjusted. This update is not expected to have an impact on our financial condition or results of operations. Early adoption is permitted as of the beginning of an entity's fiscal year.

#### Presentation of unrecognized tax benefits

In July 2013, the FASB issued an update which is intended to eliminate the diversity that is in practice with regard to the financial statement presentation of unrecognized tax benefits when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The guidance is effective for our interim period ending January 31, 2014. The adoption of this update is not expected to have a material impact on our consolidated financial statements.

## (v) Reclassifications and revisions to prior period financial statements:

Certain financial statement items have been reclassified to conform to the current period presentation. In the fourth quarter of fiscal year 2013, we identified errors in our annual 2012 and 2011 supplemental disclosures of cash flow information: Income taxes paid, net of refunds. We determined that these errors, which had no impact on our balance sheet, statement of operations or cash flows from operating, investing and financing activities were not material to our Consolidated Financial Statements for fiscal years 2012 and 2011. We revised the Consolidated Statement of Cash Flows with the appropriate disclosures in this Form 10-K, which resulted in the following:

- (i) For the fiscal year ended 2012 Income taxes paid, net of refunds is (\$935), from the previously disclosed amount of \$11,224; and
- (ii) For the fiscal year ended 2011 Income taxes paid, net of refunds is \$8,643, from the previously disclosed amount of (\$8,643).

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### 2. Discontinued operations:

During the first quarter of fiscal year 2011, we sold our hotel business, and realized net proceeds of \$10,467, after transaction costs. We recorded a gain on sale of the hotel business of \$924, net of a tax provision of \$505, or \$0.07 per diluted share in fiscal year 2011. A former member of our Board of Directors also served on the Board of Directors of the entity that acquired the hotel business. Revenue and net income for the hotel business for fiscal year 2011 was \$2,906 and \$289, respectively.

### 3. Share-based compensation expense:

The following table presents share-based compensation expenses for continuing operations included in our Consolidated Statements of Operations for fiscal years 2013, 2012, and 2011:

	Year Ended July 31,		
	2013	2012	2011
Cost of product sales	\$ 783	\$ 802	\$ 570
Cost of engineering sales	1,156	1,134	_
Research and product development	2,424	2,680	3,181
Selling and marketing	1,096	1,686	1,110
General and administrative	6,142	7,094	4,777
Total share-based compensation expense before tax	11,601	13,396	9,638
Income tax effect	(3,586)	(4,217)	(3,055)
Share-based compensation expense included in net income	\$ 8,015	\$ 9,179	\$ 6,583

We recognized compensation expense on performance-based awards with earnings per share ("EPS")-related and total shareholder return ("TSR")-related conditions along with time-based stock option and restricted stock award conditions as follows:

	Year Ended July 31,			
	2013	2012	2011	
Performance-based EPS related condition compensation expense	\$ 3,984	\$ 7,204	\$ 3,573	
Performance-based TSR related condition compensation expense	3,270	3,648	2,978	
Total performance-based stock compensation expense	7,254	10,852	6,551	
Time-based stock options and restricted stock	4,347	2,544	3,087	
Total share-based compensation expense before tax	11,601	13,396	9,638	
Income tax effect	(3,586)	(4,217)	(3,055)	
Total share-based compensation included in net income	\$ 8,015	\$ 9,179	\$ 6,583	

#### Stock incentive plans

On January 29, 2010, our stockholders approved a new share-based compensation plan named the "2009 Stock Incentive Plan". Under our 2009 Stock Incentive Plan, up to 1,600,000 shares of our common stock, \$0.05 par value per share, may be awarded to employees. Awards may be in the form of stock options, stock appreciation rights ("SARs"), shares of restricted stock, restricted stock units or other stock-based awards. Stock options granted under the 2009 Stock Incentive Plan may not be granted at an exercise price less than 100% of the fair market value of our common stock on the date of grant. Options may not be granted for a term in excess

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

of ten years. Except in certain circumstances, options that vest based on continued service of the option recipient may not vest earlier than one year from the date of grant. SARs granted under the 2009 Stock Incentive Plan must have a measurement price not less than 100% of the fair market value on the date of grant. SARs may not be granted for a term in excess of ten years. Restricted stock may be granted subject to our right to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture if such shares are issued at no cost) from the recipient in the event that conditions of the grant are not satisfied prior to the end of the restriction period. Such conditions may include the achievement of performance goals or continued service with us. Except in certain circumstances, restricted stock that vests solely based on the passage of time will not vest prior to the first anniversary of the date of grant, be no more than one-third vested prior to the second anniversary of the date of grant, and be no more than two-thirds vested prior to the third anniversary of the date of grant. This plan was amended on January 23, 2012 to, among other things, increase the number of shares available for issuance under the plan to 2,200,000 and allow non-employee members of our board of directors (the "Board) to participate in the plan.

On January 28, 2008, our stockholders approved a new share-based director compensation plan for the non-employee members of our Board named the "Analogic Corporation Non-Employee Director Stock Plan" (the "Director Plan"). Under our Director Plan, up to 100,000 shares of our common stock, \$0.05 par value per share, may be awarded to directors. During fiscal years 2013, 2012, and 2011 we granted shares of 8,720, 37,107, and 3,492, respectively, under this plan. The Director Plan provides for an Annual Share Retainer to be granted to each participant on each February 1. The Annual Share Retainer for calendar years 2013, 2012, and 2011 had a value of \$70, \$70, and \$55, respectively. Each participant may elect to receive some or all of (i) his or her Annual Share Retainer for a given calendar year or (ii) his or her Annual Cash Retainer (which consists of the annual base cash compensation he or she receives for service on the Board and on any committees of the Board, and, if applicable, all other compensation received for service as Chairman of the Board and as a Committee Chairman) in the form of "Deferred Stock Units", as elected by the participant no later than December 15 of the preceding calendar year. This plan was amended on January 23, 2012 to, among other things, have the payment of all outstanding Deferred Stock Units and any future Deferred Stock Units made in common stock instead of cash and that any future dividends earned on Deferred Stock Units are paid in cash instead of additional Deferred Stock Units. The total number of deferred stock units outstanding at July 31, 2013 and 2012 were 34,974 and 28,981, respectively.

During fiscal year 2007, our stockholders approved two share-based compensation plans, named the "2007 Stock Option Plan" and the "2007 Restricted Stock Plan". Under our 2007 Stock Option Plan, options may either be non-qualified options or incentive stock options and may not be granted at an exercise price less than 100% of the fair market value of the common stock on the date of grant (or less than 110% of the fair market value in the case of incentive stock options granted to optionees holding more than 10% of the voting power of us). Under our 2007 Stock Option Plan, up to 250,000 shares of our common stock, \$0.05 par value per share, may be awarded to employees. Options may not be granted for a term in excess of ten years (or five years in the case of incentive stock options granted to optionees holding more than 10% of the voting power of us). Except in certain circumstances, options that vest based on continued service of the optionee may not vest earlier than one year from the date of grant. Unless otherwise provided by the Compensation Committee of the Board (the "Committee") in the specific option agreement, each option will vest as to 25% of the number of shares of common stock underlying the option on each of the second, third, fourth, and fifth anniversaries of the date of grant.

Under our 2007 Restricted Stock Plan, recipients are awarded shares of common stock, subject to our right repurchase all or part of such shares from the recipient in the event that the conditions specified in the applicable award are not satisfied prior to the end of the applicable restriction period established for such award. Under our

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2007 Restricted Stock Plan, up to 500,000 shares of our common stock, \$0.05 par value per share, may be awarded to employees. Such conditions may include the achievement of performance goals or continued service with us. Except in certain circumstances, awards that vest based on continued service may not vest earlier than in three equal installments on each of the first three anniversaries of the date of grant. The Committee may condition an award on the recipient not competing with us for a one-year period following termination of such recipient's employment with us.

Prior to fiscal year 2007, we had two key employee stock option plans (one of which has lapsed as to the granting of options), two key employee stock bonus plans, two non-employee director stock option plans (one of which has lapsed as to the granting of options), and one employee stock purchase plan.

Options granted under the two key employee stock option plans generally become exercisable in installments commencing no earlier than two years from the date of grant and ending no later than six years from the date of grant. Unexercised options expire up to seven years from date of grant. Options issued under the plans are non-qualified options or incentive stock options and are issued at prices of not less than 100% of the fair market value of the common stock at the date of grant. Options granted under the two non-employee director stock option plans become exercisable in equal installments over three years commencing one year from the date of grant and remain exercisable for ten years from the date of grant. Options issued under the plans are non-qualified options and are issued at prices of 100% of the fair market value of the common stock at the date of grant. Under our key employee stock bonus plans, restricted common stock may be granted to key employees under terms and conditions as determined by the Board. Generally, participants under the stock bonus plans may not dispose or otherwise transfer stock granted for three years from date of grant. Stock granted under these plans generally vest in four equal installments beginning in the third year from the date of grant.

We estimate the fair value of stock options using the Black-Scholes valuation model. Key input assumptions used to estimate the fair value of stock options include the exercise price of the award, the expected option term, the expected volatility of our stock over the option's expected term, the risk-free interest rate over the option's expected term, and our expected annual dividend yield. We believe that the valuation technique and the approach utilized to develop the underlying assumptions are appropriate in calculating the fair values of our outstanding stock options granted during fiscal years 2013, 2012, and 2011. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards.

The fair value of each option grant was estimated on the grant date using the Black-Scholes option-pricing model with the following assumptions for fiscal years 2013, 2012, and 2011 as follows:

	Fiscal years ended July 31,			
	2013	2012	2011	
Expected option term (1)	5.42 years	5.32 years	4.74 years	
Expected volatility factor (2)	41%	42%	43%	
Risk-free interest rate (3)	0.80%	0.95%	1.18%	
Expected annual dividend yield (4)	0.57%	0.9%	1.0%	

- (1) The option life was determined by estimating the expected option life, using historical data.
- (2) The stock volatility for each grant is determined based on the review of the experience of the weighted average of historical daily price changes of our common stock over the expected option term.
- (3) The risk-free interest rate for periods equal to the expected term of the stock option is based on the U.S. Treasury yield curve in effect at the time of grant.
- (4) The expected annual dividend yield is calculated by dividing the expected annual dividends by the stock price on the date of grant.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

At July 31, 2013 and July 31, 2012, we had target performance contingent restricted stock awards outstanding of 311,616 and 451,450 respectively. These awards, which are in the form of restricted stock shares and units, vest if specific pre-established levels of performance have been achieved at the end of a three-year performance cycle. The three year performance cycles for awards outstanding at July 31, 2013 end on July 31, 2014 and 2015. The three year performance cycles for awards outstanding at July 31, 2012 ended or will end on July 31, 2013, 2014, and 2015. The actual number of shares/units to be issued will be determined at the end of the three-year performance cycle and can range from zero to 200% of the target award. We grant performance awards with either an EPS related performance condition or a TSR as determined against a specified peer group condition. As of July 31, 2013, of the 311,616 restricted shares/units outstanding, 182,776 had an EPS related performance condition and 128,390 had a TSR related performance condition.

We estimate the fair value of restricted stock and restricted stock units based on the quoted market price of its common stock. We estimate the fair value of performance based restricted stock and restricted stock units with market conditions based on the use of a Monte-Carlo simulation model. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards.

Stock compensation expense is amortized over each award's vesting period on a straight-line basis for all awards with service conditions, while the graded vesting method applies to all awards with both service and performance conditions.

For awards with an EPS-related condition, we recognize compensation expense over the performance period based on the number of shares that are deemed probable of vesting at the end of the three-year performance cycle, net of forfeitures. This probability assessment is done each quarter and changes in estimates can result in significant expense fluctuations due to the cumulative catch-up adjustment. The fair value of the awards with an EPS-related condition is determined by the closing price of our common stock on the date of grant.

For awards with a TSR-related condition, we recognize compensation expense, net of estimated forfeitures, over an average derived service period of 2.8 years for the awards granted in fiscal years 2013, 2012, and 2011. The weighted average grant date fair values of awards granted with a TSR-related condition was \$106.54, \$97.31, and \$54.27 per share in fiscal years 2013, 2012, and 2011 respectively. The fair value of awards with a TSR-related condition at date of grant was estimated using a Monte-Carlo simulation model with the following assumptions:

	Fiscal years ended July 31,			
	2013	2012	2011	
Stock Price (1)	\$70.04	\$57.81	\$41.96	
Expected volatility factor (2)	28%	29%	49%	
Risk-free interest rate (3)	0.32%	0.33%	0.73%	
Expected annual dividend yield (4)	0.00%	0.0%	0.0%	

- (1) The stock price is the closing price of our common stock on the date of grant.
- (2) The stock volatility for each grant is determined based on the historical volatility for the peer group companies and our common stock over a period equal to the remaining term of the performance period from the date of grant for all awards.
- (3) The risk-free interest rate for periods equal to the performance period is based on the U.S. Treasury yield curve in effect at the date of grant.
- (4) Dividends are considered reinvested when calculating TSR. For the purpose of the fair value model, the dividend yield is therefore considered to be 0%.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Under the employee stock purchase plan, eligible participants are granted options to purchase our common stock twice a year at the lower of 85% of market value at the beginning or end of each period. The calculation of the number of options granted, and subsequent purchase of these shares, is based upon voluntary payroll deductions during each six-month period. The number of options granted to each employee under this plan, when combined with options issued under other plans, is limited to a maximum outstanding value of \$25 during each calendar year.

The fair value of each option granted under the employee stock purchase plan was estimated on the expected grant date using the Black-Scholes option pricing model with the following assumptions:

	Fiscal years ended July 31,			
	2013	2012	2011	
Expected option term	0.5 years	0.5 years	0.5 years	
Expected volatility factor	32%	42%	42%	
Risk-free interest rate	0.11%	0.79%	0.27%	
Expected annual dividend yield	0.0%	1.0%	1.0%	

At July 31, 2013, approximately 1,060,760 shares were reserved for grant under the above stock option, bonus and purchase plans.

The following table sets forth the stock option and restricted stock transactions for fiscal year 2013:

Amounts in thousands, except share and per share data	s	tock Opti	ons Outstand	ing			Performance-Based Unvested Restricted Contingent Restricted Stock	
	Number of Shares	Weighted Average Exercise Price		Aggregate Intrinsic Value	Number of Shares/ Units	Weighted Average Grant Date Fair Value	Number of Shares/ Units (1)	Weighted Average Grant Date Fair Value
Outstanding at July 31, 2012	341,494	\$53.67	4.57	\$3,708	123,071	\$48.40	451,450	\$52.29
Granted	119,391	70.82			123,031	71.78	75,966	74.04
Exercised	(72,259)	55.22						
Vesting of restricted stock					(41,543)	55.78	(185,068)	43.00
Cancelled (forfeited and expired)	(20,629)	55.10			(6,118)	51.19	(13,282)	50.69
Outstanding at July 31, 2013 Options vested or expected to vest at	367,997	\$58.84	4.81	\$4,746	198,441	\$60.10	329,066	\$60.16
July 31, 2013 (2)	341,280	58.84	4.81	4,694				
Options exercisable at July 31, 2013	175,567	\$56.74	3.32	\$2,598				

<sup>(1)</sup> The performance-based unvested restricted stock is shown in this table at target, except for the number of shares vested, which reflect the shares earned. As of July 31, 2013, the maximum number of performance-based unvested restricted stock available to be earned is 658,132.

<sup>(2)</sup> In addition to the vested options, we expect a portion of the unvested options to vest at some point in the future. Options expected to vest are calculated by applying an estimated forfeiture rate to the unvested options.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The weighted average fair value of stock options granted during fiscal years 2013, 2012, and 2011 were \$25.25, \$16.71, and, \$15.42 per share, respectively.

During fiscal years 2013, 2012, and 2011, the total intrinsic value of options exercised (i.e., the difference between the market price and the price paid by the employee to exercise the options) was \$1,535, \$489, and \$195, respectively, and the total amount of cash received from the exercise of these options was \$3,390, \$1,891, and \$1,122, respectively. The total fair value of restricted stock that vested during fiscal years 2013, 2012, and 2011 was \$15,967, \$1,867, and \$4,138, respectively.

As of July 31, 2013, there was \$12,620 of total unrecognized compensation cost, which assumes target performance for the performance based EPS—related condition awards, related to non-vested share-based compensation arrangements granted under our stock option and restricted stock plans. That cost is expected to be recognized over a weighted-average period of 2.1 years.

The actual tax benefit realized for the tax deductions from option exercises totaled \$19, \$26, and \$49 for fiscal years 2013, 2012, and 2011, respectively.

#### 4. Business combination

### **Ultrasonix Medical Corporation**

On March 1, 2013, we completed our acquisition of all of the outstanding equity securities of Ultrasonix Medical Corporation, a Nevada Corporation, whose principal assets included customer lists and intangibles related solely to sales destined to the U.S. On March 2, 2013, we completed our acquisition of all of the outstanding equity securities of Ultrasonix Medical Corporation, a Canadian Corporation, pursuant to a "plan of arrangement" under Canadian law. Ultrasonix is a supplier of advanced ultrasound systems for point-of-care and general imaging applications. We undertook the acquisition to accelerate our expansion into the point-of-care ultrasound market. The purchase price, net of cash acquired, of \$79,932, was finalized in July 2013. The acquisition was funded from our existing cash on hand and has been accounted for as an acquisition of a business.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The purchase price has been allocated to the assets acquired and the liabilities assumed based on estimated fair values as of the acquisition date. The fair value measurements of inventory, intangibles, property, plant and equipment and deferred revenue were based upon significant inputs not observable in the market and therefore represent fair value measurements based on Level 3 inputs. As of the date of filing this Annual Report on Form 10-K, the purchase accounting has not been finalized mainly due to the fact that the evaluation of the utilization of certain foreign tax losses and credits have not been completed. The following table summarizes the preliminary purchase price allocation that includes the estimated fair values of the separately identifiable assets acquired and liabilities assumed as of March 2, 2013:

Cash	\$ 366
Accounts receivable (A)	6,511
Inventory (B)	9,444
Prepaids and other assets	2,881
Property, plant, and equipment	311
Goodwill	48,224
Intangible assets:	
Developed technology (weighted-average useful life of 10 years) 5,900	
Customer relationships (weighted-average useful life of 10.6 years) 18,500	
Tradename (estimate useful life of 2 years) 900	
Total intangible assets	25,300
Other assets	72
Total assets acquired	93,109
Accounts payable and accrued expenses	(5,377)
Deferred revenue (B)	(813)
Accrued warranty	(1,169)
Debt	(784)
Deferred taxes	(4,668)
Total liabilities assumed	(12,811)
Total purchase price	\$ 80,298

- (A) The gross amount due is \$8,720, of which \$2,209 is expected to be uncollectible. We did not acquire any other class of receivables other than trade receivables as a result of the acquisition of Ultrasonix.
- (B) The inventory fair value and deferred revenue adjustments associated with the acquisition are \$3,667 and \$807, respectively and will be amortized over 6 months and 4.5 years, respectively. The inventory fair value and deferred revenue adjustments were recognized in product cost of sales and product revenue in our statement of operations, respectively.

In determining the purchase price allocation, we considered, among other factors, market participants' intentions to use the acquired assets and the historical and estimated future demand for Ultrasonix products and services. The fair value of developed technology and trade name intangible assets were based upon the relief from royalty approach while the customer relationships intangible asset was based upon the excess earnings income approach.

The rate used to discount the estimated future net cash flows to their present values for each intangible asset was based upon a weighted average cost of capital calculation. The discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales related to the technology and assets acquired from Ultrasonix.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The total weighted average amortization period for the intangible assets is approximately 10 years. The intangible assets are being amortized on an economic consumption basis, which is consistent with the pattern that the economic benefits of the intangible assets are expected to be utilized based upon estimated cash flows generated from such assets. Goodwill associated with the acquisition was primarily attributable to the opportunities from the addition of Ultrasonix's product portfolio which complements our direct Ultrasound business suite of products. The goodwill attributable to the U.S. will be deductible for tax purposes over the statutory 15 year period. The goodwill attributable to non-U.S. jurisdictions is not deductible for tax purposes.

During fiscal year 2013, we incurred approximately \$5,600 of acquisition related costs comprised of \$3,033 of inventory step up amortization, \$1,357 of intangible and deferred revenue amortization, and \$1,210 of legal and due diligence related expenses. These costs are included in product revenue, product costs of sales, selling and marketing expenses, and general and administrative expenses in our Consolidated Statement of Operations.

Our consolidated financial statements include the results of Ultrasonix, which is included in our Ultrasound segment results, from the date of acquisition. For the period of March 2, 2013 to July 31, 2013, Ultrasonix contributed revenues of approximately \$10,095 and a net loss of \$5,777. The following unaudited pro forma information for fiscal years 2013 and 2012 presents consolidated information as if the business combination had occurred on August 1, 2011, which is the first day of our fiscal year 2012:

	Fiscal Year Ended July 31			
	2013	2012		
Net revenue	\$572,272	\$553,149		
Net income	\$ 31,654	\$ 38,771		
Net income per share, basic	\$ 2.58	\$ 3.16		
Net income per share, diluted	\$ 2.52	\$ 3.08		

The pro forma results above have been calculated after adjusting the results of Ultrasonix to reflect the additional amortization that would have been charged assuming the fair value adjustments to intangible assets has been applied from August 1, 2011 with the consequential tax effects. The pro forma results for the fiscal years 2013 and 2012 includes \$4,791 and \$7,842, respectively, of expenses related to the amortization of the trade name, developed technology, customer relationships and inventory fair value and deferred revenue adjustments from the purchase accounting, respectively. Fiscal year 2013 was adjusted to exclude acquisition related expenses of \$1,210.

# **Tetrad Corporation**

On November 19, 2010, we acquired certain assets of Tetrad Corporation, an OEM ultrasound transducer and probe business. The acquisition was undertaken by us in order to increase our market share in the transducer and probe business, expand our relationships with a major customer, and expand our product portfolio. The acquisition resulted in a bargain purchase as the seller was motivated to sell the assets of the transducer and probe business since they were not a core part of the seller's business. The purchase price of the acquisition has been allocated to the net tangible and intangible assets acquired, with the excess of the fair value of assets acquired over the purchase price recorded as a bargain purchase gain in fiscal year 2011.

The results of operations and estimated fair value of assets acquired and liabilities assumed were included in our audited Consolidated Financial Statements beginning November 19, 2010.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The total purchase consideration was expected to be \$686 in cash, of which approximately \$346 was paid at the closing. The purchase consideration also included contingent consideration of \$340, which represented the fair value of future cash payments expected to be made by us based on the sale of certain acquired products over a two year period commencing on November 1, 2010. We estimated the contingent consideration based on probability weighted expected future cash flows, and it is included in the audited Consolidated Balance Sheet at July 31, 2012 under accrued liabilities. The rate used to discount the estimated future net cash flows to their present values for each intangible asset was based upon a weighted average cost of capital calculation. The contingent consideration was marked to market at the end of each fiscal quarter. During fiscal year 2013, we paid the \$435 of contingent consideration to the seller and have no further contingent consideration obligation related to this transaction. Acquisition-related costs were insignificant.

The final fair value allocated to each of the major classes of tangible and identifiable intangible assets acquired on November 19, 2010 and the bargain purchase gain recorded in general and administrative expenses in the audited Consolidated Statements of Operations were computed as follows:

Inventory	\$1,284
Property, plant, and equipment	489
Intangible assets	730
Accrued liabilities	(154)
Deferred tax liabilities	(621)
Net tangible and intangible assets	1,728
Estimated purchase price	686
Bargain purchase gain	\$1,042

The deferred tax liability associated with the estimated fair value adjustments of tangible and intangible assets acquired is recorded at an estimated weighted average statutory tax rate in the jurisdictions where the fair value adjustments may occur.

The following table sets forth the components of the identifiable intangible assets acquired and being amortized over their estimated useful lives, with a maximum amortization period of five years, on a straight-line basis:

	<u>Fair Value</u>	Useful Life
Backlog	\$ 70	3.5 months
Developed Technology	420	5 years
Customer Relationships	240	5 years
Total acquired identifiable intangible assets	\$730	

In determining the purchase price allocation, we considered, among other factors, our intention to use the acquired assets and the historical and estimated future demand for the acquired products and services. The fair value of developed technology was based upon the relief from royalty approach while the customer relationship and backlog intangible assets were based on the income approach. The rate used to discount the estimated future net cash flows to their present values for each intangible asset was based upon a weighted average cost of capital. The discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales related to the technology and assets acquired.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Our results would not have been materially different from our reported results had the acquisition occurred at the beginning of fiscal years 2011 or 2010.

# 5. Restructuring charges:

### Fiscal Year 2013 Restructuring Plan

During the third and fourth quarter of fiscal year 2013, we incurred restructuring expense in the amount of \$496 and \$3,023, respectively. During fiscal year 2013, we incurred pre-tax charges of \$3,519, primarily relating to severance and personnel related costs of 137 involuntarily terminated employees, as well as for facility exit costs associated with restructuring activities, including the consolidation of manufacturing and certain support activities currently conducted at the Ultrasonix facility in Vancouver, into operations at our existing facilities, closure of the Ultrasonix sales subsidiary in Paris, France, the transition costs associated with the planned closure of our Englewood, Colorado facility, as we consolidate manufacturing and development activities into our State College, Pennsylvania facility, and optimization of our operations in Montreal, Canada and Peabody Massachusetts, all of which were recognized in our Consolidated Statement of Operation under restructuring. Our pre-tax charges were included in our operating results of our Medical Imaging segment, Ultrasound segment and Security Technology segment. We expect to record additional pre-tax restructuring charges of up to approximately \$1,500 as we complete the transitions associated with these other restructuring activities by the fourth quarter of our fiscal year ending July 31, 2014. Of the total pre-tax charges of up to approximately \$1,500, we expect approximately \$1,300, \$130, and \$0 will be included in the operating results of our Ultrasound, Medical Imaging and Security Technology segments, respectively.

### Fiscal Year 2011 Restructuring Plan

In the first quarter of fiscal year 2011, we recorded a restructuring charge of \$3,562 for severance and personnel related costs of the plan we initiated to reduce our workforce by 104 employees worldwide. The purpose of this workforce reduction was to streamline our operations and consolidate our Denmark and Canton, Massachusetts manufacturing operations into our existing facilities. During the second quarter of 2011, we recorded an adjustment of \$134 for a change in estimate of severance and related benefit expenses related to this plan.

In the fourth quarter of fiscal year 2011, we recorded a restructuring charge of \$3,587 for severance and personnel related costs of a plan to streamline our operations by reducing our workforce by 51 employees worldwide.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes accrued restructuring costs activity from July 31, 2010 through July 31, 2013:

	Employee Severance and Benefits	Facility Exit Costs (A)	Acquisition Related Charges (A)	Total (B)
Balance at July 31, 2010	\$ 153	\$ 722		\$ 875
Restructuring Charge Adjustments Cash payments	7,147 (134) (2,212)	 53 (620)	_ _ _	7,147 (81) (2,832)
Foreign exchange	81			81
Balance at July 31, 2011	5,035	155		5,190
Cash payments Foreign exchange	(4,560) (198)	(155)		(4,715) (198)
Balance at July 31, 2012	277	_		277
Restructuring Charge Cash payments Foreign exchange	2,471 (986) 6	261 — 4	787 — 28	3,519 (986) 38
Balance at July 31, 2013	\$ 1,768	\$ 265	\$815	\$ 2,848

<sup>(</sup>A) Activity in fiscal year 2013 pertains to the Ultrasonix acquisition.

The cash expenditures remaining to be paid as of July 31, 2013 will be paid within the next twelve months.

Restructuring and related charges, including actions associated with acquisitions, by segment are as follows:

	Fiscal Year Ended July, 31			
	2013	2012	2011	
Medical Imaging	\$1,099	<del>\$</del>	\$2,829	
Ultrasound	2,209		3,668	
Security Detection	211		569	
Total restructuring and related charges	\$3,519	\$—	\$7,066	

Net restructuring and related charges are comprised of the following:

	Fiscal Y	Fiscal Year Ended July, 31			
	2013	2012	2011		
Fiscal Year 2013 Acquisition Related Charges	\$1,049	<u>\$</u> —	\$ 53		
Fiscal Year 2013 Restructuring Plan	2,470	_	_		
Fiscal Year 2011 Restructuring Plan		_	7,013		
Restructuring and related charges	\$3,519	\$—	\$7,066		

<sup>(</sup>B) All activity prior to July 31, 2012 relates to the Fiscal Year 2011 Restructuring Plan. In fiscal year 2013, the restructuring charge of \$3,519, cash payments of \$702 and foreign exchange loss of \$31 relate to the Fiscal Year 2013 Restructuring Plan, while cash payments of \$284 and foreign exchange loss of \$7 relate to the Fiscal Year 2011 Restructuring Plan.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### 6. Net income per share:

Basic net income per share is computed using the weighted average number of common shares outstanding during the period. Diluted net income per share is computed using the sum of the weighted average number of common shares outstanding during the period and, if dilutive, the weighted average number of potential shares of common stock, including unvested restricted stock and the assumed exercise of stock options using the treasury stock method. Options to purchase common shares with exercise prices that exceeded the market value of the underlying common stock are excluded from the computation of diluted earnings per share.

The following table sets forth the computation of basic and diluted net income per share for fiscal years 2013, 2012, and 2011:

	(In	thousan	ds, ex	kcept per	shar	e data)	
		Yea	ır En	ded July	31,	1,	
		2013		2012	2	2011	
Income from continuing operations	\$3	31,121	\$4	3,071	\$1	6,620	
Income from discontinued operations, net of tax						289	
Gain on disposal of discontinued operations, net of tax						924	
Net income	\$3	1,121	\$4	3,071	\$1	7,833	
Weighted average number of common shares outstanding-basic Effect of dilutive securities:	1	2,247	1	2,265	1	2,491	
Stock options and RSUs		322		311		81	
Weighted average number of common shares outstanding-diluted	1	2,569	1	2,576	1	2,572	
Basic net income per share: Income from continuing operations Income from discontinued operations, net of tax Gain on disposal of discontinued operations, net of tax	\$	2.54 — —	\$	3.51 — —	\$	1.33 0.02 0.08	
Basic net income per share	\$	2.54	\$	3.51	\$	1.43	
Diluted net income per share: Income from continuing operations Income from discontinued operations, net of tax Gain on disposal of discontinued operations, net of tax	\$	2.48	\$	3.42	\$	1.33 0.02 0.07	
Diluted net income per share	\$	2.48	\$	3.42	\$	1.42	
Anti-dilutive shares related to outstanding stock options and unvested restricted stock (A)		105		212		204	

<sup>(</sup>A) - These shares related to outstanding stock options and unvested restricted stock were not included in our calculations of diluted earnings per share, as the effect of including them would be anti-dilutive.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### 7. Risks and uncertainties:

We are subject to risks common to companies in the medical and security technology industries. These risks, which could have a material and negative impact on our business, financial condition, and results of operations, include, but are not limited to, loss of any significant customer, dependence on key suppliers, and U.S. and foreign regulatory clearances and approvals.

#### **Customers**

We had three customers, as set forth in the table below, who accounted for 10% or more of our net revenue during fiscal years 2013, 2012, and 2011.

	rear i	naea July 31,		
	2013	2012	2011	
Philips	15%	14%	13%	
L-3	12%	12%	*	
Toshiba Corporation ("Toshiba")	10%	10%	11%	

Note(\*): Total net revenue was less than 10% in this fiscal year.

Philips' and Toshiba's revenue was in the Medical Imaging segment and L-3's revenue was in the Security Technology segment.

Our ten largest customers as a group accounted for 68%, 68%, and 64% of our net product and engineering revenue for fiscal years 2013, 2012, and 2011, respectively. The loss of any one of these customers could have a material adverse effect on our business. Philips accounted for 18% and 13% of net accounts receivable at July 31, 2013 and 2012, respectively. GE accounted for 7% and 10% of net accounts receivable at July 31, 2013 and 2012, respectively. L-3 accounted for 16% and 18% of net accounts receivable at July 31, 2013 and 2012, respectively.

Although we are seeking to broaden our customer base, we will continue to depend on sales to a relatively small number of major customers. Because it often takes significant time to replace lost business, it is likely that operating results would be adversely affected if one or more major customers were to cancel, delay, or reduce significant orders in the future. Customer agreements typically permit the customer to discontinue future purchases after timely notice. In addition, we generate significant accounts receivable in connection with the products we sell and the services we provide to our major customers. Although our major customers are large well established corporations, if one or more of our customers were to become insolvent or otherwise be unable to pay for our products and services, our operating results and financial condition could be adversely affected.

#### 8. Derivative instruments:

Certain of our foreign operations have revenues and/or expenses transacted in currencies other than the U.S. dollar. In order to mitigate foreign currency exchange risk, we use forward contracts to lock in exchange rates associated with a portion of our forecasted international expenses.

As of July 31, 2013, we had forward contracts outstanding with notional amounts totaling \$6,720 in the Canadian dollar. These contracts have been designated as cash flow hedges, and the unrealized loss of \$104, net of tax, on these contracts are reported in accumulated other comprehensive income (loss). Liability and asset

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

derivatives designated as hedging instruments are presented in other assets and other liabilities, respectively, on our consolidated balance sheets. Realized (gains) losses on the cash flow hedges are recognized in income in the period when the payment of expenses is recognized. During fiscal year 2013 and 2012, we recorded approximately \$80 and \$70 of realized losses included in cost of revenues and operating expenses in our Consolidated Statements of Operations. We expect all contracts currently outstanding to settle as of January 31, 2014 and any amounts in accumulated other comprehensive income (loss) to be reported as an adjustment to operating expenses.

#### 9. Fair value:

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. We use a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Our cash equivalents at July 31, 2013 and July 31, 2012 are comprised primarily of demand deposits and money market funds at highly rated financial institutions

The following table provides the assets and liabilities carried at fair value measured on a recurring basis at July 31, 2013 and July 31, 2012:

	Quoted Prices in	Significant Other	Cianificant
i_	for Identical Assets (Level 1)	Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
53 25	\$ — 2,725	\$753 —	\$— —
78	\$2,725	\$753	\$—
50	<u> </u>	\$160	<b>\$</b> —
50	\$ —	\$160	<u>\$—    </u>
2	53 25 78	Assets (Level 1)  33 \$ — 25 2,725  78 \$2,725  50 \$ —	for Identical Assets (Level 1)         Inputs (Level 2)           53         \$ —         \$753           25         2,725         —           78         \$2,725         \$753           50         \$ —         \$160

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

			Fair Value Measurements at July 31, 2012			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
Assets						
Cash equivalents	\$14,590	\$ —	\$14,590	<b>\$</b> —		
Foreign currency forward contracts	66	_	66	_		
Plan assets for deferred compensation (A)	1,693	1,693				
Total assets at fair value	\$16,349	\$1,693	\$14,656	<b>\$</b> —		
Liabilities						
Contingent consideration (B)	\$ 460	\$	\$ <u></u>	\$460		
Total liabilities at fair value	\$ 460	\$ —	\$ —	\$460		

<sup>(</sup>A) Assets held in the deferred compensation plan will be used to pay benefits under our non-qualified deferred compensation plan. The investments consist primarily of mutual funds.

Our Level 2 instruments classified as cash equivalents consist of highly liquid demand deposits. The fair value of these deposits does not deviate from the face value.

The fair value of our Level 2 instruments classified as foreign currency forward contracts is determined using valuation models based on market observable inputs, including forward and spot prices for currencies.

Intangible assets acquired in the Ultrasonix acquisition were accounted for as described in Note 4 of this report. The estimated fair value of these non-financial assets was based on Level 3 inputs.

# Contingent consideration

The fair values of contingent consideration are based on significant unobservable inputs, including management estimates and assumptions, and were measured based on the probability-weighted present value of the payments expected to be made. Accordingly, the fair values of contingent consideration have been classified as level 3 within the fair value hierarchy. These liabilities are remeasured each reporting period and changes in the fair values are included in the Consolidated Statements of Operations.

The following are reconciliations of the changes in the fair value of contingent consideration in fiscal years 2013 and 2012:

	Fiscal Year Ended	
	2013	2012
Beginning Balance	\$ 460	\$340
Change in fair value	(25)	120
Payments	(435)	
Ending Balance	\$ <b>—</b>	\$460

<sup>(</sup>B) The amount of contingent consideration related to the acquisition to acquire certain assets of an OEM ultrasound transducer and probe business in November 2010. During our quarter ended January 31, 2013, we paid \$435 in contingent consideration and have no further obligation.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### 10. Inventory:

The components of inventory are summarized as follows for fiscal years 2013 and 2012:

	July 31, 2013	July 31, 2012
Raw materials	\$ 78,679	\$ 73,657
Work-in-process	11,862	9,994
Finished goods	25,739	25,293
Total inventory	\$116,280	\$108,944

# 11. Goodwill and other intangible assets:

The carrying amount of goodwill at July 31, 2013 and July 31, 2012 was \$50,073 and \$1,849, respectively. The increase in goodwill of \$48,224 was due to our acquisition of Ultrasonix in March 2013. For further information relating to the acquisition, please refer to Note 4.

Other intangible assets include the value assigned to intellectual property and other technology, patents, customer contracts and relationships, a trade name, and in-process research and development. The estimated useful lives for all of these intangible assets, excluding the trade name and in-process research and development, as they are considered to have an indefinite life, are between 1 to 14 years. The carrying values of our indefinite lived intangible assets were \$9,507 at July 31, 2013 and July 31, 2012, respectively.

Intangible assets at July 31, 2013 and 2012 consisted of the following:

	July 31, 2013			July 31, 2012		
	Cost	Accumulated Amortization	Net	Cost	Accumulated Amortization	Net
Developed technologies	\$18,091	\$ 6,573	\$11,518	\$12,191	\$ 4,974	\$ 7,217
Customer relationships	43,940	10,209	33,731	25,440	7,824	17,616
Trade names	8,507	131	8,376	7,607	_	7,607
Backlog	<u> </u>		_	70	70	_
In-process research and development	1,900		1,900	1,900		1,900
Total intangible assets	\$72,438	\$16,913	\$55,525	\$47,208	\$12,868	\$34,340

Amortization expense related to acquired intangible assets was \$4,115, \$3,063, and \$3,088 for fiscal years 2013, 2012, and 2011, respectively.

The estimated future amortization expenses related to intangible assets for each of the five succeeding fiscal years is expected to be as follows:

2014	\$ 7,570
2015	7,590
2016	6,634
2017	5,924
2018	4,981
	\$32,699

We perform our annual impairment test for goodwill and indefinite lived intangible assets during the second quarter of each fiscal year. In the second quarter of fiscal year 2013, we performed the annual impairment test for

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

our goodwill of \$1,849 at December 31, 2012 that relates to our 2008 acquisition of Copley Controls, all of which is in our OEM reporting unit in the Medical Imaging segment. We elected to bypass the qualitative assessment and proceeded to Step 1 of the impairment test by comparing the fair value of the OEM reporting unit in the Medical Imaging segment to its carrying value. Our approach considered both the market approach and income approach with equal weight assigned to each. Under the market approach, the fair value of the reporting unit is based on trading multiples and a control premium which was determined based on an analysis of control premiums for relevant recent acquisitions. Under the income approach, the fair value of the reporting unit is based on the present value of estimated future cash flows. The income approach is dependent on a number of significant management assumptions including estimates of future sales, future gross margin percentage, and discount rates. We determined that the fair value of the reporting unit was in excess of the carrying value of the net assets of the reporting unit by greater than 70%, and thus it was not necessary for us to perform step two of the impairment test for the goodwill.

For the trade name, we compared the fair value of the Copley trade name using the relief from royalty approach to our carrying value during the second quarter of fiscal year 2013. The relief from royalty approach utilized an after-tax royalty rate and a discount rate. The after-tax royalty rate was determined based on royalty research and margin analysis while the discount rate was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales for the Copley trade name. We determined that the fair value of the Copley trade name was more than its carrying value by greater than 40%.

The goodwill acquired as the result of our acquisition of Ultrasonix has been assigned to the Ultrasound reporting unit. The total amount of goodwill expected to be deductible for tax purposes was \$3,709 and \$0, for fiscal years 2013 and 2012, respectively.

For the in-process research and development, which represents our investment of \$1,900 in PocketSonics, Inc. (PocketSonics), a start-up company with proprietary ultrasound technology, we compared the fair value of the in-process research and development using the income approach to its carrying value during the second quarter of fiscal year 2013. Refer to Note 22 for further discussion of PocketSonics. The income approach utilized a discount rate which was determined after consideration of market rates of return on debt and equity capital, the weighted average return on invested capital and the risk associated with achieving forecasted sales from the in-process research and development. We determined that the fair value of the in-process research and development was more than its carrying value by greater than 100%.

The current economic environment and the uncertainties regarding its impact on our business and our estimates for forecasted revenue and spending levels, made for purposes of our goodwill, trade name, and inprocess research and development impairment testing during the second quarter of fiscal year 2013 may not be accurate predictions of the future. If our assumptions regarding forecasted revenue or margin growth rates of the reporting unit, trade name, and in-process research and development are not achieved, we may be required to record an impairment charge for the goodwill, trade name, and in-process research and development in future periods, whether in connection with our next annual impairment testing in the second quarter of the fiscal year ending July 31, 2014, or prior to that if any such change constitutes a triggering event outside of the quarter from when the annual goodwill, trade name, and in-process research and development impairment test is performed. It is not possible at this time to determine if any such future impairment charge would result or, if it does, whether such charge would be material.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# 12. Commitments, guarantees, and contingencies:

Guarantees and indemnification obligations

Our standard OEM and supply agreements entered in the ordinary course of business typically contain an indemnification provision pursuant to which we indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party in connection with any U.S. patent or any copyright or other intellectual property infringement claim by any third party with respect to our products. Such provisions generally survive termination or expiration of the agreements. The potential amount of future payments we could be required to make under these indemnification provisions is, in some instances, unlimited. We have never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, we believe that our estimated exposure on these agreements is currently minimal. Accordingly, we have no liabilities recorded for these agreements as of July 31, 2013.

Generally, we warrant that our products will perform in all material respects in accordance with our standard published specifications in effect at the time of delivery of the products to the customer for a period ranging from 12 to 36 months from the date of delivery. We provide for the estimated cost of product and service warranties based on specific warranty claims, claim history, and engineering estimates, where applicable.

The following table presents our product general warranty liability for fiscal years 2013 and 2012:

2013	2012
\$ 5,634	\$ 5,174
1,169	_
5,310	6,407
(5,612)	(5,947)
\$ 6,501	\$ 5,634
	1,169 5,310 (5,612)

At July 31, 2013 and 2012, we had deferred revenue for product extended warranty contracts of \$8,018 and \$7,207, respectively.

### Legal claims

We are subject to litigation, claims, investigations and audits arising from time to time in the ordinary course of its business. Although legal proceedings are inherently unpredictable, we believe that we have valid defenses with respect to those matters currently pending against us and intend to defend ourselves vigorously. The outcome of these matters, individually and in the aggregate, is not expected to have a material impact on our cash flows, results of operations, or financial position.

#### Revolving credit agreements

On October 11, 2011, we entered into a \$100 million five-year, revolving credit agreement ("Credit Agreement") with the financial institutions identified therein as lenders, which included Sovereign Bank, TD Bank, N.A., and HSBC Bank USA, National Association. The Credit Agreement is guaranteed by our material domestic subsidiaries as designated by us from time to time or as required under the Credit Agreement, and is supported by a pledge of 65% of the capital stock and equity equivalents of our principal international subsidiary.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The credit facility does not require amortization of principal and may be reduced before maturity in whole or in part at our option without penalty.

Borrowings under the Credit Agreement may be used for general corporate purposes, including permitted acquisitions. The amount of the facility can be increased under specified circumstances up to \$150,000 in aggregate. We are the sole borrower under the Credit Agreement.

Interest rates on borrowings outstanding under the credit facility would range from 1.25% to 2.00% above the LIBOR rate, or, if we do not elect the LIBOR rate, from 0.00% to 1.00% above the defined base rate (which is the highest of (1) the prime rate, (2) the federal funds rate plus 0.50% or (3) one-month LIBOR plus 1%, in each case based upon our leverage ratio. A quarterly commitment fee ranging from 0.20% to 0.35% per annum is applicable on the undrawn portion of the credit facility, based upon our leverage ratio.

The Credit Agreement limits us and our subsidiaries' ability to, among other things: incur additional indebtedness; incur liens or guarantee obligations; pay dividends or make other distributions; make investments; dispose of assets; and engage in transactions with affiliates except on an arms-length basis. In addition, the Credit Agreement requires us to maintain the following financial ratios:

- A leverage ratio, defined as consolidated funded indebtedness to consolidated trailing four quarters EBITDA of no greater than 2.75:1.00 at any time; and
- An interest coverage ratio, defined as the ratio of consolidated trailing four quarters EBITDA to consolidated interest charges of no less than 3.00:1.00 at any time.

At July 31, 2013, our leverage ratio was 0.005 and our interest coverage ratio was not applicable as we had no attributable interest expense. As of July 31, 2013, we were in full compliance with all financial and operating covenants.

Any failure to comply with the financial or operating covenants of the credit facility would prevent us from being able to borrow and would also constitute a default, permitting the lenders to, among other things, accelerate repayment of outstanding borrowings, including all accrued interest and fees, and to terminate the credit facility. A change in control of us, as defined in the Credit Agreement, would also constitute an event of default, permitting the lenders to accelerate repayment and terminate the Credit Agreement.

In connection with the entering into this facility, we incurred approximately \$500 of transactions costs, which are being expensed over the five-year life of the credit facility.

We currently also have approximately \$12,025 in other revolving credit facilities with banks available for direct borrowings. In connection with our acquisition of Ultrasonix, we assumed \$784 of debt under a certain credit facility, all of which was paid as of July 31, 2013. In addition to the debt assumed, we borrowed \$2,230 under this credit facility during the fiscal year 2013, all of which was paid as of July 31, 2013. We did not have any borrowings outstanding under credit facilities as of July 31, 2013 and July 31, 2012.

#### Investigation regarding our Danish subsidiary

As initially disclosed in our annual report on Form 10-K for the fiscal year ended July 31, 2011, we identified certain transactions involving BK Medical and certain of its foreign distributors, with respect to which we have raised questions concerning compliance with law, including Danish law and the U.S. Foreign Corrupt

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Practices Act, and our business policies. These have included transactions in which the distributors paid BK Medical amounts in excess of amounts owed and BK Medical transferred the excess amounts, at the direction of the distributors, to third parties identified by the distributors. We have been unable to ascertain with certainty the ultimate beneficiaries or the purpose of these transfers. We have voluntarily disclosed this matter to the Danish Government, the U.S. Department of Justice, which we refer to as the DOJ, and the SEC and are cooperating with inquiries by the Danish Government, the DOJ and the SEC. We are unable to estimate the potential penalties and/or sanctions, if any, that might be assessed in connection with these matters. We have concluded that the transactions identified to date have been properly accounted for in our reported financial statements in all material respects. During fiscal year 2013, we incurred inquiry-related costs of approximately \$1,211 in connection with this matter, as compared to \$1,288 in fiscal year 2012. We have terminated the employment of certain BK Medical employees and have wound down the relationships with the BK Medical distributors that were involved in the transactions. We incurred employee termination costs of \$0 and \$400, respectively, in connection with this matter in fiscal years 2013 and 2012. Revenue from sales to the BK Medical distributors with whom we wound down BK Medical's relationship represented less than 0.2% of our total revenue in fiscal year 2013, as compared to less than 1.3% of our total revenue in fiscal year 2012.

### 13. Leases and other commitments:

Certain of our subsidiaries lease manufacturing and office space under non-cancelable operating leases. These leases contain renewal options. We lease certain other real property and equipment under operating leases which, in the aggregate, are not significant.

Rent expense associated with our operating leases was approximately \$1,812, \$2,154, and \$2,623 in fiscal years 2013, 2012, and 2011, respectively.

The following is a schedule by year of future minimum lease payments at July 31, 2013:

	Operating Leases
Fiscal Year	
2014	\$2,790
2015	1,762
2016	1,131
2017	879
2018	718
Thereafter	1,203
	\$8,483

At July 31, 2013, we had outstanding non-cancelable purchase orders aggregating to \$61,371. The purchase orders are for manufacturing and non-manufacturing related goods and services.

#### 14. Other income (expense):

Other income (expense) consists primarily of interest income on cash equivalents, gains on sale of other investments, and foreign exchange gains (losses).

We had foreign exchange (losses) gains totaling (\$1,546), \$668 and (\$678) in fiscal years 2013, 2012 and 2011, respectively.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### 15. Retirement Plans:

### 401(k) Plan

We have a qualified retirement plan called the Analogic 401(k) Plan (the "Plan") to provide retirement income for eligible employees through employee contributions and contributions from us. Employer contributions are discretionary and may be in the form of a direct profit sharing contribution or a discretionary matching contribution as determined and approved by the board of directors. Our contribution each year shall in no event exceed the maximum allowable under applicable provisions of the Internal Revenue Code. All contributions vest immediately.

The Plan, as allowed under Section 401(k) of the Internal Revenue Code, permits tax-deferred salary/wage deductions for eligible employees. Employees may contribute from 1% to 80% of their eligible compensation to the Plan, limited to a maximum annual amount as determined by the IRS.

In fiscal years 2013, 2012, and 2011, we matched employee contributions up to 4% of eligible compensation. Our contributions to the Plan totaled \$3,344, \$2,900, and \$2,729, in fiscal years 2013, 2012, and 2011, respectively.

### Defined Benefit Retirement Plan

Our Canadian subsidiary, Analogic Canada Corporation, formerly known as ANRAD Corporation, sponsors a defined benefit retirement plan called the Analogic Canada Corporation Retirement Plan (the "Analogic Canada Plan"). The Analogic Canada Plan provides benefits to employees based on a formula recognizing length of service and final average earnings. The measurement date used for the plan is July 31. We recognize the periodic pension expense in our Consolidated Statement of Operations and the associated assets or liabilities on our consolidated balance sheet.

The estimated net prior service cost, net transition asset, and net actuarial loss for the Analogic Canada Plan that are expected to be amortized from stockholders' equity into pension cost in fiscal year 2014 are \$9, (\$26), and \$136, respectively. Comparable amortized amounts of net prior service cost, net transition asset, and net actuarial loss in fiscal year 2013 were \$10, (\$26), and \$357, respectively.

Amounts Recognized in Accumulated Other Comprehensive (Loss)

		Year Ended July 31,	
	2013	2012	
Net actuarial gain (loss)	\$2,409	\$(1,632)	
Net amount recognized	\$2,409	\$(1,632)	

#### Net Periodic Benefit Cost

	Year Ended July 31,		
	2013	2012	2011
Service cost	\$1,395	\$1,077	\$1,064
Interest cost	641	576	523
Expected return on plan assets	(684)	(651)	(568)
Amortization of transition asset obligations	(26)	(26)	(28)
Amortization of prior service costs	10	10	10
Amortization of net actuarial loss recognized	357	210	184
Total net periodic benefit cost	\$1,693	\$1,196	\$1,185

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### **Actuarial Assumptions**

Actuarial assumptions for the Analogic Canada Plan are described below. The discount rates at July 31 were used to measure the fiscal year end benefit obligations and the earnings effects for the subsequent year. The discount rate is based on high quality corporate bond spot rates with cash flows that match the timing and amount of expected benefit payments.

		July 31,		
	2013	2012	2011	
Discount rate	4.80%	4.20%	4.90%	
Expected return on assets	6.00%	6.00%	6.25%	
Salary increase	3.50%	3.50%	3.75%	

To determine the expected long-term rate of return on the Analogic Canada Plan assets, we considered the current and expected asset allocations, as well as historical and expected returns on various categories of plan assets. We amortize realized gains and losses, as well as the effects of changes in actuarial assumptions and plan provisions over a period no longer than the average future service of employees.

### Funding Policy

The funding policy for the Analogic Canada Plan is to contribute amounts sufficient to meet minimum funding requirements as set forth in employee benefit and tax laws, plus such additional amounts as we may determine to be appropriate. During fiscal years 2013, 2012 and 2011, we made contributions to the Analogic Canada Plan of \$1,657, \$1,068, and \$1,168, respectively, and made payments for benefits and administrative expenses of \$647, \$107, and \$209, respectively. In fiscal year 2014, we expect to make contributions and payments for benefits and administrative expenses of \$1,457 and \$358, respectively.

### Projected Benefit Obligation

	2013	2012
Beginning balance at August 1	\$15,543	\$12,546
Current service cost	1,395	1,077
Foreign currency exchange gain	(392)	(535)
Interest cost	641	575
Net actuarial (gains) loss	(2,389)	2,147
Plan participant contributions	250	241
Benefit payments	(568)	(508)
Ending balance at July 31	\$14,480	\$15,543

# Accumulated Benefit Obligation (ABO)

ABO balances for the Analogic Canada Plan were \$10,189 and \$7,743 at July 31, 2013 and 2012, respectively.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### Fair Value of Plan Assets

	2013	2012
Beginning balance at August 1	\$10,855	\$10,536
Actual return on plan assets	1,496	11
Employer contributions	1,657	1,068
Plan participant contributions	250	241
Benefits paid	(568)	(508)
Foreign currency exchange gain	(309)	(493)
Ending balance at July 31	\$13,381	\$10,855

### Plan Assets

The Analogic Canada Plan assets are held in trust, as follows:

	July 31	July 31, 2013	
	Target allocation	Actual allocation	Actual allocation
Equity securities	65.0%	65.8%	65.6%
Debt securities	35.0%	34.2%	34.4%
Total	100.0%	100.0%	100.0%

The Pension Committee of the Analogic Canada Plan sets investment policies and strategies for the Analogic Canada Plan. Long-term strategic investment objectives include preserving the funded status of the Analogic Canada Plan and balancing risk and return. The Pension Committee oversees the investment allocation process, which includes selecting investment managers, commissioning periodic asset-liability studies, setting long-term strategic targets and monitoring asset allocations.

Target allocation ranges are guidelines, not limitations, and occasionally the Pension Committee will approve allocations above or below a target range.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The fair value of the Analogic Canada Plan pension assets by asset category at July 31, 2013 and 2012 were as follows:

	Fair V	Fair Value Measurements at July 31, 2013				
Assets	Quoted Prices in Active Markets for Indentical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Assets at Fair Value		
Mutual funds (a)	\$—	\$—	\$13,381	\$13,381		
Total	\$	\$—	\$13,381	\$13,381		

	Fair V	Fair Value Measurements at July 31, 2012				
Assets	Quoted Prices in Active Markets for Indentical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Assets at Fair Value		
Mutual funds (a)	\$—	<b>\$</b> —	\$10,855	\$10,855		
Total	\$—	\$—	\$10,855	\$10,855		

<sup>(</sup>a) - This comprises units of segregated pooled funds with an insurance company. These funds have underlying values primarily derived from mutual funds that have debt and equity securities, which are traded on an active market based on the closing price of each trading day.

	Using Sig	rements gnificant ervable outs
	July 31, 2013	July 31, 2012
Beginning balance at beginning of fiscal year Actual return on plan assets	\$10,855	\$10,536
Relating to assets still held at end of fiscal year	1,576	112
Purchases, sales, and settlements	1,259	700
Foreign currency exchange loss	(309)	(493)
Ending balance at end of fiscal year	\$13,381	\$10,855

# Estimated Future Benefit Payments

Estimated future benefit payments under the Analogic Canada Plan are as follows:

2014	2015	2016	2017	2018	2019-23
\$253	\$272	\$293	\$301	\$314	\$2,459

# Funded Status

The amounts recognized on our consolidated balance sheets for the Analogic Canada Plan were as follows:

	July	31,
	2013	2012
Long-term liabilities	\$(1,099)	\$(4,653)
Net balance sheet (liability) asset	\$(1,099)	\$(4,653)

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### 16. Income taxes:

A reconciliation of income taxes at the U.S. statutory rate to the effective tax rate follows:

	Year Ended July 31,		
	2013	2012	2011
U.S. Federal statutory tax rate	35%	35%	35%
State income taxes, net of federal tax benefit	(1)	(1)	(2)
Domestic production benefit	(2)	(2)	(2)
General business credit (U.S. R&D)	(4)	(1)	(10)
Valuation allowance	1	1	0
Effect of international operations	(2)	(3)	(3)
(Decrease) increase in tax reserves	1	(26)	5
Other items, net	1	0	(2)
Effective tax rate	29%	3%	21%

The components of the provision (benefit) for income taxes on continuing operations are as follows:

	July 31,		
	2013	2012	2011
Current income taxes provision (benefit):			
U.S.:			
Federal	\$ 11,054	\$ 3,403	\$ 5,461
State	464	541	534
Non-U.S.	452	232	(37)
Current income tax provision (benefit)	\$ 11,970	\$ 4,176	\$ 5,958
Deferred income taxes provision (benefit):			
U.S.:			
Federal	\$ 12,364	\$(3,337)	\$ (113)
State	(133)	25	167
Non-U.S.	(11,225)	264	(1,700)
Deferred income tax provision (benefit)	1,006	(3,048)	(1,646)
	\$ 12,976	\$ 1,128	\$ 4,312

Income from continuing operations before income taxes from domestic and foreign operations is as follows:

	July 31,		
	2013	2012	2011
Domestic	\$24,901	\$30,249	\$15,676
Foreign	19,196	13,950	5,256
Income from continuing operations before income taxes	\$44,097	\$44,199	\$20,932

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Net deferred taxes, detailed below, recognize the impact of temporary differences between the amounts of assets and liabilities recorded for financial statement purposes and such amounts measured in accordance with tax laws:

	July	31,
	2013	2012
Assets		
Compensation	\$ 11,607	\$14,233
Accruals and reserves	5,082	4,987
Goodwill and intangibles		1,110
Comprehensive income	<del></del>	1,219
Net operating loss and credit carryforwards	8,909	7,140
Other	3,253	1,705
Deferred tax assets	\$ 28,851	\$30,394
Valuation allowance	(6,294)	(5,537)
Total deferred tax assets	\$ 22,557	\$24,857
Liabilities		
Depreciation related	(5,798)	(5,299)
Goodwill and intangibles	(4,329)	_
Comprehensive income	(176)	
Total deferred tax liabilities	\$(10,303)	\$ (5,299)
Net deferred taxes	\$ 12,254	\$19,558

We received a refund of \$12,007 in the second quarter of fiscal year 2012 as the result of the completion of an U.S. Internal Revenue Service ("IRS") audit of U.S. Federal income tax returns for the fiscal years ended July 31, 2003, 2005, and 2008. The refund was largely the result of Federal research and experimentation credits that carryover from the fiscal years 1991 through 2000 into the audited returns. We recorded a tax benefit for this refund, including the related interest, in the Consolidated Statement of Operations of \$10,025 in the fiscal year ended July 31, 2012. Related to the refund and interest were contingent professional fees of \$2,714 that were recorded in general and administrative expenses in the Consolidated Statement of Operations in the fiscal year ended July 31, 2012. In connection with the conclusion of the IRS audit, we recorded a benefit from the reversal and re-measurement of related tax reserves of \$2,308 in the Consolidated Statement of Operations in the fiscal year ended July 31, 2012. An additional benefit of \$358 was recorded in the fiscal year ended July 31, 2012 for the reversal of tax reserves for certain state and non-U.S. taxes.

We do not provide for U.S. Federal income taxes on undistributed earnings of consolidated foreign subsidiaries, as such earnings are intended to be indefinitely reinvested in those operations. Determination of the potential deferred income tax liability on these undistributed earnings is not practicable because such liability, if any, is dependent on circumstances that exist if and when remittance occurs. The circumstances that would affect the calculations would be the source location and amount of the distribution, the underlying tax rate already paid on the earnings, foreign withholding taxes and the opportunity to use foreign tax credits.

As of July 31, 2013, we had net operating loss carryforwards in Belgium of approximately \$3,797 which have no expiration date, losses of \$287 in Italy that expire in 2017, losses of approximately \$2,450 in the United Kingdom which have no expiration date, losses of approximately \$142 in Denmark which have no expiration

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

date, and losses of \$1,001 in France which have no expiration date. As of July 31, 2013, we also had state tax credit carryforwards of \$9,051 that will expire in 2028.

We have determined that it is more likely than not that we will not recognize the benefit of certain foreign losses, state losses, and tax credits and, as a result, valuation allowances have been established at July 31, 2013 and July 31, 2012. The change in the valuation allowance in fiscal year 2013 is primarily the result of the addition of state credits and foreign losses where use cannot be assured.

We perform a two-step evaluation of all tax positions, ensuring that these tax return positions meet the "more likely than not" recognition threshold and can be measured with sufficient precision to determine the benefit recognized in the financial statements. These evaluations provide us with a comprehensive model for how we should recognize, measure, present, and disclose in our financial statements certain tax positions that we have taken or expect to take on our income tax returns.

The following table summarizes the changes in our unrecognized income tax benefits for fiscal years 2013 and 2012:

	July 31,	
	2013	2012
Beginning balance	\$6,756	\$16,250
Increases based on tax positions related to current year	883	790
Increases for tax positions of prior years	157	27
Decreases for tax positions of prior years	_	(180)
Decreases due to settlements with taxing authorities		(9,802)
Decreases due to lapse of the applicable statute of limitations	(540)	(303)
Adjustment due to foreign exchange rate		(26)
Ending balance	\$7,256	\$ 6,756
Net interest as of end of fiscal year	\$ 682	\$ 640

The unrecognized tax benefits have increased to \$7,256 at July 31, 2013 and, if recognized in a future period, the timing of which is not estimable, the net unrecognized tax benefit of approximately \$6,223 would reduce our effective tax rate.

We are subject to U.S. Federal income tax as well as the income tax of multiple state and foreign jurisdictions. We have concluded all U.S. Federal income tax matters through the year ended July 31, 2008. We are currently under review for our federal income tax return for the year ended July 31, 2009. In the next four quarters, the statute of limitations for our fiscal year ended July 31, 2010 may expire for U.S. Federal and state income taxes and for foreign subsidiaries and it is reasonably expected that net unrecognized benefits, including interest, of approximately \$1,190 may be recognized. During the fiscal year 2012, we reduced our uncertain tax benefits and accrued interest by \$11,389 as a result of the completion of the audits of fiscal years 2003, 2005 and 2008, closing of statutes of limitation for the fiscal year 2006 for foreign subsidiaries and 2008 for domestic entities and the re-measurement of uncertain tax benefits in open years.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

We accrue interest and, if applicable, penalties for any uncertain tax positions. This interest and penalty expense is treated as a component of income tax expense. At July 31, 2013 and July 31, 2012, we had approximately \$682 and \$640, respectively, accrued for interest and penalties on unrecognized tax benefits.

Refundable and deferred income taxes at July 31, 2013 consisted of deferred tax assets of \$6,815 and refundable income tax assets of \$988. Refundable and deferred income taxes at July 31, 2012 consisted of deferred tax assets of \$8,810 and refundable income tax assets of \$976. The refundable income tax assets include expected Federal, state, and foreign refunds that are expected to be received within the next twelve months.

# 17. Quarterly results of operations (unaudited):

The following is a summary of unaudited quarterly results of operations for fiscal years 2013 and 2012:

	Fiscal Year 2013			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenue Gross profit Net income Basic net income per share Diluted net income per share	\$119,867 45,086 4,381 \$ 0.36 \$ 0.35	\$138,554 55,399 9,809 \$ 0.80 \$ 0.78	\$125,765 49,140 5,224 \$ 0.42 \$ 0.41	\$166,177 67,054 11,707 \$ 0.96 \$ 0.93
	Fiscal Year 2012			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenue	\$117,857	\$126,433	\$121,270	\$151,011
Gross profit	43,026	46,845	44,752	58,561
Net income	4,026	19,615	7,330	12,100
Basic net income per share	\$ 0.32	\$ 1.61	\$ 0.60	\$ 0.99
Diluted net income per share	\$ 0.32	\$ 1.59	\$ 0.59	\$ 0.96

As discussed in Note 16, we received a tax refund of \$12,007 in the second quarter of fiscal year 2012 and recorded a tax benefit for this refund, including the related interest, of \$10,025. Related to this refund we recorded contingent consulting fees of \$2,714 in general and administrative expenses.

As discussed in Note 20, we recorded a gain of \$2,500 in the second quarter of fiscal year 2012 related to the sale of our 25% interest in a China-based affiliate.

As discussed in Note 5, during the third and fourth quarters of fiscal year 2013, we recorded restructuring charges of \$496 and \$3,023, respectively.

As discussed in Note 4, during the second, third and fourth quarters of fiscal year 2013, we recorded acquisition related expense of \$663, \$1,880 and \$3,057, respectively, in association with the Ultrasonix acquisition.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

### 18. Segment and geographic information:

Our business is strategically aligned into three segments: Medical Imaging, Ultrasound, and Security Technology. Our business segments are described as follows:

- Medical Imaging primarily includes systems and subsystems for CT and MRI medical imaging
  equipment as well as state-of-the-art, selenium-based detectors for screening of breast cancer and other
  diagnostic applications in mammography.
- *Ultrasound* includes ultrasound systems and transducers primarily in the urology, surgery (including robotic assisted surgery), anesthesia, and point-of-care markets.
- Security Technology includes advanced threat detecting CT systems utilizing our expertise in advanced imaging technology and primarily used in the checked baggage screening at airports worldwide.

The table below presents information about our reportable segments:

	Year Ended July 31,		31,
	2013	2012	2011
Product Revenue:			
Medical Imaging	\$305,573	\$290,665	\$283,615
Ultrasound	149,597	151,201	129,313
Security Technology	71,555	52,809	34,694
Total net revenue	\$526,725	\$494,675	\$447,622
Engineering Revenue:			
Medical Imaging	\$ 12,974	\$ 11,101	\$ 9,417
Ultrasound	206		124
Security Technology	10,458	10,795	16,432
Total net revenue	\$ 23,638	\$ 21,896	\$ 25,973
Net Revenue:			
Medical Imaging	\$318,547	\$301,766	\$293,032
Ultrasound	149,803	151,201	129,437
Security Technology	82,013	63,604	51,126
Total net revenue	\$550,363	\$516,571	\$473,595
Income (loss) from continuing operations			
Medical Imaging (A)	\$ 31,864	\$ 18,854	\$ 12,680
Ultrasound (B)	(3,735)	10,786	1,081
Security Technology (C)	17,246	10,323	6,975
Total income from continuing operations	45,375	39,963	20,736
Total other (expense) income, net (D)	(1,278)	4,236	196
Income from continuing operations before income taxes	\$ 44,097	\$ 44,199	\$ 20,932

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

	July 31,		
	2013	2012	2011
Identifiable assets by segment:			
Medical Imaging (E)	\$217,112	\$199,512	\$192,625
Ultrasound (F)	218,434	136,388	127,402
Security Technology	53,347	26,769	23,644
Total reportable segment assets	488,893	362,669	343,671
Corporate assets (G)	98,891	195,327	177,881
Total assets	\$587,784	\$557,996	\$521,552

- (A) Includes restructuring charges of \$1,099 for fiscal year 2013. Includes \$2,198 of contingent consulting fees related to the tax refund and related interest received in fiscal year 2012. Includes restructuring charges of \$2,829 for fiscal year 2011.
- (B) Includes restructuring charges of \$2,209 for fiscal year 2013. Includes restructuring charges of \$3,668 for fiscal year 2011.
- (C) Includes restructuring charges of \$202 for fiscal year 2013. Includes \$516 of contingent consulting fees related to the tax refund and related interest received in fiscal year 2012. Includes restructuring of \$569 for fiscal year 2011.
- (D) Includes a realized loss of \$1,546 on foreign currency transactions in fiscal year 2013. Includes realized gain of \$2,500 from the sale of our remaining interest in our China based affiliate received in fiscal year 2012. Includes net interest income of \$371, \$532, and \$711 in fiscal years 2013, 2012, and 2011, respectively.
- (E) Includes goodwill and net intangible assets from acquisitions of \$1,849 and \$29,391, respectively, at July 31, 2013, \$1,849 and \$32,447, respectively, at July 31, 2012, and \$1,849 and \$35,503, respectively, at July 31, 2011.
- (F) Includes goodwill and net intangible assets from acquisitions of \$48,224 and \$24,248, respectively, at July 31, 2013, relating to our acquisition of Ultrasonix during the third quarter of fiscal year 2013.
- (G) Includes cash equivalents and marketable securities of \$57,424, \$153,122, and \$135,069, as of July 31, 2013, 2012, and 2011, respectively.

Information regarding share-based compensation and depreciation and amortization by segment for the fiscal years 2013, 2012 and 2011 are as follows:

	Year Ended July 31,		y 31,
	2013	2012	2011
Share-based compensation expense:			
Medical Imaging	\$ 7,602	\$ 7,836	\$ 6,162
Ultrasound	2,057	3,575	2,078
Security Technology	1,942	1,985	1,398
Total share-based compensation expense	\$11,601	\$13,396	\$ 9,638
Depreciation and amortization:			
Medical Imaging	\$11,469	\$11,484	\$11,315
Ultrasound	4,697	5,099	5,303
Security Technology	1,109	1,192	1,180
Total depreciation and amortization	\$17,275	\$17,775	\$17,798

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Information regarding geographic areas for fiscal years 2013, 2012, and 2011 are as follows:

	Ye	Year Ended July 31,		
	2013	2012	2011	
Net Revenue:				
United States	\$209,594	\$199,518	\$161,720	
Japan	86,947	81,907	76,429	
Germany	69,809	63,491	56,330	
Netherlands	69,687	61,368	51,600	
Other	114,326	110,287	127,516	
Total net revenue	\$550,363	\$516,571	\$473,595	

	July 31,		
	2013	2012	2011
Long Lived Assets:			
United States	\$ 62,563	\$50,718	\$42,212
Denmark	19,713	18,574	22,789
China	20,228	18,953	9,475
Other (A)	8,479	8,524	8,681
Total long lived assets	\$110,983	\$96,769	\$83,157

<sup>(</sup>A) - Other long lived assets are primarily in Canada.

Revenues are attributed to countries based on the location of our customers. For OEM sales, our customer location may differ from the location where the ultimate completed systems are sold by the OEM into the market.

#### 19. Common stock repurchases:

On December 9, 2010, we announced that our board of directors had authorized the repurchase of up to \$30,000 of our common stock. During fiscal year 2012, we repurchased 286,390 shares of common stock under this repurchase program for \$14,813 at an average purchase price of \$51.73 per share. The 2010 repurchase program was completed in the second quarter of fiscal year 2012. The cumulative shares that were repurchased and retired under the program were 586,679 shares of common stock for \$30,000 at an average price of \$51.14 per share.

On December 8, 2011, we announced that our Board of Directors had authorized the repurchase of up to an additional \$30,000 of our common stock. The repurchase program will be funded using our available cash. During the fiscal year 2013, we repurchased and retired 111,816 shares of common stock under this repurchase program for \$7,945 at an average purchase price of \$71.06 per share. During fiscal year 2012, we repurchased and retired 137,591 shares of common stock under this repurchase program for \$8,447 at an average purchase price of \$61.39 per share. As of July 31, 2013, we had repurchased and retired a total of 249,407 shares of common stock under this repurchase program for \$16,393 at an average purchase price of \$65.73 per share.

#### 20. Related party transactions:

On July 25, 2011, we entered into an agreement to sell our 25% interest in a China-based affiliate for \$2,500. The book value of the interest in the China-based affiliate was written down to \$0 in fiscal year 2006,

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

and we, upon final approval of the transaction by the Chinese government and receipt of the proceeds, recorded a gain on sale of other investments of \$2,500 in fiscal year 2012. At July 31, 2011, we had a net advance payment and deferred revenue balance of \$474 from our former China-based affiliate. Sales to this China-based affiliate for fiscal years 2012, and 2011 were approximately \$0 and \$2,808, respectively.

In April 2010, we invested \$1,900 in PocketSonics, a start-up company with proprietary ultrasound technology. We have expensed \$898, \$1,547, and \$2,438 for engineering services from this start-up company during fiscal years 2013, 2012, and 2011, respectively.

# 21. Accumulated Other Comprehensive Income (Loss):

Components of comprehensive income include net income and certain transactions that have generally been reported in the Consolidated Statements of Changes in Stockholders' Equity. Other comprehensive income consists of reported foreign currency translation gains and losses (net of taxes), actuarial gains and losses on pension plan assets (net of taxes), and changes in the unrealized value on foreign currency forward contracts (net of taxes). Deferred taxes are not provided on cumulative translation adjustments where we expect earnings of a foreign subsidiary to be indefinitely reinvested. The income tax effect of currency translation adjustments related to foreign subsidiaries that are not considered indefinitely reinvested is recorded as a component of deferred taxes with an offset to other comprehensive income.

The following table summarizes components of accumulated other comprehensive income (loss) as follows:

	Unrealized Gains (Losses) on Foreign Currency Forward Contracts	Unrealized Gain (Loss) on Pension Plan	Currency Translation	Accumulated Other Comprehensive Income
Balance as of July 31, 2010	\$ —	\$(2,286)	\$ 7,008	\$ 4,722
Pre-tax change before reclass to earnings		(1,188)	8,281	7,093
Amount reclassed to earnings				_
Income tax benefit (provision)		395	(713)	(318)
Balance as of July 31, 2011	_	(3,079)	14,576	11,497
Pre-tax change before reclass to earnings	67	(2,516)	(6,952)	(9,401)
Amount reclassed to earnings	_	_		
Income tax (provision) benefit	(24)	884	(653)	207
Balance as of July 31, 2012	43	(4,711)	6,971	2,303
Pre-tax change before reclass to earnings	(160)	3,714	4,383	7,937
Amount reclassed to earnings	(67)			(67)
Income tax benefit (provision)	80	(1,305)	200	(1,025)
Balance as of July 31, 2013	\$(104)	\$(2,302)	\$11,554	\$ 9,148

The effective portion of the unrealized gains and losses on foreign currency forward contracts and unrealized gains or losses on currency translation is included in other income (expense) on our Consolidated Statement of Operations.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# 22. Subsequent events:

In April 2010, we entered into a transaction with PocketSonics, Inc. (PocketSonics) pursuant to which we received an exclusive license to certain ultrasound technology owned or controlled by PocketSonics and acquired a ten percent (10%) equity interest in PocketSonics. The equity investment was recorded as in-process research and development of \$1,900. On September 20, 2013, we acquired all of the remaining equity of PocketSonics. The purchase price includes a base merger consideration of \$11,083 which was paid in cash at closing, and additional contingent consideration of up to \$3,000 payable upon the achievement of certain milestones. Due to the timing of the transaction, supplemental disclosures with respect to the acquisition were not readily available in order to properly disclose at this time. We intend to update the disclosure surrounding this transaction in our fiscal year 2014 quarterly filings.

On September 12, 2013, we announced that our board of directors, on September 10, 2013, declared a dividend of \$0.10 per common share payable on October 10, 2013 to stockholders of record on September 26, 2013.

# ANALOGIC CORPORATION SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS

# (In thousands)

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at End of Period
Allowance for doubtful accounts				
Year ended July 31, 2013	\$344	\$345	\$ (91)	\$598
Year ended July 31, 2012	\$599	\$200	\$(455)	\$344
Year ended July 31, 2011	\$616	\$ 26	\$ (43)	\$599
Description	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at End of Period
Description Income Tax Valuation Allowance	Beginning	to Costs and	Deductions	at End of
	Beginning	to Costs and	Deductions \$	at End of
Income Tax Valuation Allowance	Beginning of Period	to Costs and Expenses		at End of Period

Changes in valuation allowance represents changes in Federal, state and foreign tax attributes for which we believe it is more likely than not that they will not be able to be utilized.

# INDEX TO EXHIBITS

2.1	Shares Purchase Agreement, dated as of January 30, 2008, between Analogic Corporation and Chonqing Anke Medical Equipment Co.	Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 5, 2008
2.2	Termination Agreement, dated as of January 30, 2008, between Analogic Corporation and Shenzhen Anke High-Tech Company Limited	Exhibit 2.2 to the Company's Current Report on Form 8-K filed on February 5, 2008
2.3	Agreement and Plan of Merger, dated as of March 5, 2008, by and among Analogic Corporation, Canton Merger Corporation, Copley Controls Corporation ("Copley"), the Principal Shareholders of Copley named therein, the Additional Shareholders of Copley named therein and Matthew Lorber, as the Securityholders' Representative	Exhibit 2.1 to the Company's Current Report on Form 8-K filed on March 6, 2008
2.4	Purchase and Sale Agreement, dated as of October 14, 2010, by and among Analogic Corporation, Anadventure II Corporation, and Sigma Phi Alpha Corporation	Exhibit 2.1 to the Company's Current Report on Form 8-k filed on October 14, 2010
2.5	Arrangement Agreement, dated January 7, 2013, by and among Analogic Corporation, 8385998 Canada Inc., Ultrasonix Medical Corporation and Scott Ratushny, Ronald Pelzer and Laurent Pelissier, soley in their capacity as the representatives of Ultrasonix.	Exhibit 2.1 to the Company's Current Report on Form 8-K filed on January 8, 2013.
3.1	Restated Articles of Organization, as amended	Exhibit 3.1 to the Company's Current Report on Form 8-K filed on January 30, 2009
3.2	By-laws, as amended	Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 3, 2010
10.1	Form of Indemnity Agreement	Exhibit 10.19 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 1987
10.2	Form of Indemnity Agreement for Directors and Executive Officers of Analogic Corporation	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 9, 2007
10.3	Key Employee Stock Bonus Plan dated March 14, 1983, as amended on January 27, 1988	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2006
10.4	Form of Restricted Stock Grant for Key Employee Stock Bonus Plan dated March 14, 1983, as amended on January 27, 1988	Exhibit 10.23 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2007
10.5	Employee Qualified Stock Purchase Plan dated June 10, 1986, as amended October 9, 1997 and October 15, 2002	Exhibit 10.1 to the Company's Post-Effective Amendment No. 2 to Registration Statement on Form S-8 filed on July 24, 2003

*	10.6	Key Employee Incentive Stock Option Plan dated June 11, 1993, as amended October 12, 2000, November 16, 2001, and September 20, 2006	Exhibit 10.7 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2006
*	10.7	1997 Non-Qualified Stock Option Plan for Non- Employee Directors dated January 31, 1997, as amended December 8, 2003 and September 20, 2006	Exhibit 10.8 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2006
*	10.8	Form of Stock Option Grant for 1997 Non-Qualified Stock Option Plan for Non-Employee Directors dated January 31, 1997, as amended December 8, 2003 and September 20, 2006	Exhibit 10.29 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2004
*	10.9	Key Employee Incentive Stock Option Plan dated June 11, 1998, as amended October 12, 2000, November 16, 2001, and September 20, 2006	Exhibit 10.9 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2006
*	10.10	Form of Stock Options Grant for Key Employee Incentive Stock Option Plan dated June 11, 1998, as amended October 12, 2000, November 16, 2001, and September 20, 2006	Exhibit 10.30 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2004
*	10.11	Key Employee Stock Bonus Plan dated October 12, 2000, as amended March 11, 2003	Appendix A to the Company's Definitive Proxy Statement dated December 15, 2003 for the Company's Annual Meeting of Stockholders held January 16, 2004
*	10.12	Form of Restricted Stock Grant for Key Employee Stock Bonus Plan dated October 12, 2000, as amended March 11, 2003	Exhibit 10.31 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2004
*	10.13	2007 Stock Option Plan	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 2, 2007
*	10.14	Form of Stock Option Award Agreement for 2007 Stock Option Plan	Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 2, 2007
*	10.15	2007 Restricted Stock Plan	Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 2, 2007
*	10.16	Form of Restricted Stock Award Agreement for 2007 Restricted Stock Plan used for awards granted prior to October 14, 2009	Exhibit 10.4 to the Company's Current Report on Form 8-K filed on February 2, 2007
*	10.17	Form of Restricted Stock Award Agreement for 2007 Restricted Stock Plan used for awards granted on October 14, 2009	Exhibit 10.17 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2010
*	10.18	Analogic Corporation Amended and Restated 2009 Stock Incentive Plan	Exhibit 99.1 to the Company's Current Report on Form 8-K filed on January 27, 2012
*	10.19	Form of Performance-Based Restricted Stock Unit Award Agreement for the Analogic Corporation 2009 Stock Incentive Plan (used prior to September 9, 2013)	Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 3, 2010

	10.20	Form of Performance-Based Restricted Stock Unit Award Agreement for the Analogic Corporation 2009 Stock Incentive Plan (used subsequent to September 9, 2013)	Exhibit 99.1 to the Company's Current Report on Form 8-K filed on September 13, 2013
*	10.21	Form of Time-Based Restricted Stock Unit Agreement for 2009 Stock Incentive Plan (used prior to September 9, 2013)	Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the six months ended January 31, 2010
	10.22	Form of Time-Based Restricted Stock Unit Agreement for 2009 Stock Incentive Plan (used subsequent to September 9, 2013)	Exhibit 99.2 to the Company's Current Report on Form 8-K filed on September 13, 2013
	10.23	Restricted Stock Unit Agreement between Analogic Corporation and James Green dated March 8, 2013	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the six months ended January 31, 2013
*	10.24	Form of Nonstatutory Stock Option Agreement for 2009 Stock Incentive Plan (used prior to September 9, 2013)	Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the three months ended October 31, 2011
	10.25	Form of Nonstatutory Stock Option Agreement for 2009 Stock Incentive Plan (used subsequent to September 9, 2013)	Exhibit 99.3 to the Company's Current Report on Form 8-K filed on September 13, 2013
*	10.26	Amended and Restated Non-Employee Director Stock Plan	Appendix B to the Company's Definitive Proxy Statement dated November 25, 2011 for the Company's Annual Meeting of Stockholders held January 23, 2012
*	10.27	Nonqualified Deferred Compensation Plan	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 14, 2008
*	10.28	Non-Qualified Stock Option Program for Non- Employee Directors	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the nine months ended April 30, 2012
*	10.29	Form of Nonstatutory Stock Option Agreement for Non-Employee Directors for 2009 Stock Incentive Plan	Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the nine months ended April 30, 2012
*	10.30	Analogic 401(k) Plan (January 1, 2007 Restatement)	Exhibit 10.22 to the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2007
	10.31	Form of Notice to Executive Officers (at Vice President or higher level) Regarding the Fiscal Year 2013 Annual Incentive Plan	Exhibit 10.1 to Company's Quarterly Report on Form 10-Q for the three months ended October 31, 2012
*	10.32	Form of Notice to Executive Officers (at Vice President or higher level) Regarding the Fiscal Year 2012 Annual Incentive Plan	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended October 31, 2011
*	10.33	Form of Notice to Executive Officers (who are Business Unit heads) regarding the Analogic Corporation Annual Incentive Plan for Fiscal Year 2011	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2011

*	10.34	Form of Notice to Executive Officers (at Vice President or higher level) regarding the Analogic Corporation Annual Incentive Plan for Fiscal Year 2011	Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the three months ended October 31, 2010
*	10.35	Separation Agreement between Mr. Melson and the Company dated March 2, 2012	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 7, 2012
*	10.36	Employment Agreement between Ms. Consylman and the Company entered into on January 24, 2012.	Exhibit 99.1 to the Company's Current Report on Form 8-K filed on January 27, 2012
*	10.37	Letter Agreement between Analogic Corporation and Mervat Faltas, dated March 31, 2010 and accepted and agreed to by Ms. Faltas on April 29, 2010	Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2011
*	10.38	Letter Agreement between Analogic Corporation and James Green, dated April 20, 2007 and accepted and agreed to by Mr. Green on May 1, 2007	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 7, 2007
*	10.39	Amendment, dated December 24, 2008, to the Letter Agreement between Analogic Corporation and James Green, dated April 20, 2007	Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2009
*	10.40	Letter Agreement, dated as of November 23, 2007, between Analogic Corporation and Bernard M. Gordon	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 29, 2007
*	10.41	Letter Agreement between Analogic Corporation and John J. Fry, dated October 29, 2007 and accepted and agreed to by Mr. Fry on October 30, 2007	Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the three months ended October 31, 2007
*	10.42	Amendment, dated December 24, 2008, to Letter Agreement between Analogic Corporation and John J. Fry, dated October 29, 2007	Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2009
*	10.43	Form of Change of Control Agreement for Certain Executive Officers of Analogic Corporation	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 24, 2007
*	10.44	Incumbent Director Resignation Policy	Appendix C to the Company's Definitive Proxy Statement dated November 28, 2008 for the Company's Annual Meeting of Stockholders held January 26, 2009
*	10.45	Severance Plan for Management Employees, as Amended and Restated, effective as of December 31, 2008	Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the three months ended January 31, 2009
*	10.46	Employment Agreement, dated June 8, 2009, between Analogic Corporation and Michael L. Levitz	Exhibit 10.2 to the Company's Current Report on Form 8-K filed on June 12, 2009

10.47	Stock Purchase Agreement dated as of November 1, 2005, between Analogic Corporation and Emageon Inc.	Exhibit 2.1 to the Company's Current Report on Form 8-K filed on November 4, 2005
10.48	Credit Agreement by and among Analogic Corporation, the financial institutions identified therein as lenders, Sovereign Bank as Administrative Agent, and TD Bank, N.A., as Documentation Agent dated October 11, 2011.	Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 12, 2011
10.49	Guaranty by Anadventure 3 Corporation in favor of the Lenders dated October 11, 2011.	Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 12, 2011
10.50	Pledge Agreement between Analogic Corporation and Sovereign Bank over the shares and preferred equity certificates of Analogic Holding Luxembourg S.à.r.l.	Exhibit 10.3 to the Company's Current Report on Form 8-K filed on October 12, 2011
21	List of Subsidiaries	
23	Consent of PricewaterhouseCoopers LLP	
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended	
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended	
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	
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	
** 101.INS	XBRL Instance Document.	
** 101.SCH	XBRL Taxonomy Extension Schema Document.	
** 101.CAL	XBRL Taxonomy Calculation Linkbase Document.	
** 101.LAB	XBRL Taxonomy Label Linkbase Document.	
** 101.PRE	XBRL Taxonomy Presentation Linkbase Document.	
** 101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	

Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets at July 31, 2013 and July 31, 2012, (ii) Consolidated Statements of Operations for the years ended July 31, 2013, 2012, and 2011, (iii) Consolidated Statements of Comprehensive Income for the years ended July 31, 2013, 2012 and 2011, (iv) Consolidated Statements of Changes in Stockholders' Equity for the years ended July 31, 2013, 2012, and 2011, (v) Consolidated Statements of Cash Flows for the years ended July 31, 2013, 2012, and 2011, and (vi) Notes to Consolidated Financial Statements.

In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Annual Report on Form 10-K is deemed not filed or part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act, is deemed not filed for purposes of section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.

<sup>\*</sup> Management contract or compensatory plan or arrangement

<sup>\*\*</sup> Submitted electronically herewith

# **List of Subsidiaries**

Jurisdiction of Name Incorporation Analogic Limited Massachusetts ANALOGIC FOREIGN SALES CORPORATION U.S. Virgin Islands

Analogic China Holding Limited Hong Kong Analogic Holding Luxembourg S.a.r.l. Luxembourg

Analogic Japan KK Japan Analogic Medical Equipment (Shanghai) Co. Ltd. China

ANALOGIC SECURITIES CORPORATION Massachusetts ANADVENTURE II CORPORATION Massachusetts ANA/DVENTURE 3 CORPORATION Massachusetts ANADVENTURE DELAWARE, INC. Delaware

ANALOGIC CANADA CORPORATION Province of Nova Scotia, Canada

B-K Medical Holding ApS Denmark B-K Medical ApS Denmark **B-K Medical AB** Sweden B-K Medical Benelux NV/SA Belgium

B-K Medical Medizinische Systeme GmbH Germany B-K Medicale S.r.L Italy

B-K Medical Systems, Inc. Massachusetts Copley Motion Systems, LLC Delaware Sound Technology, Inc. Pennsylvania ANALOGIC LTD.

Ultrasonix Medical Corporation Province of British Columbia, Canada

Korea

Ultrasonix Europe Medical Corporation Ltd United Kingdom

Ultrasonix Europe MC Ltd. France

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-179187, 033-05913, 033-05913, 033-53381, 333-40715, 333-55588, 333-113039, 333-113040, 333-129010, 333-143743, 333-149007, and 333-164735) of Analogic Corporation of our report dated September 30, 2013 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/PricewaterhouseCoopers LLP

Boston, Massachusetts September 30, 2013

# CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO RULE 13a-14(a)/ RULE 15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

# I, James W. Green, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Analogic Corporation;
- 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

	/s/ James W. Green
Date: September 30, 2013	James W. Green
	President and Chief Executive Officer
	(Principal Executive Officer)

# CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO RULE 13a-14(a)/RULE 15d-14(a) OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

### I, Michael L. Levitz, certify that:

- I have reviewed this Annual Report on Form 10-K of Analogic Corporation;
- 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;
- 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: September 30, 2013	/S/ MICHAEL L. LEVITZ
	Michael L. Levitz Senior Vice President, Chief Financial Officer, and Treasure
	(Principal Financial Officer)

# 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

In connection with the Annual Report on Form 10-K of Analogic Corporation (the "Company") for the fiscal year ended July 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, James W. Green, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to the best of his knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; 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/ James W. Green
Date: September 30, 2013	James W. Green
	President and Chief Executive Officer
	(Principal Executive Officer)

# 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

In connection with the Annual Report on Form 10-K of Analogic Corporation (the "Company") for the fiscal year ended July 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Michael L. Levitz, Vice President, Chief Financial Officer, and Treasurer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to the best of his knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: September 30, 2013

/S/ MICHAEL L. LEVITZ

Michael L. Levitz

Senior Vice President, Chief Financial Officer, and Treasurer

(Principal Financial Officer)

# **Board of Directors**

EDWARD F. VOBORIL 3,4

Chairman of the Board of Analogic Corporation; Former Chairman of the Board of Directors and Former Chief Executive Officer of Greatbatch, Inc.

BERNARD C. BAILEY 1, 3

Chief Executive Officer and Chairman of the Board of Authentix, Inc.

JEFFREY P. BLACK 1, 2

Former Chairman and Chief Executive Officer of Teleflex Incorporated

JAMES W. GREEN

President and Chief Executive Officer of Analogic Corporation

JAMES J. JUDGE 1,3

Executive Vice President and Chief Financial Officer of Northeast Utilities

KEVIN C. MELIA 1, 2

Former Non-Executive Chairman of Vette Corporation and Co-Managing Director of Boulder Brook Partners Private Investment

MICHAEL T. MODIC 2,4

Chairman of the Neurological Institute at the Cleveland Clinic Foundation

FRED B. PARKS 2, 4

Former Chief Executive Officer of NDS Surgical Imaging, Inc.

SOPHIE V. VANDEBROEK 3, 4

Vice President and Chief Technology Officer of Xerox Corporation; President of the Xerox Innovation Group

# **Executive Officers**

JAMES W. GREEN

**President and Chief Executive Officer** 

MERVAT FALTAS

Senior Vice President and General Manager, Medical Imaging Business

JOHN J. FRY

Senior Vice President, General Counsel, and Secretary

MICHAEL L. LEVITZ

Senior Vice President, Chief Financial Officer, and Treasurer

FARLEY PEECHATKA

Senior Vice President and General Manager, Ultrasound Business

# Senior Leadership

SHALABH CHANDRA

Vice President, General Manager, Analogic Asia

JOYCE KILROY

Vice President, Global Quality Assurance, Regulatory Affairs and Compliance

JOHN P. O'CONNOR

Vice President, Advanced Engineering & Chief Technology Officer

DOUGLAS B. ROSENFELD

Vice President, Global Human Resources and Administration

JAMES P. RYAN

Senior Vice President, Global Operations

YASH SINGH

Vice President, Corporate Strategy & Development

ERIC ZANIN

Vice President and General Manager Security Systems Business

# Stockholder Information

ANNUAL MEETING Tuesday, January 21, 2014 11:00 AM at Analogic Corporate Headquarters

CORPORATE HEADQUARTERS Analogic Corporation 8 Centennial Drive Peabody, MA 01960 978-326-4000

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

PricewaterhouseCoopers LLP 125 High Street Boston, MA 02110

TRANSFER AGENT Computershare Trust Company, N.A 250 Royall Street Canton, MA 02021 781-575-2000 STOCK LISTING
NASDAQ Global Market: ALOG

STOCK INDEXES Russell 2000 S&P SmallCap 600

INVESTOR RELATIONS

Mark Namaroff

Director of Investor Relations

978-326-4058 investorrelations@analogic.com

WEB SITE www.analogic.com

- 1 Audit Committee
- 2 Compensation Committee
- 3 Nominating and Corporate Governance Committee
- 4 Technology Committee

#### SAFE HARBOR STATEMENT

This report may contain projections or other forward-looking statements regarding future events or the future financial performance of the Company that involve risks and uncertainties. Readers are cautioned that these forward-looking statements are only predictions and may differ materially from actual future events or results. Readers are referred to the "Risk Factors" section of the Company's Annual Report on Form 10-K, which identifies important risk factors that could cause actual results to differ from those contained in the forward-looking statements, including risks associated with dependence on new product offerings, competition, patents, intellectual property and licensing, future growth, rapid technological and market change, manufacturing and sourcing, acquisition strategy, international operations, volatility of stock price, financial risk management, and potential volatility in operating results, among others.

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Innovative Solutions for Life

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