GREATBATCH, INC.
Form 10-K
March 04, 2014

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

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FORM 10-K

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ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For The Fiscal Year Ended January 3, 2014
Commission File Number 1-16137

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GREATBATCH, INC.
(Exact name of Registrant as specified in its charter)

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Delaware (State of Incorporation)	16-1531026 (I.R.S. Employer Identification No.)

2595 Dallas Parkway
Suite 310
Frisco, Texas 75034
(Address of principal executive offices)
(716) 759-5600
(Registrant's telephone number, including area code)
Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class:	Name of Each Exchange on Which Registered:
Common Stock, Par Value $0.001 Per Share	New York Stock Exchange

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No x
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨
Indicate by checkmark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and

post such files). Yes x No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨

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

Large accelerated filer x	Accelerated filer ¨
Non-accelerated filer ¨	Smaller reporting company ¨

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

The aggregate market value of common stock held by non-affiliates as of June 28, 2013 (the last business day of the registrant's most recently completed second fiscal quarter), based on the last sale price of $32.79, as reported on the New York Stock Exchange: $771.2 million. Solely for the purpose of this calculation, shares held by directors and officers and 10 percent shareholders of the registrant have been excluded. Such exclusion should not be deemed a determination by or an admission by the registrant that these individuals are, in fact, affiliates of the registrant.

Shares of common stock outstanding as of March 4, 2014: 24,649,884

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following document are specifically incorporated by reference into the indicated parts of this report:

Document	Part
Proxy Statement for the 2014 Annual Meeting of Stockholders	Part III, Item 10 "Directors, Executive Officers and Corporate Governance"
	Part III, Item 11 "Executive Compensation"
	Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters"
	Part III, Item 13 "Certain Relationships and Related Transactions, and Director Independence"
	Part III, Item 14 "Principal Accountant Fees and Services"

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PART I

ITEM 1. BUSINESS

OVERVIEW

Greatbatch, Inc. was founded in 1970 and is a Delaware corporation incorporated in 1997. When used in this report, the terms “Greatbatch,” “we,” “us,” “our” and the “Company” mean Greatbatch, Inc. and its subsidiaries. The Company conducted its initial public offering in 2000.

In connection with the realignment of our operating structure in 2013 to optimize profitable growth, which included changing our management and reporting structure, we reevaluated our operating and reporting segments. Beginning in the fourth quarter of 2013, we have two reportable segments: Greatbatch Medical and QiG Group (“QiG”). As required, prior year amounts have been reclassified in order to conform them to the current year presentation. Greatbatch Medical designs and manufactures products where Greatbatch either owns the intellectual property or has unique manufacturing and assembly expertise. The financial results of Greatbatch Medical include the former Implantable Medical and Electrochem Solutions (“Electrochem”) segments, excluding QiG. These products include medical devices and components for the cardiac, neuromodulation, orthopaedics, portable medical, vascular and energy markets among others. The Greatbatch Medical segment also offers value-added assembly and design engineering services for medical devices that utilize its component products.

QiG focuses on developing medical device systems for some of healthcare’s most pressing challenges and reflects Greatbatch’s strategic evolution of its product offerings in order to raise the growth and profitability profile of the Company. Through the research and development professionals in QiG, the Company is now investing in three areas - new medical device systems commercialization, collaborative programs with OEM customers, and strategic equity positions in start-up companies - to grow a diversified and distinctive portfolio. The medical device systems developed by QiG are manufactured by Greatbatch Medical.

The Company's customers include large multi-national original equipment manufacturers (“OEMs”).

Since Greatbatch, Inc. was incorporated, it has completed the following acquisitions either directly or indirectly through one of its subsidiaries:

Acquisition Date	Acquired Company	Business at Time of Acquisition
July 1997	Wilson Greatbatch Ltd.	Founded in 1970, designed and manufactured batteries for implantable medical and commercial applications.
August 1998	Hittman Materials and Medical Components, Inc.	Founded in 1962, designed and manufactured ceramic and glass feedthroughs and specialized porous coatings for electrodes used in implantable medical devices (“IMDs”).
August 2000	Battery Engineering, Inc.	Founded in 1983, designed and manufactured high-energy density batteries for industrial, commercial, military and medical applications.
June 2001	Sierra-KD Components division of Maxwell Technologies, Inc.	Founded in 1986, designed and manufactured ceramic electromagnetic filtering capacitors and integrated them with wire feedthroughs for use in IMDs as well as military, aerospace and commercial applications.
July 2002	Globe Tool and Manufacturing Company, Inc.	Founded in 1954, designed and manufactured precision enclosures used in IMDs and commercial products used in the aerospace,

		electronics and automotive sectors.
March 2004	NanoGram Devices Corporation	Founded in 1996, developed nanoscale materials for battery and medical device applications.
April 2007	BIOMEC, Inc.	Established in 1998, provided medical device design and component integration to early-stage and established customers.

Acquisition Date	Acquired Company	Business at Time of Acquisition
June 2007	Enpath Medical, Inc.	Founded in 1981, designed, developed, and manufactured venous introducers and dilators, implantable leadwires, steerable sheaths and steerable catheters.
October 2007	IntelliSensing LLC	Founded in 2005, designed and manufactured battery-powered wireless sensing solutions for commercial applications.
November 2007	Quan Emerteq LLC	Founded in 1998, designed, developed, and manufactured catheters, stimulation leadwires, microcomponents and assemblies.
November 2007	Engineered Assemblies Corporation	Founded in 1984, designed and integrated custom battery solutions and electronics focused on rechargeable systems for industrial, commercial, military and portable medical applications.
January 2008	P Medical Holding SA	Founded in 1994, designed, manufactured and supplied delivery systems, instruments and implants for the orthopaedics industry.
February 2008	DePuy Orthopaedics' Chaumont, France manufacturing facility	Manufactured hip and shoulder implants for DePuy Orthopaedics.
December 2011	Micro Power Electronics, Inc. ("Micro Power")	Founded in 1990, designed custom battery packs, smart chargers and power supplies for industrial, military and portable medical applications.
February 2012	NeuroNexus Technologies, Inc. ("NeuroNexus")	Founded in 2004, medical device design firm specializing in developing neural interface technology, components and systems.

FINANCIAL STATEMENT YEAR END

We utilize a fifty-two, fifty-three week fiscal year ending on the Friday nearest December 31st. Fiscal years 2013, 2012 and 2011 ended on January 3, 2014, December 28, 2012 and December 30, 2011, respectively. Fiscal year 2013 contained fifty-three weeks and fiscal years 2012 and 2011 contained fifty-two weeks.

SEGMENT INFORMATION

In connection with the realignment of our operating structure in 2013, which included changing our management and reporting structure, we reevaluated our operating and reporting segments. Beginning in the fourth quarter of 2013, we have two reportable segments: Greatbatch Medical and QiG. Segment information including sales from external customers, profit or loss, and assets by segment as well as sales from external customers and long-lived assets by geographic area are set forth at Note 19 "Business Segment, Geographic and Concentration Risk Information" of the Notes to Consolidated Financial Statements contained in Item 8 of this report.

Greatbatch Medical

Greatbatch Medical's products include medical devices and components for the cardiac, neuromodulation, orthopaedics, portable medical, vascular and energy markets among others. A brief description of these products and markets follows:

Cardiac and neuromodulation – Products include batteries, capacitors, filtered and unfiltered feedthroughs, engineered components, implantable stimulation leads and enclosures used in IMDs. Additionally, we offer value-added assembly for these IMDs. An IMD is an instrument that is surgically inserted into the body to provide diagnosis and/or therapy. One sector of the IMD market is cardiac, which is comprised of devices such as implantable pacemakers, implantable cardioverter defibrillators (“ICD”), cardiac resynchronization therapy (“CRT”) devices, and cardiac resynchronization therapy with backup defibrillation devices (“CRT-D”). Another sector of the IMD market is neuromodulation, which is comprised of pacemaker-type devices that stimulate nerves for the treatment of various conditions. Beyond established therapies of pain control, incontinence and movement disorders (Parkinson’s disease and epilepsy), nerve stimulation for the treatment of other disabilities such as migraines, obesity and depression has shown promising results.

The following table sets forth the main categories of battery-powered IMDs and the principal illness or symptoms treated by each device:

Device	Market Size (in billions)	Principal Illness or Symptom
Pacemakers	$4.0	Abnormally slow heartbeat (Bradycardia)
ICDs	$3.7	Rapid and irregular heartbeat (Tachycardia)
CRT/CRT-Ds	$3.0	Congestive heart failure
Neurostimulators	$2.6	Chronic pain, movement disorders, epilepsy, obesity or depression
Cochlear hearing devices	$0.8	Hearing loss

IMD systems generally include an implantable pulse generator ("IPG") and one or more stimulation leads. An IPG is a battery powered device that produces electrical pulses. The lead then carries this electrical pulse from the IPG to the heart, spinal cord or other location in the body. Our portfolio of proprietary technologies, products and capabilities has been built to provide our cardiac and neuromodulation customers with a single source for the vast majority of the components and subassemblies required to manufacture an IPG or lead, to include complete lead systems. Our investments in research and development has generated proprietary products such as the QHR®, QMR® and QCapacitor® primary battery and capacitor lines, which have enabled our OEM partners to make improvements in their system offerings in terms of device reliability, size, longevity and power. Our Xcellion™ line of Lithium-Ion rechargeable batteries leverages decades of implantable battery research, development and manufacturing expertise. This line of cells now includes the optional CoreGuard™ feature, which enables batteries to discharge to zero volts without performance degradation.

We believe that the cardiac and neuromodulation markets continue to exhibit fundamentals that position this product line for growth. Factors that are impacting these markets are as follows:

- Growing patient population – Implantable pacemakers and ICDs remain primary therapies for a number of critical clinical conditions, most of which are non-elective in nature. As the prevalence of many of these clinical conditions increase with age, underlying population demographics in developed countries will provide an engine for procedure growth.
- Focus on emerging markets – OEM's have increased their focus and investment to expand physicians' awareness of these life changing therapies, which we believe will result in increased utilization to improve quality of life for more patients globally. These growth initiatives will drive increased utilization of existing cardiac technologies and provide an avenue for new device and technology development as device manufacturers look to develop unique products for these markets.
- Trends in device features – IMD evolution continues to favor the development of smaller, longer lasting devices with increased functionality and more physiologic shapes. Innovative battery, capacitor, enclosure, and filtering solutions such as those provided by Greatbatch Medical are critical to the realization of these market needs.
- Growth within neuromodulation – Neuromodulation applications continue to grow at a faster pace than traditional markets, and are expected to continue to expand as new therapeutic applications are identified. There continues to be growth in clinical data supporting new applications and a growing focus and excitement from clinicians looking for treatment alternatives for challenging patient conditions. Additionally, core neuromodulation markets—like spinal cord stimulation—that rely significantly on patients for co-pays, are positioned to see stronger growth as global economic markets strengthen. Many cardiac OEM companies are also OEMs in the neuromodulation market, which positions us to capitalize on both drivers of market growth.
- Disruptive Technologies - Two disruptive device technologies, sub-cutaneous ICDs and leadless pacemakers, gained significant visibility in 2013. Our portfolio of technologies and next generation development efforts are vital to the advancement of these new therapy platforms.

Orthopaedics – Products include hip and shoulder joint reconstruction implants, bone plates and spinal devices, and instruments and delivery systems used in hip and knee replacement, trauma fixation, extremity and spine surgeries. Orthopaedic implants are used in reconstructive surgeries to replace or repair hips, knees and other joints, such as

shoulders, ankles and elbows that have deteriorated as a result of disease or injury. Trauma implant systems are used primarily to reattach or stabilize damaged bone or tissue while the body heals. Spinal implant systems are used by orthopaedic surgeons and neurosurgeons in the treatment of degenerative diseases, deformities and injuries in various regions of the spine.

Each implant system typically has an associated instrument set that is used in the surgical procedure to insert that specific implant system. Instruments included in a set vary by implant system. Usually, instrument sets are sterilized after each use and then reused, however, recent trends are moving towards single use instrumentation. Cases are used to store, transport and arrange implant systems and other medical devices and related surgical instruments. Orthopaedic trays are generally designed to allow for sterilization and re-use after an implant or other surgical procedure is performed. The majority of cases are tailored for

specific implant procedures so that the instruments, implants and other devices are arranged to match the order of use in the procedure and are securely held in clearly labeled, custom-formed pockets or brackets.

Many of the factors affecting the orthopaedics market segment are similar to the cardiac and neuromodulation markets and include:

- Aging population in developed markets - Conditions like osteoarthritis and spine degeneration are underlying drivers of a diverse spectrum of reconstructive therapies, and increase significantly with age. Continued growth in the 65+ population, along with an increased desire to remain active, will provide a driver for procedural growth.
- Rates of obesity—Rates of obesity globally have continued to rise, and are expected to do so for the foreseeable future. Excess weight carriage exacerbates wear on joints and will drive the need for replacement and revision procedures.
- New implant and surgical technology - The orthopaedic market continues to see a growing focus on minimally invasive procedures across a number of sectors including joint reconstruction and spinal fusion, potentially expanding the use of these therapeutic approaches.
- Growth in emerging markets—Growing affluence in emerging markets has provided an opportunity for global growth of a number of orthopaedic procedures. Patient populations outside of developed markets continue to be underpenetrated, and investment from large device manufacturers in these markets will provide for procedural growth of established therapies.

We estimate that the orthopaedics market represents a $3 billion market opportunity for Greatbatch Medical.

Vascular – Products include introducers, steerable sheaths and catheters that deliver minimally invasive therapies for many end-user markets including coronary and neurovascular disease, peripheral vascular disease, interventional radiology, vascular access, atrial fibrillation, and interventional cardiology, as well as products for medical imaging and drug and pharmaceutical delivery. Most of these markets are expected to experience significant global procedural growth over the next few years. Introducers enable physicians to create a conduit through which they can insert infusion catheters, implantable ports, pacemaker leads and other therapeutic devices into a blood vessel. A catheter is a tube that can be inserted into a blood vessel to deliver a therapeutic device or allow drainage, injection of fluids, or access by surgical instruments.

Our products seek to capitalize on the growth in the cardiac and vascular markets, especially since many of the large cardiac OEMs are also in the vascular markets. This gives us an opportunity to develop close strategic partnerships that can be leveraged across markets, an opportunity that will grow in significance as OEMs continue to consolidate their operating divisions. In addition to those factors that are driving the cardiac and neuromodulation markets, increased demand is also being driven by continued focus on minimally invasive procedures. Patients, healthcare providers, and payors are looking for minimally invasive technologies to treat disease, expanding the use of catheter based procedures and associated vascular therapies. We also continue to see strong growth in the vascular markets because of the increased prevalence and treatment of peripheral artery disease as well as new indications for tissue extraction or ablation.

We believe that the vascular market represents a $1.3 billion market opportunity for Greatbatch Medical.

Portable Medical, Energy, Military and Environmental - Greatbatch Medical also provides customized battery power and management systems, charging and docking stations, and power supplies. We design customized primary (non-rechargeable) and secondary (rechargeable) battery solutions which are used in the portable medical, energy, military and environmental markets. Our primary and secondary power solutions are used where failure is not an option.

Greatbatch Medical's primary lithium power solutions, which include high, moderate and low rate non-rechargeable cell solutions, are utilized in extreme conditions and can withstand exceptionally high and low temperatures, sterilization, and high shock and vibration. Our product designs incorporate protective circuitry, glass-to-metal hermetic seals, fuses and diodes to help ensure safe, durable and reliable power as devices are subjected to these harsh conditions. Our primary batteries are often used in remote and demanding environments, including down hole drilling tools, military communication devices, oceanographic buoys and more.

In addition to primary power solutions, Greatbatch Medical offers customized secondary or rechargeable battery packs, in a diverse range of chemistries for critical applications requiring rechargeable solutions. Rechargeable

chemistries include lithium ion, lithium ion polymer, nickel metal hydride, nickel cadmium, lithium iron phosphate and sealed lead acid. Greatbatch Medical's rechargeable battery packs include advanced electronics, smart charging and battery management systems and are used in critical and life-saving applications, including automated external defibrillators, ventilators, powered surgical instruments and portable oxygen concentrators, among others.

The portable medical market trends continue to be favorable with an aging population and the shift from clinical to home settings for portable equipment to monitor and provide therapy. This market represents a strong opportunity despite cost pressure from healthcare reform. New product development in this market is vibrant as our customers continue to invest in the

future to position for growth. We estimate that the portable medical market represents a $1.0 billion market opportunity for Greatbatch Medical.

The following table summarizes information about our Greatbatch Medical products:

Product	Description	Principal Product Attributes
Batteries	Lithium iodine (“Li Iodine”) Lithium silver vanadium oxide (“Li SVO”) Lithium carbon monoflouride (“Li CFx”) Lithium ion rechargeable (“Li Ion”) Lithium SVO/CFx (“QHR” & “QMR”)	High reliability and predictability; Long service life; Customized configuration; Light weight; High energy density, small size
Capacitors	Storage for energy generated by a battery before delivery to the heart. Used in ICDs and CRT-Ds.	Stores more energy per unit volume (energy density) than other existing technologies; Customized configuration
EMI filters	Filters electromagnetic interference to limit undesirable response, malfunctioning or degradation in the performance of electronic equipment	High reliability attenuation of EMI RF over wide frequency ranges; Customized design
Feedthroughs	Allow electrical signals to be brought from inside hermetically sealed IMD to an electrode	Ceramic to metal seal is substantially more durable than traditional seals; Multifunctional
Coated electrodes	Deliver electric signal from the feedthrough to a body part undergoing stimulation	High quality coated surface; Flexible in utilizing any combination of biocompatible coating surfaces; Customized offering of surfaces and tips
Precision components	Machined Molded and over molded products	High level of manufacturing precision; Broad manufacturing flexibility
Enclosures and related components	Titanium Stainless steel	Precision manufacturing, flexibility in configurations and materials
Value-added assemblies	Combination of multiple components in a single package/unit	Leveraging products and capabilities to provide subassemblies and assemblies; Provides synergies in component technology and procurement systems
Stimulation leads	Cardiac, neuromodulation and hearing restoration stimulation leads	Custom and unique configurations that increase therapy effectiveness, provide finished device design and manufacturing
Introducers	Creates a conduit to insert infusion catheters, guidewires, implantable ports, pacemaker leads and other therapeutic devices into a blood vessel	Variety of sizes and materials that facilitate problem-free access in a variety of clinical applications
Catheters		

	Delivers therapeutic devices to specific sites in the body	Enable safe and effective delivery of therapeutic and diagnostic devices, providing the right balance of steerability, trackability and crossability to reach the intended location
Cases and trays	Delivery systems for cleaning and sterilizing orthopaedic instruments and implants	High degree of customization; Short, predictable development and production timelines

Product	Description	Principal Product Attributes
Implants	Orthopaedic implants for large joint, spine, extremity and trauma procedures	Precision manufacturing, leveraging capabilities and product processes including sterile packaging and coatings
Instruments	Reusable and single use orthopaedic instruments for large joint, spine, extremity and trauma procedures	Designed to improve surgical techniques, reduce surgery time, and increase surgical precision
Primary cells	Low-rate Moderate-rate High rate (spiral) Wide Range	Optimized rate capability, shock and vibration resistant, high and low temperature tolerant, high energy density; Ability to operate in low and high temp applications
Primary and secondary battery packs	Highly-customized pack solutions	Diverse portfolio of cells in various sizes, temperature ranges and rate capabilities, custom-engineered and designed, value-add charging and battery management systems for secondary packs

A majority of the components and devices Greatbatch Medical sells incorporate proprietary technologies. These proprietary technologies provide an entry barrier for new competitors, and further limit existing competitors from duplicating our products. In addition to these proprietary technologies, our proprietary “know-how” in the manufacture of these products provides further barriers to competition.

QiG GROUP

QiG focuses on developing medical device systems for some of healthcare’s most pressing challenges and reflects Greatbatch’s strategic evolution of its product offerings in order to raise the growth and profitability profile of the Company. QiG encompasses 120 research and development professionals across the U.S. working on a portfolio of new and innovative product opportunities. QiG has established relationships with highly specialized physicians across the U.S. and Europe that help support the design of medical device systems with unique benefits to improve clinical outcomes. QiG provides differentiated medical devices to OEM customers by accelerating the velocity of innovation while delivering optimized supply chain and cost efficiencies. We are utilizing our market research to drive our intellectual property portfolio with a goal of improved return on investment.

QiG utilizes a disciplined and diversified portfolio approach with three investment modes: new medical device systems commercialization, collaborative programs with OEM customers, and strategic equity positions in start-up companies. The development of certain new medical device systems are facilitated through the establishment of limited liability corporations (“LLC”). These LLCs do not own, but have the exclusive right to use the technology of Greatbatch Medical in certain, specifically designed fields of use and have an exclusive manufacturing agreement with Greatbatch Medical. QiG currently owns 89% - 100% of three LLCs. The minority interest of these LLCs was granted to key opinion leaders, clinicians and strategic partners at or near the time the LLC was established. Under the LLC agreement, QiG is liable for 100% of the expenses incurred by the LLC. However, no income is distributed to the minority holders of the LLC until QiG is reimbursed for all expenses paid. Once QiG has been fully reimbursed, all future net income is distributed based upon the respective LLCs ownership percentages. One of the LLCs established by QiG is for our spinal cord stimulator to treat chronic intractable pain of the trunk and/or limbs. This product was submitted for Food and Drug Administration (“FDA”) and CE Mark approval near the end of 2013. Another medical device system being developed by QiG is an implantable loop recorder for cardiac arrhythmia diagnostics. QiG is in the early stages of development of two additional medical device systems, which are targeting approved and emerging indications. Additionally, based upon the technology acquired from NeuroNexus, QiG is developing a platform of thin-film electrodes for neuromodulation leads, sub-systems and components.

Current QiG revenue includes sales of neural interface technology, components and systems to the neuroscience and clinical markets. Future income of QiG is expected to come from various sources including investment gains from the sales of LLC ownership interests, technology licensing fees, royalty revenue, and/or the sales of medical device systems to OEM customers.

RESEARCH AND DEVELOPMENT

Our position as a leading developer and manufacturer of medical devices and components is largely the result of our long history of technological innovation. We invest substantial resources in research, development and engineering. Our scientists, engineers and technicians focus on improving existing products, expanding the use of our products and developing new products. In addition to our internal technology and product development efforts, we also engage outside research institutions

for unique technology projects. In order to facilitate the development of new and improved medical devices, in 2008 we significantly increased our investments in research and development. Net investments in medical device systems (including gross profit and SG&A), which are being facilitated through QiG, totaled $30.5 million, $32.6 million and $27.3 million for 2013, 2012 and 2011, respectively. Further information regarding our research and development activities can be found in the “Product Development” section of Item 7 of this report.

PATENTS AND PROPRIETARY TECHNOLOGY

We rely on a combination of patents, licenses, trade secrets and know-how to establish and protect our proprietary rights to our technologies and products. Often, several patents covering various aspects of the design protect a single product. We believe this provides broad protection of the inventions employed.

As of January 3, 2014, we have 625 active U.S. patents and 344 active foreign patents. We also have 279 U.S. and 241 foreign pending patent applications at various stages of approval. During the past three years, we have been granted 189 new U.S. patents, 55 of which were granted in 2013. As a result of QiG’s development of complete medical device systems, the amount of intellectual property being generated by the Company has accelerated. Of the 1,489 patents and patents pending, approximately 537 of these relate to our medical device systems.

We are also a party to several license agreements with third parties under which we have obtained, on varying terms, exclusive or non-exclusive rights to patents held by them. An example of these agreements is the license of basic technology used in our wet tantalum capacitors, filtered feedthroughs, biomimetic coatings, safety needles and MRI compatible lead systems. We have also granted rights to our patents to others under license agreements.

It is our policy to require our management and technical employees, consultants and other parties having access to our confidential information to execute confidentiality agreements. These agreements prohibit disclosure of confidential information to third parties except in specified circumstances. In the case of employees and consultants, the agreements generally provide that all confidential information relating to our business is the exclusive property of Greatbatch.

MANUFACTURING AND QUALITY CONTROL

We leverage our strength as an innovative designer and manufacturer of finished devices and components to the medical device industry. Our manufacturing and engineering services include: design, testing, component production, and device assembly. We have integrated our proprietary technologies in our own products and those of our customers throughout the medical device industry. Our flexible, high productivity manufacturing capabilities span sites in Tijuana, Mexico, Beaverton, OR, Plymouth, MN, Minneapolis, MN, Ft. Wayne, IN, Indianapolis, IN, Alden, NY, Clarence, NY, Raynham, MA, and Chaumont, France.

Due to the highly regulated nature of the products we produce, we have implemented strong quality systems which are harmonized across our enterprise. The quality systems at our sites are compliant with and certified to various recognized international standards, requirements, and directives. Each site quality system is certified under an applicable International Organization for Standardization (“ISO”) quality system standard, such as ISO 13485 or ISO 9001. This certification requires, among other things, an implemented quality system that applies (where applicable) to the design and manufacture of components, assemblies and finished medical devices, including component quality and supplier control. Maintenance of these certifications for each facility requires periodic re-examination from an independent notified body.

Along with ISO 13485, the facilities producing finished medical devices are subject to extensive and rigorous regulation by numerous government bodies, including the FDA and comparable international regulatory agencies in order to ship product worldwide. For these facilities, we maintain FDA registration and compliance to all applicable domestic and international regulations. Compliance with applicable regulatory requirements is subject to continual review and is monitored through periodic inspections by FDA and other international regulatory bodies.

SALES AND MARKETING

We sell our products directly to our customers. In 2013, approximately 49% of our products were sold in the U.S. Sales outside the U.S. are primarily to customers whose corporate offices are located and headquartered in the U.S. Information regarding our sales by geographic area is set forth at Note 19 “Business Segment, Geographic and Concentration Risk Information” of the Notes to Consolidated Financial Statements contained in Item 8 of this report.

Although the majority of our customers contract with us to develop custom components and assemblies to fit their product specifications, we also provide system and device solutions ready for market distribution by OEMs. As a result, we have established close working relationships between our internal program managers and our customers. We market our products and technologies at industry meetings and trade shows domestically and internationally. Internal account executives support all activity and involve engineers and technology professionals in the sales process to address customer requests appropriately. For system and device solutions, we partner with our customers' research, marketing, and clinical groups to jointly develop technology platforms in alignment with their product roadmaps and therapy needs.

We leverage our account executives with support from engineering to design and sell product solutions into our targeted markets. Our account executives are trained to assist our customers in selecting appropriate chemistries and configurations. We market our products and services through well-defined selling strategies and marketing campaigns that are customized for each of the industries we target.

Over the last several years we have significantly enhanced our sales and marketing capabilities. This has included moving account executives closer to our major customers, upgrading our sales force with new sales talent, enhancing our sales commission programs, and intensifying our market research. Additionally, we have placed additional emphasis on reaching long-term agreements with our OEM customers in order to secure our revenue base. At times, we have provided our customers with price concessions in exchange for entering into long-term agreements and certain volume commitments. We estimate that approximately 70 percent of our revenue is generated from long-term (three- to seven-year) agreements.

Firm backlog orders at January 3, 2014 and December 28, 2012 were approximately $170 million and $160 million, respectively. The majority of the orders outstanding at January 3, 2014 are expected to be shipped within one year.

CUSTOMERS

Our Greatbatch Medical customers include large multi-national OEMs and their affiliated subsidiaries such as, in alphabetical order here and throughout this report, Biotronik, Boston Scientific, Halliburton Company, Johnson & Johnson, Medtronic, Philips Healthcare, Smith & Nephew, Sorin Group, St. Jude Medical, Stryker, and Zimmer. During 2013, 2012, and 2011, Johnson & Johnson, Medtronic and St. Jude Medical collectively accounted for 49%, 46% and 51% of our total sales, respectively. We have been successful in leveraging our diversified product line to further penetrate these customers and selling into more of their operating divisions, which cover the cardiac, neuromodulation, vascular and orthopaedic markets. QiG customers include numerous scientists, hospitals and universities throughout the world who perform research for the neuroscience and clinical markets.

The nature and extent of our selling relationship with each OEM customer is different in terms of breadth of products purchased, selling prices, product volumes, ordering patterns and inventory management. For customers with long-term contracts, we have negotiated fixed pricing arrangements for pre-determined volume levels with pricing fixed at each level. In general, the higher the volume level, the lower the pricing. We have pricing arrangements with our customers that at times do not specify minimum order quantities. We recognize revenue when it is realized or realizable and earned. This occurs when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable, the buyer is obligated to pay us (i.e. payment is not contingent on a future event), the risk of loss is transferred, there is no obligation of future performance, collectability is reasonably assured and the amount of future returns can reasonably be estimated. Those criteria are met at the time of shipment when title passes.

Our visibility to customer ordering patterns is over a relatively short period of time. Our customers may have inventory management programs, vertical integration plans and/or alternate supply arrangements which we are unaware of. Additionally, the relative market share among the OEM manufacturers changes periodically. Consequently, these and other factors can significantly impact our sales in any given period. Our customers may initiate field actions with respect to market-released products. These actions may include product recalls or communications with a significant number of physicians about a product or labeling issue. The scope of such actions can range from very minor issues affecting a small number of units to more significant actions. There are a number of factors, both short-term and long-term, related to these field actions that may impact our results. In the short-term, if a product has to be replaced, or customer inventory levels have to be restored, demand will increase. Also, changing customer order patterns due to market share shifts or accelerated device replacements may also have a positive or negative impact on our sales results in the near-term. These same factors may have longer-term implications as well. Customer inventory levels may ultimately have to be rebalanced to match new demand.

SUPPLIERS AND RAW MATERIALS

We purchase certain critical raw materials from a limited number of suppliers due to the technically challenging requirements of the supplied product and/or the lengthy process required to qualify these materials both internally and with our customers. We cannot quickly establish additional or replacement suppliers for these materials because of these rigid requirements. For these critical raw materials, we maintain minimum safety stock levels and contractually

partner with suppliers to help ensure the continuity of supply. Historically, we have not experienced any significant interruptions or delays in obtaining critical raw materials.

For non-critical raw material purchases, we utilize competitive pricing methods such as bulk purchases, precious metal pool buys, blanket orders, and long-term contracts to secure supply. We believe that there are alternative suppliers or substitute products available at competitive prices for all of these non-critical raw materials.

As discussed more fully in Item 1A “Risk Factors,” our business depends on a continuous supply of raw materials from a limited number of suppliers. If an unforeseen interruption of supply were to occur, we may be unable to obtain substitute

sources for these raw materials on a timely basis or on terms acceptable to us, which could harm our ability to manufacture our products profitably or on time. Additionally, we may be unable to quickly establish additional or replacement suppliers for these materials as there are a limited number of worldwide suppliers.

COMPETITION

Our existing and potential competitors include leading IMD manufacturers such as Biotronik, Boston Scientific, Johnson & Johnson, Medtronic, Smith & Nephew, Sorin Group, St. Jude Medical, Stryker and Zimmer that currently have vertically integrated operations and may expand their vertical integration capability in the future. Competitors also include independent suppliers who typically specialize in one type of component. Our known non-vertically integrated competitors include the following:

Product Line	Competitors
Medical batteries	Eagle-Picher Quallion
Capacitors	Critical Medical Components
Feedthroughs	Alberox (subsidiary of The Morgan Crucible Co. PLC)
EMI filtering	AVX (subsidiary of Kyocera) Eurofarad
Enclosures	Heraeus Hudson National
Machined and molded components	Numerous
Value added assembly	Numerous
Catheters	Creganna Teleflex Vention medical
Introducers	Pressure Products Theragenics (Galt) Merit Medical
Stimulation leads	Oscor
Orthopaedic trays, instruments and implants	Accelent Avalign Technologies IMDS Micropulse, Inc. Juno Orchid Sandvik Symmetry Paragon Tecomet

Primary Power Solutions	Tracer Technologies Engineered Power Saft Ultralife
Secondary Power Solutions	Totex Palladium ICC/Nexergy BMZ Ultralife Saft

GOVERNMENT REGULATION

As described below, our business is subject to direct governmental regulation including the laws and regulations generally applicable to all businesses in the jurisdictions in which we operate. We are subject to federal, state and local environmental laws and regulations governing the emission, discharge, use, storage and disposal of hazardous materials and the remediation of contamination associated with the release of these materials at our facilities and at off-site disposal locations. Our manufacturing and research, development and engineering activities may involve the controlled use of small amounts of hazardous materials. Liabilities associated with hazardous material releases arise principally under the Federal Comprehensive Environmental Response, Compensation and Liability Act and analogous state laws that impose strict, joint and several liabilities on owners and operators of contaminated facilities and parties that arrange for the off-site disposal of hazardous materials. We are not aware of any material noncompliance with the environmental laws currently applicable to our business and we are not subject to any material claim for liability with respect to contamination at any of our facilities or any off-site location. We may, however, become subject to these environmental liabilities in the future as a result of our historic or current operations.

Our products are subject to regulation by numerous government agencies, including the FDA and comparable foreign agencies. For some of our component technology, we have “master files” on record with the FDA. Master files may be used to provide proprietary and confidential detailed information about technology, facilities, processes, or articles used in the manufacturing, processing, packaging and storing of one or more medical device components. These master files may be used by device manufacturers to support their premarket approval application (“PMA”), investigational device exemption application (“IDE”) or premarket notification (“510(k)”).

In the U.S., our introducer and delivery catheter products are considered Class II devices. The 510(k) process requires us to demonstrate that our new medical devices are substantially equivalent to a legally marketed medical device. In order to support a substantial equivalence claim, we must submit supporting data. In Europe, these devices are considered Class IIa and Class III, respectively, under European Medical Device Directives. These Directives require companies that wish to manufacture and distribute medical devices in European Union member countries to obtain a CE Marking for those products, which indicate that the products meet minimum standards of performance, essential requirements, safety conformity assessment and quality.

The PMA process is a more rigorous process that is required to demonstrate that a new medical device is safe and effective. This is demonstrated by generating data regarding the design, manufacturing processes, materials, bench testing, and animal testing and typically requiring human clinical data. Some of our products that we are developing are Class III medical devices that require a PMA or, in the European Union, premarket approval through submission of a Design Dossier.

As a manufacturer of medical devices and components that go into medical devices, we are also subject to periodic inspection by the FDA for compliance with the FDA’s Quality System Requirements and the applicable notified body in the European Union to ensure conformity to the Medical Device Directives and Active Implantable Medical Device Directives. We believe that our quality controls, development, testing, manufacturing, labeling, marketing and distribution of our medical devices conform to the requirements of all pertinent regulations.

Our sales and marketing practices are subject to regulation by the U.S. Department of Health and Human Services pursuant to federal anti-kickback laws, and are also subject to similar state laws.

We are also subject to various other environmental, transportation and labor laws as well as various other directives and regulations both in the U.S. and abroad. We believe that compliance with these laws will not have a material impact on our capital expenditures, earnings or competitive position. Given the scope and nature of these laws, however, they may have a material impact on our operational results in the future.

The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act (collectively “Health Care Reform”) legislated broad-based changes to the U.S. healthcare system that could significantly impact our business operations and financial results, including higher or lower revenue, as well as higher employee medical costs and taxes. Health Care Reform imposes significant new taxes on medical device OEMs, which will result in a significant increase in the tax burden on our industry and which could have a material negative

impact on our financial condition, results of operations and our cash flows. Other elements of Health Care Reform such as comparative effectiveness research, an independent payment advisory board, payment system reforms including shared savings pilots and other provisions could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, results of operations and financial condition. Many significant parts of Health Care Reform will be phased in over the next several years and require further guidance and clarification in the form of regulations. The new medical device tax, which was effective in 2013, increased our cost of sales by $0.5 million.

On August 22, 2012, the U.S. Securities and Exchange Commission ("SEC") issued a rule under Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act requiring companies to publicly disclose their use of conflict minerals that originated in the Democratic Republic of the Congo ("DRC") or an adjoining country. Under the rule, issuers are required

to conduct a reasonable due diligence process to ascertain the source of conflict minerals, defined as tantalum, tin, gold or tungsten, that are necessary to the functionality or production of their manufactured or contracted to be manufactured products. Companies are required to provide this disclosure on a new form to be filed with the SEC called Form SD. Companies are required to file Form SD by May 31, 2014 for the 2013 calendar period and annually by May 31 every year thereafter. We anticipate additional, new compliance costs to be incurred since we utilize all of the minerals specified in the rule. We are unable to quantify the cost of implementing this new regulation at this time.

RECRUITING AND TRAINING

We invest substantial resources in our recruiting efforts to focus on a quality workforce that will support our business objectives. Our goal is to provide our associates with growth opportunities by attempting to fill many of our open employment positions internally. We further meet our hiring needs through outside sources, as required. We have an active talent review process including a comprehensive development program in place for senior management in order to ensure we are able to implement our strategic plan.

We provide training for our associates designed to educate them on safety, quality, business strategy, and our culture. Our safety training programs educate associates on basic industrial safety practices while emphasizing the importance of knowing emergency response procedures. Our training programs focus on the methodologies and technical competencies required to support current and future business needs with a strong focus on quality and continuous improvement.

Supporting our commitment to learning, we offer our associates tuition reimbursement and encourage them to continue their education at accredited colleges and universities. We have established a number of programs designed to challenge and motivate our associates specifically encouraging continuous improvement, supervisory and leadership skills. We believe ongoing development is necessary to ensure our associates utilize best practices, and share a common understanding of work practices and performance expectations.

EMPLOYEES

The following table provides a breakdown of our employees:

Manufacturing – U.S.	1,746
General and administrative – U.S.	147
Sales and marketing – U.S.	72
Research, development and engineering – U.S.	253
Chaumont, France facility	247
Switzerland facility	5
Tijuana, Mexico facility	915
Total	3,385

We also employ a number of temporary employees to assist us with various projects and service functions and address peaks in staff requirements. Our employees at our Chaumont, France and Tijuana, Mexico facilities are represented by a union. Nearly all of the positions at our Chaumont, France and Tijuana, Mexico facilities are manufacturing related. We believe that we have a good relationship with our employees.

EXECUTIVE OFFICERS OF THE COMPANY

Information concerning our executive officers is presented below as of March 4, 2014. The officers' terms of office run from year to year until the first meeting of the Board of Directors occurring immediately following our Annual Meeting of Stockholders, and until their successors are elected and qualified, except in the case of earlier death, retirement, resignation or removal.

Mauricio Arellano, age 47, is Executive Vice President for Global Operations and has served in that office since June 2013. From December 2010 to June 2013, he was President of Greatbatch Medical. Mr. Arellano served as Senior Vice President and Business Leader of our Cardiac and Neurology Group from October 2008 until December 2010, Senior Vice President and Business Leader of our CRM and Neuromodulation Group from January 2008 to October 2008, Senior Vice President and Business Leader of our Medical Solutions Group from November 2006 to January 2008, and as Vice President of Greatbatch Mexico from January 2005 to November 2006. Mr. Arellano joined our Company in October 2003 as the Plant Manager of our former Carson City, NV facility. Prior to joining our

Company, he served in a variety of human resources and operational roles with Tyco Healthcare - Especialidades Medicas Kenmex and with Sony de Tijuana Este.

George M. Cintra, age 52, is Senior Vice President & Chief Technology Officer, and has served in that role since June 2013. Mr. Cintra had previously served as Vice President of Research, Development & Engineering of our Electrochem Solutions business since joining Greatbatch in August 2010. Prior to joining Greatbatch, he was Section Head & Technical Manager, Research & Development with Procter & Gamble from January 2007 to July 2010. Mr. Cintra previously held positions with Gillette Co, Duracell, W.R. Grace and Alcoa.

Michael Dinkins, age 59, is Executive Vice President & Chief Financial Officer, and has served in that office since joining our Company in May 2012. From 2008 until May 2012, he was Executive Vice President and Chief Financial Officer of USI Insurance Services, an insurance intermediary company. From 2005 until 2008, he was Executive Vice President and Chief Financial Officer of Hilb Rogal & Hobbs Co., an insurance and risk management services company. Prior to that, Mr. Dinkins held senior positions at Guidant Corporation, Access Worldwide Communications, Cadmus Communications Group and General Electric Company.

Michelle Graham, age 47, is Senior Vice President for Human Resources, and has served in that office since joining our Company in December 2010. From 2005 until December 2010, she held a number of senior human resources positions at Bausch & Lomb, most recently as Vice President of Human Resources for its Global Vision Care division.

Andrew P. Holman, age 46, is Executive Vice President, Global Sales & Marketing, and has served in that role since June 2013. He joined Greatbatch in April 2012 as Vice President of Sales and Marketing for Greatbatch Medical. From September 2009 to October 2011, Mr. Holman served as Executive Vice President, Sales & Marketing for DJO Global, Inc., and from October 2005 to June 2009, he served as President of the Americas for the Orthopaedics business unit of Smith & Nephew, Inc. Mr. Holman previously held various sales and marketing leadership positions at Johnson & Johnson, Inc., Boston Scientific Corporation and Xerox Corporation.

Thomas J. Hook, age 51, has served as our President & Chief Executive Officer since August 2006. Prior to August 2006, he was our Chief Operating Officer, a position he assumed upon joining our Company in September 2004. From August 2002 until September 2004, Mr. Hook was employed by CTI Molecular Imaging where he had served as President, CTI Solutions Group.

Timothy G. McEvoy, age 56, is Senior Vice President, General Counsel & Secretary, and has served in that office since joining our Company in February 2007. From 1992 until January 2007, he was employed in a variety of legal roles by Manufacturers and Traders Trust Company.

AVAILABLE INFORMATION

We make available free of charge through our Internet website our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file those reports with, or furnish them to, the SEC. Our Internet address is www.greatbatch.com. The information contained on our website is not incorporated by reference in this annual report on Form 10-K and should not be considered a part of this report. These items may also be obtained free of charge by written request made to Christopher J. Thome, Assistant Corporate Controller – Reporting and Shared Services, Greatbatch, Inc., 10000 Wehrle Drive, Clarence, New York 14031.

CAUTIONARY FACTORS THAT MAY AFFECT FUTURE RESULTS

Some of the statements contained in this annual report on Form 10-K and other written and oral statements made from time to time by us and our representatives are not statements of historical or current fact. As such, they are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We have based these forward-looking statements on our current expectations, and these statements are subject to known and unknown risks, uncertainties and assumptions. Forward-looking statements include statements relating to:

- future sales, expenses and profitability;
- future development and expected growth of our business and industry;
- our ability to execute our business model and our business strategy;
-

our ability to identify trends within our industries and to offer products and services that meet the changing needs of those markets; and

- projected capital expenditures.

You can identify forward-looking statements by terminology such as “may,” “will,” “should,” “could,” “expects,” “intends,” “p “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or “variations” or the negative of these terms or oth comparable terminology. These statements are only predictions. Actual events or results may differ materially from those stated or implied by these forward-looking statements. In evaluating these statements and our prospects, you should carefully consider the factors set forth below. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary factors and to others contained throughout this report. We are under

no duty to update any of the forward-looking statements after the date of this report or to conform these statements to actual results.

Although it is not possible to create a comprehensive list of all factors that may cause actual results to differ from the results expressed or implied by our forward-looking statements or that may affect our future results, some of these factors include the following: our dependence upon a limited number of customers; customer ordering patterns; product obsolescence; our inability to market current or future products; pricing pressure from our customers; our ability to timely and successfully implement cost reduction and plant consolidation initiatives; our reliance on third party suppliers for raw materials, products and subcomponents; fluctuating operating results; our inability to maintain high quality standards for our products; challenges to our intellectual property rights; product liability claims; our inability to successfully consummate and integrate acquisitions and to realize synergies and to operate these acquired businesses in accordance with expectations; our unsuccessful expansion into new markets; our failure to develop new products including medical device systems; our inability to obtain licenses to key technology; regulatory changes or consolidation in the healthcare industry; global economic factors including currency exchange rates and interest rates; the resolution of various legal actions brought against the Company; and other risks and uncertainties that arise from time to time and are described in Item 1A “Risk Factors” of this report.

ITEM 1A. RISK FACTORS.

Our business faces many risks. Any of the risks discussed below, or elsewhere in this report or in our other SEC filings, could have a material impact on our business, financial condition or results of operations.

Risks Related To Our Business

We depend heavily on a limited number of customers, and if we lose any of them or they reduce their business with us, we would lose a substantial portion of our revenues.

In 2013, Johnson & Johnson, Medtronic and St. Jude Medical, collectively accounted for approximately 49% of our revenues. Our supply agreements with these customers may not be renewed. Furthermore, many of our supply agreements do not contain minimum purchase level requirements and therefore there is no guaranteed source of revenue that we can depend upon under these agreements. The loss of any large customer or a reduction of business with that customer for any reason would harm our business, financial condition and results of operations.

If we do not respond to changes in technology, our products may become obsolete and we may experience a loss of customers and lower revenues.

We sell our products to customers in several industries that experience rapid technological changes, new product introductions and evolving industry standards. Without the timely introduction of new products and enhancements, our products and services will likely become technologically obsolete over time and we may lose a significant number of our customers. In addition, other new products introduced by our customers may require fewer of our components. We dedicate a significant amount of resources to the development of our products and technologies and we would be harmed if we did not meet customer requirements and expectations. Our inability, for technological or other reasons, to successfully develop and introduce new and innovative products could result in a loss of customers and lower revenues.

If we are unable to successfully market our current or future products, our business will be harmed and our revenues and operating results will be adversely affected.

The markets for our products have been growing in recent years. If the markets for our products do not grow as forecasted by industry experts, our revenues could be less than expected. In addition, it is difficult to predict the rate at which the markets for our products will grow or at which new and increased competition will result in market saturation. Slower growth in the cardiac and neuromodulation, orthopaedic, portable medical, vascular or energy markets in particular would negatively impact our revenues. In addition, we face the risk that our products will lose widespread market acceptance. Our customers may not continue to utilize the products we offer and a market may not develop for our future products.

We may at times determine that it is not technically or economically feasible for us to continue to manufacture certain products and we may not be successful in developing or marketing them. Additionally, new technologies that we

develop may not be rapidly accepted because of industry-specific factors, including the need for regulatory clearance, entrenched patterns of clinical practice and uncertainty over third party reimbursement. If this occurs, our business will be harmed and our operating results will be negatively affected.

We are subject to pricing pressures from customers, which could harm our operating results.

We have made price concessions to some of our larger customers in recent years and we expect customer pressure for price concessions will continue. Price concessions or reductions may cause our operating results to suffer. In addition, any delay or failure by a large customer to make payments due to us would harm our operating results and financial condition.

We rely on third party suppliers for raw materials, key products and subcomponents and if we are unable to obtain these materials, products and subcomponents on a timely basis or on terms acceptable to us, our ability to manufacture products will suffer.

Our business depends on a continuous supply of raw materials. The principal raw materials used in our business include lithium, iodine, gold, palladium, stainless steel, aluminum, cobalt chrome, tantalum, platinum, ruthenium, gallium trichloride, tantalum pellets, vanadium pentoxide, iridium, and titanium. The supply and price of these raw materials are susceptible to fluctuations due to transportation, government regulations, price controls, foreign civil unrest, economic climate or other unforeseen circumstances. Increasing global demand for these raw materials has caused prices of these materials to increase significantly. In addition, there are a limited number of worldwide suppliers of several raw materials needed to manufacture our products. We may not be able to continue to procure raw materials critical to our business or to procure them at acceptable price levels.

In addition, we rely on third party manufacturers to supply many of our products and subcomponents. Manufacturing problems may occur with these and other outside sources, as a supplier may fail to develop and supply products and subcomponents to us on a timely basis, or may supply us with products and subcomponents that do not meet our quality, quantity and cost requirements. If any of these problems occur, we may be unable to obtain substitute sources for these products and subcomponents on a timely basis or on terms acceptable to us, which could harm our ability to manufacture our own products and components profitably or on time. In addition, to the extent the processes our suppliers use to manufacture products and subcomponents are proprietary, we may be unable to obtain comparable subcomponents from alternative suppliers.

We may never realize the full value of our intangible assets, which represent a significant portion of our total assets.

At January 3, 2014, we had $443.1 million of intangible assets, representing 50% of our total assets. These intangible assets consist primarily of goodwill, trademarks, tradenames, customer lists and patented technology arising from our acquisitions. Goodwill and other intangible assets with indefinite lives are not amortized, but are tested annually or upon the occurrence of certain events which indicate that the assets may be impaired. Definite lived intangible assets are amortized over their estimated useful lives and are tested for impairment upon the occurrence of certain events which indicate that the assets may be impaired. We may not receive the recorded value for our intangible assets if we sell or liquidate our business or assets. In addition, the significant amount of intangible assets increases the risk of a large charge to earnings in the event that the recoverability of these intangible assets is impaired. In the event of such a charge to earnings, the market price of our common stock could be affected. In addition, intangible assets with definite lives, which represent $76.1 million of our net intangible assets at January 3, 2014, will continue to be amortized. We incurred total amortization expenses relating to these intangible assets of $13.2 million in 2013. These expenses will reduce our future earnings or increase our future losses.

Quality problems with our products could harm our reputation and erode our competitive advantage.

Our products are held to high quality and performance standards. In the event our products fail to meet these standards, our reputation could be harmed, which could damage our competitive advantage, cause us to lose customers and result in lower revenues.

Quality problems with our products could result in warranty claims and additional costs.

We generally allow customers to return defective or damaged products for credit, replacement, or exchange. We generally warrant that our products will meet customer specifications and will be free from defects in materials and workmanship. Additionally, we carry a safety stock of inventory for our customers which may be impacted by warranty claims. We reserve for our exposure to warranty claims based upon recent historical experience and other specific information as it becomes available. However, these reserves may not be adequate to cover future warranty claims and additional warranty costs or inventory write-offs may be incurred which could harm our operating results.

Regulatory issues resulting from product complaints, or recalls, or regulatory audits could harm our ability to produce and supply products or bring new products to market.

Our products are designed, manufactured and distributed globally in compliance with all applicable regulations and standards. However, a product complaint, recall or negative regulatory audit may cause products to be removed from the market and harm

our operating results or financial condition. In addition, during the period in which corrective action is being taken by us to remedy a complaint, recall or negative audit, regulators may not allow new products to be cleared for marketing and sale.

If we become subject to product liability claims, our operating results and financial condition could suffer.

The manufacturing and sale of our products expose us to potential product liability claims and product recalls, including those that arise from failure to meet product specifications, misuse or malfunction, or design flaws, or use of our products with components or systems not manufactured or sold by us. Many of our products are components and function in interaction with our customers' medical devices. For example, our batteries are produced to meet electrical performance, longevity and other specifications, but the actual performance of those products is dependent on how they are utilized as part of the customers' devices over the lifetime of the products. Product performance and device interaction from time to time have been, and may in the future be different than expected for a number of reasons. Consequently, it is possible that customers may experience problems with their medical devices that could require device recall or other corrective action, where our batteries met the specification at delivery, and for reasons that are not related primarily or at all to any failure by our product to perform in accordance with specifications. It is possible that our customers (or end-users) may in the future assert that our products caused or contributed to device failure. Even if these assertions do not lead to product liability or contract claims, they could harm our reputation and our customer relationships.

Provisions contained in our agreements with key customers attempting to limit our damages, including provisions to limit damages to liability for negligence, may not be enforceable in all instances or may otherwise fail to protect us from liability for damages. Product liability claims or product recalls, regardless of their ultimate outcome, could require us to spend significant time and money in litigation and require us to pay significant damages. The occurrence of product liability claims or product recalls could affect our operating results and financial condition.

We carry product liability insurance with coverage that is limited in scope and amount. We may not be able to maintain this insurance at a reasonable cost or on reasonable terms, or at all. This insurance may not be adequate to protect us against a product liability claim that arises in the future.

Our operating results may fluctuate, which may make it difficult to forecast our future performance and may result in volatility in our stock price.

Our operating results have fluctuated in the past and are likely to fluctuate significantly from quarter to quarter due to a variety of factors, including the following:

- a substantial percentage of our costs are fixed in nature, which results in our operations being particularly sensitive to fluctuations in production volumes;
- changes in the mix of our revenue represented by our various products and customers could result in reductions in our profits if the mix of our revenue represented by lower margin products increases;
- timing of orders placed by our principal customers who account for a significant portion of our revenues; and
- increased costs of raw materials or supplies.

If we are unable to protect our intellectual property and proprietary rights, our business could be affected.

We rely on a combination of patents, licenses, trade secrets and know-how to establish and protect our rights to our technologies and products. As of January 3, 2014, we held 625 active U.S. patents and 344 active foreign patents. However, the steps we have taken and will take in the future to protect our rights may not be adequate to deter misappropriation of our intellectual property. In addition to seeking formal patent protection whenever possible, we attempt to protect our proprietary rights and trade secrets by entering into confidentiality and non-compete agreements with employees, consultants and third parties with which we do business. However, these agreements may be breached and if breached, there may be no adequate remedy available to us and we may be unable to prevent the unauthorized disclosure or use of our technical knowledge, practices and/or procedures. If our trade secrets become known, we may lose our competitive advantages. Additionally, as patents and other intellectual property protection expire we may lose our competitive advantage.

If third parties infringe or misappropriate our patents or other proprietary rights, our business could be seriously harmed. We may be required to spend significant resources to monitor our intellectual property rights, or we may not

be able to detect infringement of these rights and may lose our competitive advantages associated with our intellectual property rights before we do so. In addition, competitors may design around our technology or develop competing technologies that do not infringe on our proprietary rights.

We may be subject to intellectual property claims, which could be costly and time consuming and could divert our management from our business operations.

In producing our products, third parties may claim that we are infringing on their intellectual property rights, and we may be found to have infringed those intellectual property rights. We may be unaware of intellectual property rights of others that may be used in our technology and products. In addition, third parties may claim that our patents have been improperly granted and may seek to invalidate our existing or future patents. If any claim for invalidation prevailed, third parties may manufacture and sell products that compete with our products and our revenues from any related license agreements would decrease accordingly. We also typically do not receive significant indemnification from parties that license technology to us against third party claims of intellectual property infringement.

Any litigation or other challenges regarding our patents or other intellectual property could be costly and time consuming and could divert our management and key personnel from our business operations. The complexity of the technology involved in producing our products, and the uncertainty of intellectual property litigation increases these risks. Claims of intellectual property infringement may also require us to enter into costly royalty or license agreements. However, we may not be able to obtain royalty or license agreements on terms acceptable to us, or at all. We also may be made subject to significant damages or injunctions against development and sale of our products.

We may not be able to attract, train and retain a sufficient number of qualified employees to maintain and grow our business.

Our success will depend in large part upon our ability to attract, train, retain and motivate highly skilled employees. There is currently aggressive competition for employees who have experience in technology and engineering. We compete intensely with other companies to recruit and hire from this limited pool. The industries in which we compete for employees are characterized by high levels of employee attrition. Although we believe we offer competitive salaries and benefits, we may have to increase spending in order to attract, train and retain personnel.

We are dependent upon our senior management team and key personnel and the loss of any of them could significantly harm us.

Our future performance depends to a significant degree upon the continued contributions of our senior management team and key technical personnel. Our products are highly technical in nature. In general, only highly qualified and trained scientists have the necessary skills to develop our products. The loss or unavailability to us of any member of our senior management team or a key technical employee could significantly harm us. We face intense competition for these professionals from our competitors, customers and companies operating in our industry. To the extent that the services of members of our senior management team and key technical personnel would be unavailable to us for any reason, we would be required to hire other personnel to manage and operate our Company and to develop our products and technology. We may not be able to locate or employ such qualified personnel on acceptable terms.

We may not realize the expected benefits from our cost savings and consolidation initiatives or those initiatives may have unintended consequences, which may harm our business or results of operations.

We have incurred significant charges related to various cost savings and consolidation efforts. These initiatives were undertaken to improve our operational effectiveness, efficiencies and profitability. Additional information regarding these initiatives is discussed in the “Cost Savings and Consolidation Efforts” section of Item 7 to this report. Cost reduction efforts under these initiatives include various cost and efficiency improvement measures such as, headcount reductions, the relocation of certain resources as well as administrative and functional activities, the closure of certain facilities, the transfer of certain production lines, the sale of certain non-strategic assets and other efforts to streamline our business, among other actions. These measures could yield unintended consequences, such as distraction of our management and employees, business disruption, disputes with customers, attrition beyond our planned reduction in workforce and reduced employee productivity. If any of these unintended consequences were to occur, they could negatively affect our business, sales, financial condition and results of operations. In addition, headcount reductions and customer disputes may subject us to the risk of litigation, which could result in substantial cost. Moreover, our expense reduction programs result in charges and expenses that impact our operating results. We cannot guarantee that these measures, or other expense reduction measures we take in the future, will result in the expected cost savings.

We may make acquisitions that could subject us to a number of operational risks and we may not be successful in integrating companies we acquire into our existing operations.

We have made and expect to make in the future acquisitions that complement our core competencies in technology and manufacturing to enable us to manufacture and sell additional products to our existing customers and to expand our business into related markets. Implementation of our acquisition strategy entails a number of risks, including:

- inaccurate assessments of potential liabilities associated with the acquired businesses;
- the existence of unknown or undisclosed liabilities associated with the acquired businesses;
- diversion of our management's attention from our core businesses;
- potential loss of key employees or customers of the acquired businesses;
- difficulties in integrating the operations and products of an acquired business or in realizing projected revenue growth, efficiencies and cost savings; and
- increases in indebtedness and limitation in our ability to access capital if needed.

Our acquisitions have increased the size and scope of our operations, and may place a strain on our managerial, operational and financial resources and systems. Any failure by us to manage this growth and successfully integrate these acquisitions could harm our business and our financial condition and results.

If we are not successful in making acquisitions to expand and develop our business, our operating results may suffer.

One facet of our growth strategy is to make acquisitions that complement our core competencies in technology and manufacturing to enable us to manufacture and sell additional products to our existing customers and to expand our business into related markets. Our continued growth may depend on our ability to identify and acquire companies that complement or enhance our business on acceptable terms. We may not be able to identify or complete future acquisitions. Some of the risks that we may encounter include expenses associated with and difficulties in identifying potential targets, the costs associated with unsuccessful acquisitions, and higher prices for acquired companies because of competition for attractive acquisition targets.

Accidents at any of our facilities could delay production and affect our operations.

Our business involves complex manufacturing processes and hazardous materials that can be dangerous to our employees. Although we employ safety procedures in the design and operation of our facilities, there is a risk that an accident or death could occur. Any accident, such as a chemical spill or fire, could result in significant manufacturing delays or claims for damages resulting from injuries, which would harm our operations and financial condition. The potential liability resulting from any such accident or death, to the extent not covered by insurance, could harm our financial condition or operating results. Any disruption of operations at any of our facilities, and in particular our larger facilities, could harm our business.

We may face competition that could harm our business and we may be unable to compete successfully against new entrants and established companies with greater resources.

Competition in connection with the manufacturing of our medical products may intensify in the future. One or more of our medical customers may undertake additional vertical integration initiatives and begin to manufacture some or all of their components that we currently supply them which could cause our operating results to suffer. The market for commercial power sources is competitive, fragmented and subject to rapid technological change. Many other commercial power source suppliers are larger and have greater financial, operational, personnel, sales, technical and marketing resources than us. These and other companies may develop products that are superior to ours, which could result in lower revenues and operating results.

We intend to develop new products and expand into new markets, which may not be successful and could harm our operating results.

We intend to expand into new markets and develop new and modified products based on our existing technologies and engineering capabilities, including the development of complete medical device systems. These efforts have required and will continue to require us to make substantial investments, including significant research, development and engineering expenditures and capital expenditures for new, expanded or improved manufacturing facilities. Additionally, many of the new products we are working on take longer and more resources to develop and commercialize, including obtaining regulatory approval.

Specific risks in connection with expanding into new products and markets include: longer product development cycles, the inability to transfer our quality standards and technology into new products, the failure to receive or delay in receipt of regulatory approval for new products or modifications to existing products, and the failure of our customers to accept the new or modified products.

Our failure to obtain licenses from third parties for new technologies or the loss of these licenses could impair our ability to design and manufacture new products and reduce our revenues.

We occasionally license technologies from third parties rather than depending exclusively on our own proprietary technology and developments. Our ability to license new technologies from third parties is and will continue to be critical to our ability to offer new and improved products. We may not be able to continue to identify new technologies developed by others and even if we are able to identify new technologies, we may not be able to negotiate licenses on favorable terms, or at all. Additionally, we could lose rights granted under licenses for reasons beyond our control.

Our international sales and operations are subject to a variety of market and financial risks and costs that could affect our profitability and operating results.

Our sales outside the U.S., which accounted for 51% of sales for 2013, and our operations in Mexico, Switzerland and France, are and will continue to be subject to a number of risks and potential costs, including:

- changes in foreign economic conditions and/or regulatory requirements;
- local product preferences and product requirements;
- longer-term receivables than are typical in the U.S.;
- difficulties in enforcing agreements through foreign legal systems;
- less protection of intellectual property in some countries outside of the U.S.;
- trade protection measures and import and export licensing requirements;
- work force instability;
- political and economic instability; and
- complex tax and cash management issues.

We earn revenue and incur expenses related to our foreign sales and operations that are denominated in a foreign currency. Historically, foreign currency fluctuations have not had a material effect on our consolidated financial statements. However, fluctuations in foreign currency exchange rates could have a significant negative impact on our profitability and operating results.

The current economic environment and credit market uncertainty could interrupt our access to capital markets, borrowings, or financial transactions to hedge certain risks, which could adversely affect our financial condition.

To date, we have been able to access debt and equity financing that has allowed us to make investments in growth opportunities and fund working capital requirements. In addition, we enter into financial transactions to hedge certain risks, including foreign exchange and interest rate risk. Our continued access to capital markets, the stability of our lenders and their willingness to support our needs, and the stability of the parties to our financial transactions that hedge risks are essential for us to meet our current and long-term obligations, fund operations, and fund our strategic initiatives. An interruption in our access to external financing or financial transactions to hedge risk could affect our business prospects and financial condition.

The failure of our information technology systems to perform as anticipated could disrupt our business and affect our financial condition.

The efficient operation of our business is dependent on our information technology (“IT”) systems. Accordingly, we rely upon the capacity, reliability and security of our IT hardware and software infrastructure and our ability to expand and update this infrastructure in response to our changing needs. Despite our implementation of security measures, our systems are vulnerable to damages from computer viruses, natural disasters, incursions by intruders or hackers, failures in hardware or software, power fluctuations, cyber terrorists and other similar disruptions. The failure of our IT systems to perform as anticipated for any reason or any significant breach of security could disrupt our business and result in numerous consequences, including reduced effectiveness and efficiency of operations, inappropriate disclosure of confidential information, increased overhead costs and loss of important information, which could have a material effect on our business and results of operations. In addition, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

Risks Related To Our Industries

The healthcare industry is highly regulated and subject to various political, economic and regulatory changes that could increase our compliance costs and force us to modify how we develop and price our products.

The healthcare industry is highly regulated and is influenced by changing political, economic and regulatory factors. Several of our product lines are subject to international, federal, state and local health and safety, packaging and product content regulations. In addition, medical devices are subject to regulation by the FDA and similar governmental agencies. These regulations cover a wide variety of product activities from design and development to labeling, manufacturing, promotion, sales

and distribution. Compliance with these regulations may be time consuming, burdensome and expensive and could negatively affect our ability to sell products. This may result in higher than anticipated costs or lower than anticipated revenues.

Furthermore, healthcare industry regulations are complex, change frequently and have tended to become more stringent over time. Federal and state legislatures have periodically considered programs to reform or amend the U.S. healthcare system at both the federal and state levels. In addition, these regulations may contain proposals to increase governmental involvement in healthcare, lower reimbursement rates or otherwise change the environment in which healthcare industry participants operate. We may be required to incur significant expenses to comply with these regulations or remedy past violations of these regulations. Our failure to comply with applicable government regulations could also result in cessation of portions or all of our operations, impositions of fines and restrictions on our ability to carry on or expand our operations. In addition, because many of our products are sold into regulated industries, we must comply with additional regulations in marketing our products.

In response to perceived increases in healthcare costs in recent years, there have been and continue to be proposals by the Obama administration, members of Congress, state governments, regulators and third-party payors to control these costs and, more generally, to reform the U.S. healthcare system. Health Care Reform imposes significant new taxes on medical device manufacturers, which will result in a significant increase in the tax burden on our industry and which could have a material negative impact on our financial condition, results of operations and our cash flows. Other elements of Health Care Reform such as comparative effectiveness research, an independent payment advisory board, payment system reforms including shared savings pilots and other provisions could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, results of operations and financial condition. The new medical device tax, which was effective in 2013, increased our cost of sales by $0.5 million.

Many significant parts of Health Care Reform will be phased in over time and require further guidance and clarification in the form of regulations. As a result, many of the impacts of Health Care Reform will not be known until those regulations are enacted, which we expect to occur over the next several years.

Our business is subject to environmental regulations that could be costly to comply with.

Federal, state and local regulations impose various environmental controls on the manufacturing, transportation, storage, use and disposal of batteries and hazardous chemicals and other materials used in, and hazardous waste produced by the manufacturing of our products. Conditions relating to our historical operations may require expenditures for clean-up in the future and changes in environmental laws and regulations may impose costly compliance requirements on us or otherwise subject us to future liabilities. Additional or modified regulations relating to the manufacture, transportation, storage, use and disposal of materials used to manufacture our products or restricting disposal or transportation of batteries may be imposed that may result in higher costs or lower operating results. In addition, we cannot predict the effect that additional or modified environmental regulations may have on us or our customers.

Consolidation in the healthcare industry could result in greater competition and reduce our revenues and harm our business.

Many healthcare industry companies are consolidating to create new companies with greater market power. As the healthcare industry consolidates, competition to provide products and services to industry participants will become more intense. These industry participants may try to use their market power to negotiate price concessions or reductions for our products. If we are forced to reduce our prices, our revenues would decrease and our operating results would suffer.

Our business is indirectly subject to healthcare industry cost containment measures that could result in reduced sales of our products.

Several of our customers rely on third party payors, such as government programs and private health insurance plans, to reimburse some or all of the cost of the procedures in which our products are used. The continuing efforts of government, insurance companies and other payors of healthcare costs to contain or reduce those costs could lead to patients being unable to obtain approval for payment from these third party payors. If that occurred, sales of medical

devices may decline significantly and our customers may reduce or eliminate purchases of our products. The cost containment measures that healthcare payors are instituting, both in the U.S. and internationally, could reduce our revenues and harm our operating results.

Our energy market revenues are dependent on conditions in the oil and natural gas industry, which historically have been volatile.

Sales of our energy market products depend upon the condition of the oil and gas industry. In the past, oil and natural gas prices have been volatile and the oil and gas exploration and production industry has been cyclical, and it is likely that oil and natural gas prices will continue to fluctuate in the future. The current and anticipated prices of oil and natural gas influence the oil and

gas exploration and production business and are affected by a variety of political and economic factors, including worldwide demand for oil and natural gas, worldwide and domestic supplies of oil and natural gas, the ability of the Organization of Petroleum Exporting Countries ("OPEC") to set and maintain production levels and pricing, the level of production of non-OPEC countries, the price and availability of alternative fuels, political stability in oil producing regions and the policies of the various governments regarding exploration and development of their oil and natural gas reserves. A change in the oil and gas exploration and production industry or a reduction in the exploration and production expenditures of oil and gas companies could cause our energy market revenues to decline.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The following table sets forth information about our principal facilities as of January 3, 2014:

Location	Sq. Ft.	Own/Lease	Principal Use
Alden, NY	125,000	Own	Medical battery and capacitor manufacturing
Ann Arbor, MI	9,970	Lease	Office and lab space for design engineering team
Beaverton, OR	62,200	Lease	Commercial battery manufacturing
Blaine, MN	32,400	Own	Medical device engineering
Chaumont, France	59,200	Own	Manufacturing of orthopaedic implants
Clarence, NY	117,800	Own	Corporate offices and RD&E
Clarence, NY	20,800	Own	Machining and assembly of components
Clarence, NY	18,600	Lease	Machining and assembly of components
Cleveland, OH	16,900	Lease	Office and lab space for design engineering team
Fort Wayne, IN	81,000	Own	Manufacturing of orthopaedic instruments
Frisco, TX	9,200	Lease	Global headquarters – principal executive office
Indianapolis, IN	82,600	Own	Manufacturing of orthopaedic cases and trays
Minneapolis, MN	72,000	Own	Enclosure manufacturing and engineering
Orvin, Switzerland	40,400	Own	European corporate offices
Plymouth, MN	122,800	Lease	Introducers, catheters and leads manufacturing
Raynham, MA	81,000	Own	Commercial battery manufacturing and RD&E
Tijuana, Mexico	190,800	Lease	Feedthrough, catheters and orthopaedic instrument manufacturing and value-added assembly
Warsaw, IN	3,000	Lease	Orthopaedic rapid prototyping design center

In 2012, the Company completed construction of an orthopaedic manufacturing facility in Fort Wayne, IN and transferred manufacturing operations being performed at its Columbia City, IN location into this new facility. During 2012, the Company also transferred most major functions previously performed at its facilities in Orvin and Corgemont, Switzerland into its Fort Wayne, IN and Tijuana, Mexico facilities. Additionally, during 2012, the Company relocated its global headquarters to Frisco, TX. In the first quarter of 2013, the Company's Corgemont, Switzerland facility lease was assumed by a third party in connection with its purchase of certain non-core orthopaedic product lines. These initiatives were completed in 2013. During 2013, we began a project to expand its Chaumont, France facility in order to enhance our capabilities and fulfill larger volume customer supply agreements. This initiative is expected to be completed over the next three years.

Near the end of 2011, the Company initiated plans to upgrade and expand its manufacturing infrastructure in order to support its medical device strategy. This includes the transfer of certain product lines to create additional capacity for the manufacture of medical devices, expansion of its Plymouth, MN and Tijuana, Mexico facilities, as well as the purchase of equipment to enable the production of medical devices. These initiatives are expected to be completed over the next year. Total capital investment under these initiatives is expected to be between $15 million to $20 million of which approximately $12.4 million has been expended to date.

ITEM 3. LEGAL PROCEEDINGS

On December 21, 2012, the Company and several other unaffiliated parties were named as defendants in a personal injury and wrongful death action filed in the 113th Judicial District Court of Harris County, Texas. The complaint seeks damages alleging marketing and product defects and failure to warn, negligence and gross negligence relating to a product we manufactured and sold to a customer, one of the other named defendants. Our customer, in turn, incorporated our product into its own product which it sold to its customer, another named defendant. This matter is currently scheduled for trial in the second half of 2014. We are indemnified by our customer against any loss in this matter, including costs of defense, which obligation is supported by our customer's product liability insurance coverage. We also have our own product liability insurance coverage. The Company has meritorious defenses and is vigorously defending the matter.

We are party to various legal actions arising in the normal course of business. A description of pending legal actions against the Company is set forth at Note 15 “Commitments and Contingencies” of the Notes to Consolidated Financial Statements contained in Item 8 of this report. We do not believe that the ultimate resolution of any pending legal actions will have a material effect on our consolidated results of operations, financial position or cash flows. However, litigation is subject to inherent uncertainties and there can be no assurance that any pending legal action, which we currently believe to be immaterial, does not become material in the future.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

The Company’s common stock trades on the New York Stock Exchange (“NYSE”) under the symbol “GB.” The following table sets forth information on the prices of our common stock as reported by the NYSE:

	High	Low	Close
2012			
First Quarter	$27.22	$21.35	$24.52
Second Quarter	24.82	20.29	22.71
Third Quarter	25.64	22.05	24.33
Fourth Quarter	25.33	21.08	22.89
2013			
First Quarter	$30.64	$22.70	$29.87
Second Quarter	34.41	27.03	32.79
Third Quarter	38.36	32.70	33.69
Fourth Quarter	45.02	33.24	43.80

As of March 4, 2014, there were approximately 118 record holders of the Company’s common stock. The Company stock account included in our 401(k) plan is considered one record holder for the purposes of this calculation. There is approximately 2,219 active and former employees’ holding Company stock in the 401(k) plan. We have not paid cash dividends and currently intend to retain any earnings to further develop and grow our business.

PERFORMANCE GRAPH

The following graph compares, for the five year period ended January 3, 2014, the cumulative total stockholder return for Greatbatch, Inc., the S&P SmallCap 600 Index, and the Hemscott Peer Group Index. The Hemscott Peer Group Index includes approximately 115 comparable companies included in the Hemscott Industry Group 520 Medical Instruments & Supplies and 521 Medical Appliances & Equipment. The graph assumes that $100 was invested on January 2, 2009 and assumes reinvestment of dividends. The stock price performance shown on the following graph is not necessarily indicative of future price performance:

ITEM 6. SELECTED FINANCIAL DATA

The following table provides selected financial data for the periods indicated. You should read this data along with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and Item 8, “Financial Statements and Supplementary Data” appearing elsewhere in this report. The consolidated statement of operations data and the consolidated balance sheet data for the fiscal years indicated have been derived from our consolidated financial statements and related notes (in thousands, except per share amounts):

	Years Ended				
	Jan. 3 2014 [1]	Dec. 28 2012 [1][2]	Dec. 30, 2011 [1][2]	Dec. 31, 2010 [1][3]	Jan. 1, 2010 [1][3]
Statement of Operations Data:					
Sales	$663,945	$646,177	$568,822	$533,425	$521,821
Net income (loss)	36,267	(4,799)	33,122	33,138	(9,001)
Earnings (loss) per share					
Basic	$1.51	$(0.20)	$1.42	$1.44	$(0.39)
Diluted	1.43	(0.20)	1.40	1.40	(0.39)
Balance Sheet Data:					
Working capital	$190,731	$176,376	$170,907	$150,922	$119,926
Total assets	890,703	889,875	881,347	776,976	830,543
Long-term obligations	256,846	317,258	320,015	289,560	317,575

(1) From 2009 to 2013, we recorded material charges in Other Operating Expenses, Net, primarily related to our cost savings and consolidation initiatives. Additional information is set forth in Note 13 “Other Operating Expenses, Net” of the Notes to Consolidated Financial Statements contained in Item 8 of this report.

(2) On February 16, 2012, and on December 15, 2011, we acquired NeuroNexus Technologies, Inc., and Micro Power Electronics, Inc., respectively. This data includes the results of operations of these companies subsequent to their acquisition. Additional information is set forth in Note 2 “Acquisitions” of the Notes to Consolidated Financial Statements contained in Item 8 of this report. In 2011, the Company sold its cost method investment in IntElect Medical, Inc. This transaction resulted in a pre-tax gain of $4.5 million.

(3) In 2009, we recorded a $34.5 million litigation charge and a $15.9 million write-down of trademarks and tradenames. In 2010, we settled the litigation which resulted in a $9.5 million gain.

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

YOU SHOULD READ THE FOLLOWING DISCUSSION AND ANALYSIS OF OUR FINANCIAL CONDITION AND RESULTS OF OPERATIONS IN CONJUNCTION WITH OUR FINANCIAL STATEMENTS AND RELATED NOTES INCLUDED ELSEWHERE IN THIS REPORT.

Our Business

- Our business
- Our acquisitions
- Our customers
- Use of non-GAAP financial information
- Strategic and financial overview
- 2014 financial guidance
- Cost savings and consolidation efforts
- Product development
- Government regulation

Our Critical Accounting Estimates

- Valuation of goodwill and other identifiable intangible assets
- Stock-based compensation
- Inventories
- Tangible long-lived assets
- Provision for income taxes

Our Financial Results

- Fiscal 2013 compared with fiscal 2012
- Fiscal 2012 compared with fiscal 2011
- Liquidity and capital resources
- Off-balance sheet arrangements
- Litigation
- Contractual obligations
- Inflation
- Impact of recently issued accounting standards

Our Business

In connection with the realignment of our operating structure in 2013 to optimize profitable growth, which included changing our management and reporting structure, we reevaluated our operating and reporting segments. Beginning in the fourth quarter of 2013, we have two reportable segments: Greatbatch Medical and QiG Group ("QiG"). As required, prior year amounts have been reclassified in order to conform them to the current year presentation. Greatbatch Medical designs and manufactures products where Greatbatch either owns the intellectual property or has unique manufacturing and assembly expertise. The financial results of Greatbatch Medical include the former Implantable Medical and Electrochem Solutions ("Electrochem") segments, excluding QiG. These products include medical devices and components for the cardiac, neuromodulation, orthopaedics, portable medical, vascular and energy markets among others. The Greatbatch Medical segment also offers value-added assembly and design engineering services for medical devices that utilize its component products.

QiG focuses on developing medical device systems for some of healthcare's most pressing challenges and reflects Greatbatch's strategic evolution of its product offerings in order to raise the growth and profitability profile of the Company. Through the research and development professionals in QiG, the Company is now investing in three areas - new medical device systems commercialization, collaborative programs with OEM customers, and strategic equity positions in start-up companies - to grow a diversified and distinctive portfolio. The medical device systems developed by QiG are manufactured by Greatbatch Medical.

The Company's customers include large multi-national original equipment manufacturers ("OEMs").

Our Acquisitions

On December 15, 2011, we acquired all of the outstanding stock of Micro Power Electronics, Inc. ("Micro Power") headquartered in Beaverton, OR. Micro Power is a leading supplier of custom battery solutions, serving the portable medical, military and handheld automatic identification and data collection markets. Micro Power's commercial portfolio is highly complementary to the products and services offered by Greatbatch Medical. The results of Micro Power were included in our Greatbatch Medical segment from the date of acquisition. The aggregate purchase price of Micro Power was $71.8 million, which we funded with cash on hand and $45 million borrowed under our revolving credit facility. Total assets acquired from Micro Power were $88.2 million. Total liabilities assumed from Micro Power were $16.4 million. For 2012, Micro Power added approximately $82.4 million to our revenue.

On February 16, 2012, we purchased all of the outstanding common stock of NeuroNexus Technologies, Inc. ("NeuroNexus") headquartered in Ann Arbor, MI. NeuroNexus is an active implantable medical device design firm specializing in developing and commercializing neural interface technology, components and systems for neuroscience and clinical markets. NeuroNexus has an extensive intellectual property portfolio, core technologies and capabilities to support the development and manufacturing of innovative neural interface devices across a wide range of functions including neuromodulation, sensing, optical stimulation and targeted drug delivery applications. The results of NeuroNexus were included in our QiG segment from the date of acquisition. The aggregate purchase price of NeuroNexus was $13.2 million, which we funded with cash on hand and $10 million borrowed under our revolving credit facility. Total assets acquired from NeuroNexus were $14.6 million. Total liabilities assumed from NeuroNexus were $1.4 million. For 2012, NeuroNexus added approximately $2.5 million to our revenue.

Going forward, we will continue to pursue acquisitions to enhance our top and bottom line growth trajectory, with a focus on innovative solutions. Our strategic criteria for these acquisitions is that they should be complementary to our existing business model, drive expansion in core markets, allow us to enter adjacent growth markets, are focused on proprietary technology, can be tightly integrated into our operating base, and will enhance our return on invested capital performance.

Our Customers

Our products are designed to provide reliable, long-lasting solutions that meet the evolving requirements and needs of our customers. The nature and extent of our selling relationships with each customer are different in terms of breadth of products purchased, purchased product volumes, length of contractual commitment, ordering patterns, inventory management and selling prices.

Our Greatbatch Medical customers include large multi-national OEMs, such as Biotronik, Boston Scientific, Halliburton Company, Johnson & Johnson, Medtronic, Philips Healthcare, Smith & Nephew, Sorin Group, St. Jude Medical, Stryker, and Zimmer. During 2013, Johnson & Johnson, Medtronic and St. Jude Medical collectively accounted for 49% of our total sales.

QiG customers include numerous scientists, hospitals and universities throughout the world who perform research for the neuroscience and clinical markets.

Use of Non-GAAP Financial Information

We prepare our consolidated financial statements in accordance with generally accepted accounting principles in the United States of America ("GAAP"). Additionally, we consistently report and discuss in our quarterly earnings releases and investor presentations adjusted operating income and margin, adjusted net income, adjusted earnings per diluted share, and organic constant currency growth rates. These adjusted amounts, other than organic constant currency growth rates, consist of GAAP amounts excluding the following adjustments to the extent occurring during the period: (i) acquisition-related charges, (ii) facility consolidation, optimization, manufacturing transfer and system integration charges, (iii) asset write-down and disposition charges, (iv) severance charges in connection with corporate realignments or a reduction in force (v) litigation charges and gains, (vi) the impact of certain non-cash charges to interest expense, (vii) unusual or infrequently occurring items, (viii) certain R&D expenditures (such as medical device DVT expenses in connection with developing our neuromodulation platform), (ix) gain/loss on the sale of investments, (x) the income tax (benefit) related to these adjustments and (xi) certain tax charges related to the

consolidation of our Swiss Orthopaedic facility. Adjusted earnings per diluted share were calculated by dividing adjusted net income by diluted weighted average shares outstanding. To calculate organic constant currency growth rates that exclude the impact of changes in foreign currency exchange rates, as well as the impact of any acquisitions or divestitures of product lines on sales growth rates, we convert current period sales from local currency to U.S. dollars using the previous periods foreign currency exchange rates and exclude the amount of sales acquired/divested during the period from the current/previous period amounts, respectively. We believe that the presentation of adjusted operating income and margin, adjusted net income, adjusted diluted earnings per share, and organic constant currency growth rates provides important supplemental information to management and investors seeking to understand the financial and business trends relating to our financial condition and results of operations.

Strategic and Financial Overview

Our current strategy is centered around four strategic imperatives: 1) Organic Growth; 2) Margin Expansion; 3) Medical Device Systems; and 4) Targeted Acquisitions. This strategy was clearly exhibited in our 2013 results, illustrating not only our continuing momentum, but also the effective measures we are deploying to create an even brighter future.

2013 results include an additional week of operations in comparison to 2012 and 2011 as we utilize a fifty-two, fifty-three week fiscal year, which ends on the Friday nearest December 31st. Although this additional week of operations may have impacted certain financial statement line items, management believes that when combined with the additional holiday and weather related shutdowns, this additional week did not materially impact our net operating results.

Organic Growth - Over the last several years we have significantly enhanced our sales and marketing capabilities. This has included moving account executives closer to our major customers, upgrading our sales force with new sales talent, enhancing our sales commission programs, and intensifying our market research. These initiatives contributed to our record sales for 2013 of $663.9 million, which represented a 3% increase over 2012 sales of $646.2 million despite the divestiture of $15 million of certain non-core orthopaedic product lines during the first quarter of 2013. After adjusting for the impact of these divestitures, as well as the $2 million positive impact of foreign currency exchange rates, sales increased 5% in 2013 due to strong organic constant currency growth from our cardiac/neuromodulation (6%) and orthopaedic (20%) product lines due to market share gains, customer product launches, the additional week of sales and the release of backlog stemming from our Swiss consolidation in 2012. Partially offsetting these increases were declines in our vascular and portable medical product lines due to the previously communicated voluntary recall of two vascular medical devices in 2012 and our increased pricing discipline, which resulted in the loss of low-margin portable medical business.

Sales growth for 2012 of 14% included the benefit from our acquisitions of $84.8 million, as well as the negative impact of foreign currency exchange rate fluctuations of $6 million. On an organic constant currency basis, which excludes the impact of foreign currency exchange rates and acquired sales, sales for 2012 were consistent with 2011 as organic growth was offset by lower orthopaedic sales due to price concessions provided to customers and operational issues at our Swiss orthopaedic facilities, which were aggressively addressed in 2012.

For 2014, we expect revenue to organically grow 3-6%, which is in line with our long-term organic growth goal objectives.

Margin Expansion - We have a longstanding history of operational excellence, which is one of our core competencies. This, when combined with our organic sales growth, is expected to continue to drive both gross and operating margin expansion. This core competency was evident in our 2013 results as gross profit as a percentage of sales (“Gross Margin”) increased 180 basis points to 33.0%. This increase primarily resulted from the increased operational leverage gained from our higher sales volumes and productivity initiatives, as well as a favorable mix of higher margin products. Our Gross Margin for 2012 decreased 50 basis points in comparison to 2011 as increased operational leverage was offset by the operational issues at our Swiss orthopaedic facilities and a higher mix of lower margin products. Our increased sales volume, combined with the increase in Gross Margin for 2013 resulted in an increase to our gross profit of 9% and 12% for 2013 and 2012, respectively.

Partially offsetting these increases in gross profit were increases in our selling, general and administrative expenses (“SG&A”) and research, development and engineering costs, net (“RD&E”). SG&A expenses increased 9% and 12% for 2013 and 2012, respectively. The 2013 increase in SG&A expense was primarily due to the additional investments in sales and marketing resources, higher performance-based compensation expense and the additional week of payroll expense in 2013 in comparison to 2012. The 2012 increase in SG&A expense was primarily due to our acquisitions which added $9.6 million to SG&A in comparison to 2011. RD&E expenses increased 3% and 15% for 2013 and 2012, respectively. The 2013 increase in RD&E was primarily due to lower customer cost reimbursements and the additional week of operations compared to the prior year. These increases were partially offset by the initiative launched in the second half of 2012 to more fully optimize our research and development efforts. This included the reallocation of research and development resources to higher priority projects, the postponement of some research and

development projects, and the decision to pursue various alternatives to monetize our existing non-core intellectual property and entering into more co-development arrangements with our customers. The 2012 increase in RD&E expense was primarily due to our acquisitions, which added $2.6 million of expenses, as well as our additional investment in the development of complete medical device systems.

Since 2007, we have invested substantial resources in integrating our acquisitions and streamlining our operations. As we move forward, investing in our operations will continue to be critical to the success of our strategic imperative to drive margin expansion. This strategy continued during 2013 and 2012 as we realigned our operating structure in order to optimize our profitable growth, continued to consolidate our orthopaedic footprint, expanded our manufacturing infrastructure to support the commercialization of our medical devices and upgraded our global ERP system in order to support our future growth. As a result of these initiatives, our other operating expense totaled $15.8 million, $42.3 million and $0.6 million for 2013, 2012 and 2011, respectively. The significant increase in other operating expenses, net for 2012 related to the consolidation of our Swiss orthopaedic facilities, which was completed in the first quarter of 2013. We continually evaluate our operating structure in order

to maximize efficiencies and drive margin expansion. Future other operating expenses are expected to be lower than the 2013 levels, but could be impacted if new consolidation and optimization initiatives are undertaken.

GAAP operating income for 2013 was $61.3 million compared to $25.8 million for 2012 and $61.7 million for 2011. The significant decrease in 2012 was primarily due to the costs incurred in connection with our consolidation and productivity initiatives discussed above. Adjusted operating income, which excludes these items, was $82.9 million for 2013, compared to $73.9 million for 2012 and $67.6 million for 2011. Adjusted operating income as a percentage of sales ("Adjusted Operating Margin") for 2013 was 12.5% compared to 11.4% for 2012 and 11.9% for 2011 and reflects the success the Company has had in leveraging its operating infrastructure and driving margin expansion. We expect these improvements to continue in 2014 as Adjusted Operating Margin is expected to be 13.0% - 13.3% of sales.

A reconciliation of GAAP operating income (loss) to adjusted amounts is as follows (dollars in thousands):

	Greatbatch Medical		QiG		Unallocated		Total	
	Jan 3, 2014	Dec 28, 2012	Jan 3, 2014	Dec 28, 2012	Jan 3, 2014	Dec 28, 2012	Jan 3, 2014	Dec 28, 2012
Total sales	$660,902	$643,722	$3,043	$2,455	$—	$—	$663,945	$646,177
Operating income (loss) as reported	$111,805	$79,093	$(30,484)	$(32,554)	$(19,982)	$(20,718)	$61,339	$25,821
Adjustments:								
Inventory step-up amortization (COS)	—	532	—	—	—	—	—	532
Medical device DVT expenses (RD&E)	—	—	5,793	5,190	—	—	5,793	5,190
Consolidation and optimization costs	13,388	34,372	86	6	1,284	4,670	14,758	39,048
Acquisition and integration (income) expenses	187	1,287	(690)	167	1	6	(502)	1,460
Asset dispositions, severance and other	1,187	1,073	540	57	(193)	708	1,534	1,838
Adjusted operating income (loss)	$126,567	$116,357	$(24,755)	$(27,134)	$(18,890)	$(15,334)	$82,922	$73,889
Adjusted operating margin	19.2 %	18.1 %	N/A	N/A	N/A	N/A	12.5 %	11.4 %

	Greatbatch Medical		QiG		Unallocated		Total	
	Dec 28, 2012	Dec 30, 2011	Dec 28, 2012	Dec 30, 2011	Dec 28, 2012	Dec 30, 2011	Dec 28, 2012	Dec 30, 2011
Total sales	$643,722	$568,822	$2,455	$—	$—	$—	$646,177	$568,822
Operating income (loss) as reported	$79,093	$104,703	$(32,554)	$(27,277)	$(20,718)	$(15,727)	$25,821	$61,699
Adjustments:								
Inventory step-up amortization (COS)	532	177	—	—	—	—	532	177
Medical device DVT expenses (RD&E)	—	—	5,190	5,133	—	—	5,190	5,133
	34,372	361	6	64	4,670	—	39,048	425

Consolidation and optimization costs								
Acquisition and integration expenses	1,287	—	167	—	6	—	1,460	—
Asset dispositions, severance and other	1,073	168	57	—	708	—	1,838	168
Adjusted operating income (loss)	$116,357	$105,409	$(27,134)	$(22,080)	$(15,334)	$(15,727)	$73,889	$67,602
Adjusted operating margin	18.1 %	18.5 %	N/A	NA	N/A	N/A	11.4 %	11.9 %

Medical Device Systems - In 2008, we began evolving our product offerings to include the development of complete medical device systems in order to raise the growth and profitability profile of the Company. This medical device systems strategy is being facilitated through QiG and leverages the component technology of Greatbatch Medical. More specifically, this strategy includes the development of a neuromodulation platform that can be used to support several devices most notably of which is our spinal cord stimulator to treat chronic intractable pain of the trunk and/or limbs, which we made a PMA filing and CE Mark submission near the end of 2013. In total, net medical device costs incurred by QiG were $30.5 million for 2013 compared to $32.6 million for 2012 and $27.3 million for 2011. QiG results for 2013 include $5.8 million of design verification testing (“DVT”) costs incurred in connection with our development of a neuromodulation platform compared to $5.2 million for 2012 and $5.1 million for 2011.

A reconciliation of GAAP net income (loss) and diluted earnings (loss) per share ("EPS") to adjusted amounts is as follows (in thousands, except per share amounts):

	Year Ended January 3, 2014		December 28, 2012		December 30, 2011	
	Net Income (Loss)	Impact Per Diluted Share	Net Income (Loss)	Impact Per Diluted Share	Net Income (Loss)	Impact Per Diluted Share
Net income (loss) as reported	$36,267	$1.43	$(4,799)	$(0.20)	$33,122	$1.40
Adjustments:						
Inventory step-up amortization (COS)[a]	—	—	346	0.01	115	—
Medical device DVT expenses (RD&E)[a]	3,765	0.15	3,374	0.14	3,336	0.14
Consolidation and optimization costs[a]	10,602	0.42	28,934	1.21	276	0.01
Acquisition and integration (income) expenses[a]	(326)	(0.01)	949	0.04	—	—
Asset dispositions, severance and other[a]	997	0.04	1,186	0.05	109	—
Loss (gain) on cost and equity method investments, net[a][b]	451	0.02	69	—	(2,751)	(0.12)
CSN conversion option discount and deferred fee acceleration amortization[a][c]	3,007	0.12	6,234	0.26	5,515	0.23
2012 R&D tax credit[d]	(1,600)	(0.06)	—	—	—	—
Swiss tax impact[e]	—	—	6,190	0.26	—	—
Adjusted net income and diluted EPS[f]	$53,163	$2.10	$42,483	$1.77	$39,722	$1.68
Adjusted diluted weighted average shares[g]	25,323		23,947		23,636	

(a) Net of tax amounts computed using a 35% U.S. and France statutory tax rates for the 2013, 2012 and 2011 periods and a 0%, 22.5% and 22.5% Switzerland tax rate for the 2013, 2012 and 2011 periods, respectively.

(b) Pre-tax amount is a loss of $0.7 million, loss of $0.1 million and a gain of $4.2 million for 2013, 2012 and 2011, respectively.

(c) Pre-tax amount is $4.6 million, $9.6 million and $8.5 million for 2013, 2012 and 2011, respectively.

(d) Relates to the 2012 portion of the R&D tax credit which was reinstated in the first quarter of 2013 retroactive back to the beginning of 2012. As required, the impact of the R&D tax credit relating to 2012 was recognized in 2013.

(e) Relates to the loss of our Swiss tax holiday due to our decision to transfer manufacturing out of Switzerland, as well as the establishment of a valuation allowance on our Swiss deferred tax assets as it is more likely than not that they will not be fully realized.

(f) The per share data in this table has been rounded to the nearest $0.01 and therefore may not sum to the total.

(g) Adjusted diluted weighted average shares for 2012 includes 363,000 shares of dilution related to outstanding stock incentive awards that were not dilutive for GAAP EPS purposes.

GAAP net income (loss) and diluted EPS include the impact of costs incurred in connection with our consolidation and productivity initiatives discussed above, as well as certain tax charges/credits and certain non-cash charges to interest expense. Excluding these items, adjusted diluted EPS increased 19% in 2013 and 5% in 2012. We expect to achieve adjusted diluted EPS growth of 7-12% for 2014.

Targeted Acquisitions - The results for 2013, 2012 and 2011 include the impact of our acquisition of Micro Power on December 15, 2011 and NeuroNexus on February 16, 2012. Going forward, we will continue to pursue acquisitions to enhance our top and bottom line growth trajectory, with a focus on innovative solutions. Our strategic criteria for these acquisitions is that they should be complementary to our existing business model, drive expansion in core markets, allow us to enter adjacent growth markets, are focused on proprietary technology, can be tightly integrated

into our operating base, and will enhance our return on invested capital performance.

We expect our 2014 performance to remain on a positive growth trajectory. Our guidance is illustrative of a multi-year strategy based on market knowledge, a relentless passion to evolve our business to capitalize on market trends, and the acquisition, development and retention of some of the brightest and hardest working minds in the world.

2014 Financial Guidance

For 2014, we have provided the following financial guidance:

Sales	$685 - $705 million
GAAP Operating Income as a % of Sales	11.0% - 11.5%
Adjusted Operating Income as a % of Sales	13.0% - 13.3%
Capital Expenditures	$25 - $35 million
GAAP Effective Tax Rate	34% - 35%
GAAP Diluted EPS	$1.94 - $1.99
Adjusted Diluted EPS	$2.25 - $2.35

Adjusted operating income for 2014 is expected to consist of GAAP operating income excluding items such as acquisition, consolidation, integration and asset disposition/write-down charges totaling approximately $12 million to $15 million. The after tax impact of these adjustments is estimated to be $7.5 million to $10 million or $0.31 to $0.35 per share. The current expected GAAP effective tax rate for 2014 does not include the benefit of the U.S. R&D tax credit, which expired at the end of 2013. If reinstated, our 2014 GAAP effective tax rate could be lowered to 32% to 33%.

Cost Savings and Consolidation Efforts

In 2013, 2012 and 2011, we recorded charges in Other Operating Expenses, Net related to cost savings and consolidation efforts. These initiatives were undertaken to improve our operational efficiencies and profitability. Additional information regarding the timing, cash flow impact and amount of future expenditures is set forth in Note 13 “Other Operating Expenses, Net” of the Notes to the Consolidated Financial Statements contained in Item 8 of this report, as well as the “Liquidity and Capital Resources” section of this Item.

In 2013, we initiated a plan to realign our operating structure in order to optimize our continued focus on profitable growth. As part of this initiative, the sales and marketing and operations groups of our former Implantable Medical and Electrochem segments were combined into one sales and marketing and one operations group serving the entire Company. Total restructuring charges expected to be incurred in connection with this realignment are between $6.5 million to $7.0 million, of which $5.6 million have been incurred to date. Expenses related to this initiative will be recorded within the applicable segment and corporate cost centers to which the expenditures relate. When fully implemented, this plan is expected to result in annual savings of approximately $7.0 to $7.7 million. This initiative is expected to be completed over the next six months.

Over the last three years, we have been implementing a multi-faceted plan to further enhance, optimize and leverage our orthopaedics operations. This plan included the construction of an orthopaedic manufacturing facility in Fort Wayne, IN, updating our Indianapolis, IN facility, the transfer of most major functions previously performed at our facilities in Orvin and Corgemont, Switzerland into our Fort Wayne, IN and Tijuana, Mexico facilities, and the expansion of our Chaumont, France facility in order to enhance our capabilities and fulfill larger customer supply agreements. The total capital investment expected for these initiatives is between $30 million and $35 million, of which $22 million has been expended to date. Total expense expected to be incurred for these initiatives is between $45 million and $50 million, of which $41.2 million has been incurred to date.

Near the end of 2011, we initiated plans to optimize and expand our manufacturing infrastructure in order to support our medical device strategy. This included the transfer of certain product lines to lower cost facilities, expansion of two of our existing facilities, as well as the purchase of equipment to create additional capacity for the manufacture of medical devices and create additional cost savings. Total capital investment under these initiatives is expected to be between $15 million to $20 million, of which approximately $12.4 million has been expended to date. Total expenses expected to be incurred on these projects is between $2 million to $3 million, of which $1.8 million has been incurred to date.

These orthopaedic and medical device initiatives are expected to be completed over the next three years and are expected to generate approximately $10 million to $15 million of annual cost savings and increase our capacity in order to support our growth and the manufacturing of complete medical devices.

In 2011, we initiated plans to upgrade our existing global ERP system. This initiative is expected to be completed over the next three months. Total capital investment under this initiative is expected to be approximately $4 million to $4.5 million, of which approximately $3.9 million has been expended to date. Total expenses expected to be incurred on this initiative is between $6 million to $7 million, of which $5.8 million has been incurred to date.

We continually evaluate our operating structure in order to maximize efficiencies and drive margin expansion. Future other operating expenses are expected to be lower than the 2013 levels, but could be impacted if new consolidation and optimization initiatives are undertaken.

Product Development

Greatbatch Medical

Our core business is well positioned because our OEM customers leverage our portfolio of intellectual property, and we continue to build a healthy pipeline of diverse medical technology opportunities. We continue to deepen our relationships with our OEM customers and continue to see an increased pace of product development opportunities. These product development opportunities, when combined with our increased sales and marketing resources, are expected to allow us to continue to grow faster than our underlying markets. Some of the product development opportunities Greatbatch Medical is pursuing are as follows:

Product Line	Product Development Opportunities
Cardiac/ Neuromodulation	Developing next generation technology programs including Gen 2 Q_{HR} battery, next generation filtered feedthroughs, and high voltage capacitors.
Orthopaedic	Developing single use instruments and a suite of reusable bone preparation instruments with an emphasis on increased efficacy and longer life.
Portable Medical	Developing wireless power solutions for the surgical tool marketplace.
Vascular	Developing a full line of arterial introducers, expanding our existing non-valved peelable introducer portfolio, and expanding our existing OptiSeal portfolio for the dialysis market.
Energy/Other	Developing wide range temperature battery packs.

QiG

Through QiG, we provide our Greatbatch Medical customers with complete medical device systems. This medical device strategy includes strategic equity investments and medical devices developed independently, as well as in conjunction with our OEM partners. While we do not intend to discuss each of these projects individually, we will discuss significant milestones as they occur.

Our spinal cord stimulator to treat chronic intractable pain of the trunk and/or limbs, was designed to target unmet clinical needs with a focus on safety and product differentiation for all user groups. The FDA submission and Europe CE Mark submission for this device was made near the end of 2013. Collaboration continues with our investment bankers who are assisting us in identifying commercial partners.

CardiomoniX is an implantable loop recorder for cardiac arrhythmia diagnostics that is being designed to address the unmet needs of remote patient monitoring and data quality.

QiG is in the early stages of development of two additional medical device systems, which are targeting approved and emerging indications. Additionally, based upon the technology acquired from NeuroNexus, QiG is developing a platform of thin-film electrodes for neuromodulation leads, sub-systems and components.

Government Regulation

The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act (collectively “Health Care Reform”) legislated broad-based changes to the U.S. healthcare system that could significantly impact our business operations and financial results, including higher or lower revenue, as well as higher employee medical costs and taxes. Health Care Reform imposes significant new taxes on medical device OEMs, which will result in a significant increase in the tax burden on our industry and which could have a material negative impact on our financial condition, results of operations and our cash flows. Other elements of Health Care Reform such as comparative effectiveness research, an independent payment advisory board, payment system reforms

including shared savings pilots and other provisions could meaningfully change the way healthcare is developed and delivered, and may materially impact numerous aspects of our business, results of operations and financial condition. Many significant parts of Health Care Reform will be phased in over the next several years and require further guidance and clarification in the form of regulations. The new medical device tax, which was effective in 2013, increased our cost of sales by $0.5 million.

On August 22, 2012, the U.S. Securities and Exchange Commission ("SEC") issued a rule under Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act requiring companies to publicly disclose their use of conflict minerals that originated in the Democratic Republic of the Congo ("DRC") or an adjoining country. Under the rule, issuers are required to conduct a reasonable due diligence process to ascertain the source of conflict minerals, defined as tantalum, tin, gold or tungsten, that are necessary to the functionality or production of their manufactured or contracted to be manufactured products. Companies are required to provide this disclosure on a new form to be filed with the SEC called Form SD. Companies are required to file Form SD on May 31, 2014 for the 2013 calendar period and annually on May 31 every year thereafter. We anticipate additional, new compliance costs to be incurred since we utilize all of the minerals specified in the rule. We are unable to quantify the cost of implementing this new regulation at this time.

Our Critical Accounting Estimates

The preparation of our consolidated financial statements in accordance with GAAP requires us to make estimates and assumptions that affect reported amounts and related disclosures. The methods, estimates and judgments we use in applying our accounting policies have a significant impact on the results we report in our consolidated financial statements. Management considers an accounting estimate to be critical if (1) it requires assumptions to be made that were uncertain at the time the estimate was made; and (2) changes in the estimate or different estimates that could have been selected could have a material impact on our consolidated results of operations, financial position or cash flows. Our most critical accounting estimates are described below. We also have other policies that we consider key accounting policies, such as our policies for revenue recognition; however, these policies do not meet the definition of critical accounting estimates, because they do not generally require us to make estimates or judgments that are difficult or subjective.

Valuation of goodwill and other identifiable intangible assets

When we acquire a company, we allocate the purchase price to the tangible and intangible assets we acquire and liabilities we assume based on their fair value at the date of acquisition. Goodwill is recorded when the purchase price paid for an acquisition exceeds the estimated fair value of the net identified tangible and intangible assets acquired. In addition to goodwill, some of our intangible assets are considered non-amortizing intangible assets as they are expected to generate cash flows indefinitely. Goodwill and indefinite-lived intangibles are not amortized but are required to be assessed for impairment on an annual basis or more frequent if certain indicators are present. Definite-lived intangible assets are amortized over their estimated useful lives and are assessed for impairment if certain indicators are present. As discussed in Note 7 "Intangible Assets" of the Notes to Consolidated Financial Statements contained in Item 8 of this report, in connection with the realignment of the Company's operating structure in 2013, the Company reevaluated its operating and reporting segments. Beginning in the fourth quarter of 2013, the Company determined that it has two operating segments: Greatbatch Medical and QiG, and, as required, reassigned goodwill to each of these reporting units based upon their relative fair values. Fair values for the reporting units were determined using the assumptions and approach discussed below.

Assumptions/Approach Used

We base the fair value of identifiable tangible and intangible assets on detailed valuations that use information and assumptions provided by management. The fair values of intangible assets are determined using one of three valuation approaches: market, income or cost. The selection of a particular method depends on the reliability of available data and the nature of the asset. The market approach values the asset based on available market pricing for comparable assets. The income approach values the asset based on the present value of risk adjusted cash flows projected to be generated by that asset. The projected cash flows for each asset considers multiple factors from the perspective of a marketplace participant, including current revenue from existing customers, attrition trends, reasonable contract renewal assumptions, royalty rates and expected profit margins giving consideration to historical and expected margins. The cost approach values the asset by determining the current cost of replacing that asset with another of equivalent economic utility. The cost to replace the asset reflects the estimated reproduction or replacement cost, less an allowance for loss in value due to depreciation or obsolescence, with specific consideration given to economic

obsolescence if indicated.

We perform an annual review on the last day of each fiscal year, or more frequently if indicators of potential impairment exist, to determine if the recorded goodwill and other indefinite-lived intangible assets are impaired. We assess goodwill for impairment by comparing the fair value of our reporting units to their carrying value to determine if there is potential impairment. If the fair value of a reporting unit is less than its carrying value, an impairment loss is recorded to the extent that the implied fair value of the goodwill within the reporting unit is less than its carrying value. Fair values for reporting units are determined based on the income and market approaches. Indefinite-lived intangible assets are evaluated for impairment by using the income approach. Definite-lived intangible assets are reviewed at least quarterly to determine if any conditions exist or a change in circumstances has occurred that would indicate impairment or a change in their remaining useful life.

We do not believe that the indefinite-lived intangible assets or goodwill allocated to our Greatbatch Medical or QiG segments are at risk of failing step one of future annual impairment tests unless operating conditions significantly deteriorate, given the significant amount that our estimated fair value for these assets was in excess of their respective book values as of January 3, 2014. Examples of a significant deterioration in operating conditions for Greatbatch Medical and QiG could include the following: Greatbatch Medical - the loss of one or more significant customers, technology obsolescence, product liability claims or significant manufacturing disruption, among others. QiG - regulatory non-approval of new medical device systems, lack of market acceptance, discontinuation of significant development projects, technology obsolescence or failure of technology, among others.

Effect of Variation of Key Assumptions Used

The use of alternative valuation assumptions, including estimated cash flows and discount rates, and alternative estimated useful life assumptions could result in significant changes to our intangible asset fair value estimates. These changes in fair value estimates could impact the amount and timing of future intangible asset amortization expense and/or result in impairment losses.

We make certain estimates and assumptions that affect the expected future cash flows of our reporting units for our goodwill impairment testing. These include discount rates, terminal values and projections of future revenues and expenses. Significant changes in these estimates and assumptions could create future impairment losses to our goodwill. The assumptions used in our 2013 impairment test incorporate the information disclosed in “2014 Financial Guidance” of this section as well as other forward-looking statements made in this Management's Discussion and Analysis of Financial Condition and Results of Operations section.

For our indefinite-lived intangible assets, we make estimates of royalty rates, future revenues and discount rates. Significant changes in these estimates could create future impairments of these assets.

Estimation of the useful lives of indefinite- and definite-lived intangible assets is based upon the estimated cash flows of the respective intangible asset and requires significant management judgment. Events could occur that would materially affect our estimates of the useful lives. Significant changes in these estimates and assumptions could change the amount of future amortization expense or could create future impairments of these intangible assets.

The way the Company’s management allocates resources and evaluates its businesses determines the reporting unit level which goodwill is tested for impairment. Significant changes to these reporting units could create future impairments of goodwill.

As of January 3, 2014, we have $443.1 million of intangible assets recorded on our consolidated balance sheet representing 50% of total assets. This includes $76.1 million of amortizing intangible assets, $20.3 million of indefinite-lived intangible assets and $346.7 million of goodwill. A 1% change in the amortization of our intangible assets would change 2013 net income by approximately $0.09 million, or approximately $0.003 per diluted share.

Stock-based compensation

We record compensation costs related to our stock-based awards which include stock options, restricted stock and restricted stock units. We measure stock-based compensation cost at the grant date based on the fair value of the award.

Compensation cost for service-based awards is recognized ratably over the applicable vesting period. Compensation cost for performance awards based on Company financial metrics is reassessed each period and recognized based upon the probability that the performance targets will be achieved. Compensation cost for performance awards based on market metrics (such as total shareholder return) is expensed each period whether the performance metrics are achieved or not. The amount of stock-based compensation expense recognized during a period is based on the portion of the awards that are ultimately expected to vest, as well as market and nonmarket performance award considerations. The total expense recognized over the vesting period will only be for those awards that ultimately vest, as well as market and nonmarket performance award considerations.

Assumptions/Approach Used

We utilize the Black-Scholes Option Pricing Model to determine the fair value of stock options. We are required to make certain assumptions with respect to selected Black-Scholes model inputs, including expected volatility, expected life, expected dividend yield and the risk-free interest rate. Expected volatility is based on the historical volatility of

our stock over the most recent period commensurate with the estimated expected life of the stock options. The expected life of stock options granted, which represents the period of time that the stock options are expected to be outstanding, is based, primarily, on historical data. The expected dividend yield is based on our history and expectation of dividend payouts. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant for a period commensurate with the estimated expected life.

The fair value of time-based as well as nonmarket-based performance restricted stock and restricted stock unit awards is equal to the fair value of the Company's stock on the date of grant. The fair value of market-based performance restricted stock unit awards is determined by utilizing a Monte Carlo simulation model, which projects the value of Greatbatch stock versus our peer group under numerous scenarios and determines the value of the award based upon the present value of these projected outcomes.

Compensation cost for nonmarket-based performance awards is reassessed each period and recognized based upon the probability that the performance targets will be achieved. That assessment is based upon actual and expected future performance.

Stock-based compensation expense is recorded for those awards that are expected to vest, as well as market and nonmarket performance award considerations. Forfeiture estimates for determining appropriate stock-based compensation expense are estimated at the time of grant based on historical experience and demographic characteristics. Revisions are made to those estimates in subsequent periods if actual forfeitures differ from estimated forfeitures.

Effect of Variation of Key Assumptions Used

Option pricing models were developed for use in estimating the value of traded options that have no vesting restrictions and are fully transferable. Because our share-based payments have characteristics significantly different from those of freely traded options, and because changes in the subjective input assumptions can materially affect our estimates of fair values, existing valuation models may not provide reliable measures of the fair values of our share-based compensation. Consequently, there is a risk that our estimates of the fair values of our share-based compensation awards may bear little resemblance to the actual values realized upon the exercise, expiration or forfeiture of those share-based payments in the future. Stock options may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and reported in our consolidated financial statements. Alternatively, value may be realized from these instruments that are significantly in excess of the fair values originally estimated on the grant date and reported in our consolidated financial statements. There are significant differences among valuation models. This may result in a lack of comparability with other companies that use different models, methods and assumptions.

There is a high degree of subjectivity involved in selecting assumptions to be utilized to determine fair value and forfeiture assumptions. If factors change and result in different assumptions in future periods, the expense that we record for future grants may differ significantly from what we have recorded in the current period. Additionally, changes in performance of the Company and its stock price will affect the likelihood that performance-based targets are achieved and could materially impact the amount of stock-based compensation expense recognized.

A 1% change in our stock-based compensation expense would change 2013 net income by approximately $0.06 million, or approximately $0.002 per diluted share.

Inventories

Inventories are stated at the lower of cost, determined using the first-in, first-out method, or market.

Assumptions/Approach Used

Inventory costing requires complex calculations that include assumptions for overhead absorption, scrap, sample calculations, manufacturing yield estimates and the determination of which costs may be capitalized. The valuation of inventory requires us to estimate obsolete or excess inventory, as well as inventory that is not of saleable quality.

Effect of Variation of Key Assumptions Used

Variations in methods or assumptions could have a material impact on our results. If our demand forecast for specific products is greater than actual demand and we fail to reduce manufacturing output accordingly, we could be required to record additional inventory write-downs or expense a greater amount of overhead costs, which would have a negative impact on our net income. As of January 3, 2014, we have $118.4 million of inventory recorded on our consolidated balance sheet representing 13% of total assets. A 1% write-down of our inventory would change 2013 net income by approximately $0.8 million, or approximately $0.03 per diluted share.

Tangible long-lived assets

Property, plant and equipment and other tangible long-lived assets are carried at cost. The cost of property, plant and equipment is charged to depreciation expense over the estimated life of the operating assets primarily using straight-line rates. Tangible long-lived assets are subject to impairment assessment if certain indicators are present.

Assumptions/Approach Used

We assess the impairment of tangible long-lived assets when events or changes in circumstances indicate that the carrying value of the asset (asset group) may not be recoverable. Factors that we consider in deciding when to perform an impairment review include, but are not limited to: a significant decrease in the market price of the asset (asset group); a significant change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition; a significant change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an action or assessment by a regulator; an accumulation of costs significantly in excess of the amount originally expected for the construction; a current-period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group); or a current expectation that, more likely than not, a long-lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. Recoverability potential is measured by comparing the carrying amount of the asset (asset group) to the related total future undiscounted cash flows. The projected cash flows for each asset (asset group) considers multiple factors, including current revenue from existing customers, proceeds from the sale of the asset (asset group), reasonable contract renewal assumptions, and expected profit margins giving consideration to historical and expected margins. If an asset's (assets group's) carrying value is not recoverable through related cash flows, the asset (asset group) is considered to be impaired. Impairment is measured by comparing the asset's (asset group's) carrying amount to its fair value. When it is determined that useful lives of assets are shorter than originally estimated, and there are sufficient cash flows to support the carrying value of the assets, we accelerate the rate of depreciation in order to fully depreciate the assets over their shorter useful lives.

Effect of Variation of Key Assumptions Used

Estimation of the cash flows and useful lives of tangible assets that are long-lived requires significant management judgment. Events could occur that would materially affect our estimates and assumptions. Unforeseen changes in operations or technology could substantially alter the assumptions regarding the ability to realize the return of our investment in long-lived assets or the useful lives. Also, as we make manufacturing process conversions and other facility consolidation decisions, we must make subjective judgments regarding the remaining cash flows and useful lives of our assets, primarily manufacturing equipment and buildings. Significant changes in these estimates and assumptions could change the amount of future depreciation expense or could create future impairments of these long-lived assets (asset groups).

As of January 3, 2014 we have $145.8 million of tangible long-lived assets recorded on our consolidated balance sheet representing 16% of total assets. A 1% write-down in our tangible long-lived assets would change 2013 net income by approximately $0.9 million, or approximately $0.04 per diluted share.

Provision for income taxes

Our consolidated financial statements have been prepared using the asset and liability approach in accounting for income taxes, which requires the recognition of deferred income taxes for the expected future tax consequences of net operating losses, credits, and temporary differences between the financial statement carrying amounts and the tax bases of assets and liabilities. A valuation allowance is provided on deferred tax assets if it is determined that it is more likely than not that the asset will not be realized.

Assumptions/Approach Used

In recording the provision for income taxes, management must estimate the future tax rates applicable to the reversal of temporary differences based upon the timing of expected reversal. Also, estimates are made as to whether taxable operating income in future periods will be sufficient to fully recognize any gross deferred tax assets. If recovery is not likely, we must increase our provision for income taxes by recording a valuation allowance against the deferred tax assets that we estimate will not ultimately be recoverable. Alternatively, we may make estimates about the potential usage of deferred tax assets that decrease our valuation allowances.

The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations. Significant judgment is required in evaluating our tax positions and determining our provision for income taxes.

During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. We establish reserves for uncertain tax positions when we believe that certain tax positions do not meet the more likely than not threshold. We adjust these reserves in light of changing facts and circumstances, such as the outcome of a tax audit or the lapse of statutes of limitations. The provision for income taxes includes the impact of reserve provisions and changes to the reserves that are considered appropriate.

Effect of Variation of Key Assumptions Used

Changes could occur that would materially affect our estimates and assumptions regarding deferred taxes. Changes in current tax laws and tax rates could affect the valuation of deferred tax assets and liabilities, thereby changing the income tax provision. Also, significant declines in taxable income could materially impact the realizable value of deferred tax assets. At January 3, 2014, we had $34.1 million of gross deferred tax assets on our consolidated balance sheet and a valuation allowance of $11.7 million has been established for certain deferred tax assets as it is more likely than not that they will not be realized. A 1% change in the effective tax rate would impact the current year provision for income taxes by $0.5 million, and 2013 diluted earnings per share by $0.02 per diluted share.

Our Financial Results

We utilize a fifty-two, fifty-three week fiscal year ending on the Friday nearest December 31st. Fiscal years 2013, 2012 and 2011 ended on January 3, 2014, December 28, 2012 and December 30, 2011, respectively. Fiscal year 2013 contained fifty-three weeks. Fiscal years 2012 and 2011 each contained fifty-two weeks.

	Year Ended			2013 vs. 2012		2012 vs. 2011	
	January 3, 2014	December 28, 2012	December 30, 2011	$ Change	% Change	$ Change	% Change
Dollars in thousands, except per share data							
Greatbatch Medical Sales							
Cardiac/ Neuromodulation	$325,412	$ 306,669	$ 303,690	$18,743	6 %	$2,979	1 %
Orthopaedics	130,247	122,061	140,277	8,186	7 %	(18,216)	(13)%
Portable Medical	78,743	81,659	9,609	(2,916)	(4)%	72,050	N/A
Vascular	48,357	51,980	45,098	(3,623)	(7)%	6,882	15 %
Energy	52,488	54,066	48,100	(1,578)	(3)%	5,966	12 %
Other	25,655	27,287	22,048	(1,632)	(6)%	5,239	24 %
Total Greatbatch Medical	660,902	643,722	568,822	17,180	3 %	74,900	13 %
QiG	3,043	2,455	—	588	24 %	2,455	NA
Total sales	663,945	646,177	568,822	17,768	3 %	77,355	14 %
Cost of sales	444,632	444,528	388,469	104	— %	56,059	14 %
Gross profit	219,313	201,649	180,353	17,664	9 %	21,296	