VICOR CORP Form 10-K March 14, 2014

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

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

to

For the fiscal year ended December 31, 2013

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

For the transition period from

Commission file number 0-18277

VICOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of

04-2742817

(IRS employer

incorporation or organization)

25 Frontage Road, Andover, Massachusetts

(Address of principal executive offices)

identification no.)

01810

(Zip code)

Registrant s telephone number, including area code:

(978) 470-2900

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

Common Stock, \$.01 par Value

The NASDAQ Stock Market, LLC

(Title of Class)

(Name of Each Exchange on Which Registered)

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 b

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 þ

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 b No "

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

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

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. (Check one):

Large Accelerated Filer " Accelerated Filer b Non-accelerated Filer " Smaller Reporting Company "

(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$113,649,200 as of June 30, 2013.

On February 28, 2014, there were 26,782,623 shares of Common Stock outstanding and 11,758,218 shares of Class B Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Company s definitive proxy statement (the Definitive Proxy Statement) to be filed with the Securities and Exchange Commission pursuant to Regulation 14A and relating to the Company s 2014 annual meeting of stockholders are incorporated by reference into Part III.

PART I

In this Annual Report on Form 10-K, unless the context indicates otherwise, references to Vicon, the Company, our company, we, us, our, similar references, refer to Vicor Corporation and subsidiaries.

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The words believes, expects, anticipates, estimate. would, should, continue, prospective, project, and other similar expressions identify forward-looking statement will, Forward-looking statements also include statements regarding: the transition of our business strategically and organizationally from serving a large number of relatively low volume customers across diversified markets and geographies to serving a small number of relatively large volume customers, typically concentrated in computing and communications; the level of customer orders overall and, in particular, from large customers and the delivery lead times associated therewith; the financial and operational impact of customer changes to shipping schedules; the derivation of a portion of our sales in each quarter from orders booked in the same quarter; our ongoing development of power conversion architectures, switching topologies, packaging technologies, and products; our plans to invest in expanded manufacturing capacity and the timing thereof; our belief regarding currency risk being mitigated because of limited foreign exchange fluctuation exposure; our continued success depending in part on our ability to attract and retain qualified personnel; our belief cash generated from operations and the total of our cash and cash equivalents will be sufficient to fund operations for the foreseeable future; our intentions regarding the declaration and payment of cash dividends; our intentions regarding protecting our rights under our patents; and our expectation that no current litigation or claims will have a material adverse impact on our financial position or results of operations. These statements are based upon our current expectations and estimates as to the prospective events and circumstances that may or may not be within our control and as to which there can be no assurance. Actual results could differ materially from those implied by forward-looking statements as a result of various factors, including our ability to: develop and market new products and technologies cost effectively and on a timely basis; leverage our new technologies in standard products to promote market acceptance of our new approach to power system architecture; leverage design wins into increased product sales; continue to meet requirements of key customers and prospects; enter into licensing agreements increasing our market opportunity and accelerating market penetration; realize significant royalties under such licensing agreements; achieve sustainable bookings rates for our products across both markets and geographies; improve manufacturing and operating efficiencies; successfully enforce our intellectual property rights; successfully defend outstanding litigation; hire and retain key personnel; and maintain an effective system of internal controls over financial reporting. including our ability to obtain required financial information for investments on a timely basis, our ability to assess the value of assets, including illiquid investments, and the accounting therefor. These and other factors that may influence actual results are described in this Annual Report on Form 10-K, including but not limited to those described under Part I, Item I Business, under Part I, Item 1A Risk Factors, under Part I, Management s Discussion and Analysis of Financial Condition and Results of Operations . Legal Proceedings, and under Part II, Item 7 The discussion of our business contained herein, including the identification and assessment of factors that may influence actual results, may not be exhaustive. Therefore, the information presented should be read together with other documents we file with the Securities and Exchange Commission from time to time, including Forms 10-Q and 8-K, which may supplement, modify, supersede or update the factors discussed in this Annual Report on Form 10-K. We do not undertake any obligation to update any forward-looking statements as a result of future events or developments, except as required by law.

ITEM 1. BUSINESS Overview

We design, develop, manufacture and market modular components and complete systems for converting, regulating, and controlling electric current. In electrically-powered devices utilizing Alternating Current (AC) voltage from a primary AC source (for example, a wall outlet), a power system converts AC voltage into the

stable Direct Current (DC) voltage necessary to power subsystems and/or individual applications or loads . In many electronic devices, this DC voltage may be further converted to one or more lower voltages required by a range of loads. In equipment utilizing DC voltage from a primary DC source (for example, a generator or battery), the initial DC voltage frequently requires further conversion to one or more voltages. Because numerous applications requiring different DC voltages and varied power ratings may exist within an electronic device, and system power architectures themselves vary, we offer an extensive range of products and accessories in numerous application-specific configurations.

Our website, www.vicorpower.com, sets forth detailed information describing all of products and the applications for which they may be used. The information contained on our website is not a part of, nor incorporated by reference into, this Annual Report on Form 10-K and shall not be deemed filed under the Exchange Act.

We were incorporated in Delaware in 1981. Shares of our Common Stock were listed on the NASDAQ National Market System in April 1990 under the ticker symbol VICR, and we completed an initial public offering of our shares in May 1991.

Market Background and Our Strategy

The global merchant market for AC-DC and DC-DC power conversion solutions is highly fragmented and made up of many large, diversified manufacturers, as well as many more, smaller manufacturers focused on specialized products or narrowly defined market segments or geographies. The overall market, including those segments in which we compete, are characterized by rapid commoditization and intense price competition.

Our products are sold worldwide to customers ranging from smaller, independent manufacturers of highly specialized electronic devices to larger original equipment manufacturers (OEMs) and their contract manufacturers. Beginning in 2011, we began to shift our focus toward higher volume opportunities with these larger OEMs and their contract manufacturers. We serve customers across a range of industries and geographies.

Since our founding, our strategy has been characterized by differentiation based on superior product performance. We have emphasized innovations in technologies, product design, and packaging. Much of our differentiation has been based on proprietary implementations of high frequency, soft switching topologies enabling DC-DC converter modules that are smaller and more efficient than conventional alternatives and, therefore, less vulnerable to commoditization pressures.

We offer a comprehensive range of component-level building blocks to configure a power system specific to a customer s needs. Since introducing and popularizing the encapsulated brick during the 1980s, our product focus has been on high performance DC-DC switching converters, which provide the transformation, regulation, isolation, filtering, and/or input protection necessary to power and protect sophisticated electronic loads. A secondary and highly complementary product strategy has been to vertically integrate our component-level building blocks into complete power systems representing turnkey AC-DC and DC-DC solutions for our customers power needs. We target markets and applications for which the high conversion efficiency (i.e., the ratio of output power in watts to the power consumed by the device) and high power density (i.e., the amount of power in watts divided by the volume of the device) of our products are well suited.

The market for power supplies and their enabling components regularly evolves in response to advancing technologies and corresponding changes in customer requirements. Throughout our history, we have modified our strategy to adapt to evolving market challenges and opportunities, leveraging our strength in research and development. In response to current trends and changes in customer requirements, we are implementing a strategy addressing both the realities of today s power conversion marketplace and our vision of its long-term direction. Our balanced strategy involves maintaining a profitable legacy business in bricks and brick-based system solutions, while investing in the next generation of power management components incorporating innovations of our VI ChipTM and Picor[®] subsidiaries.

Our product strategy has been characterized by differentiation based on superior product performance, notably highly differentiated conversion efficiency and power density. Our initial market focus in the 1980s and 1990s was on the rapidly expanding telecommunications infrastructure market, within which we had established a leadership position based on early innovations, many of which were patented. However, during the 2000s, in response to the sudden and sustained decline of the telecommunication infrastructure market, the expiration of many of our patents, the consolidation of numerous competitors, and the commoditization pressures of globalization, we shifted our strategy to emphasize mass customization , using highly automated, efficient, domestic manufacturing to serve customers with product design and performance requirements, across a wide range of worldwide market segments, that could not be met by high volume oriented competitors. This strategy remains the basis upon which our Brick Business Unit (BBU) competes.

We believe that traditional power architectures, components, and systems may not provide the performance necessary to address tomorrow s power system requirements, given trends toward lower bus and load voltages, higher currents, more and diverse on-board voltages, and the higher speeds and performance demands of numerous complex loads, as well as the importance of the efficiency with which architectures, components, and systems address these requirements. We also realized the rapid commoditization and intense price competition characterizing the broader market ultimately would impact the performance of our legacy business in bricks and brick-based systems. Based on this outlook, we established the VI Chip and Picor subsidiaries to focus on development of a new approach to power conversion and power management that would reestablish our technological leadership, while providing significant growth opportunities. VI Chip and Picor are offering highly differentiated, highly integrated products that address high volume opportunities. Our goal is to avoid commoditization and pricing pressures by maintaining technological leadership and a compelling value proposition.

Our strategy is supported by our long-standing commitment to research and development of power conversion technologies, advanced packaging and manufacturing, and innovative products. We incurred approximately \$39,900,000, \$38,800,000, and \$39,000,000 in research and development expenses in 2013, 2012, and 2011, respectively, representing approximately 20.0%, 17.7%, and 15.4% of revenues in 2013, 2012, and 2011, respectively. We intend to maintain spending in support of research and development expenses at a level, as a percentage of revenues, consistent with prior periods.

Business Segments

Our business segments are organized by key product lines supporting our balanced strategy:

Brick Business Unit

The BBU segment, our largest, designs, develops, manufactures, and markets power modules in three formats: our well-established encapsulated modules, known as bricks; our line of modular power converters incorporating our VI Chip modules and complementary circuitry into thermally advantageous packaging, which we market as VI BrickTM modules; and our line of intermediate bus converters, also marketed under the VI Brick name, which are open-frame (i.e., not encapsulated) devices. The BBU also designs, develops, manufactures, and markets a line of configurable products, which are complete DC-input power systems assembled using our modular power components. The BBU also includes the operations of our WestcorTM division, which is focused only on AC-input configurable products, the operations of Vicor Custom PowerTM, which is our turnkey custom power solutions business, and Vicor Japan Company, Ltd. (VJCL), our majority-owned Japanese subsidiary.

Organized around and operating on a mass customization model, the BBU manufactures products based on customer specifications. We believe the BBU offers one of the broadest product lines in our industry, with many thousands of standard combinations of input voltage, output voltage, power level, and accessory components available. Mass customization, with an emphasis on manufacturing efficiency and ongoing cost reduction, allows the BBU, without the need for a significant investment in

finished goods inventory, to profitably serve the needs of low volume customers seeking module performance they may not be able to obtain from our larger, volume-oriented competitors. The BBU serves customers across a wide range of market segments, with concentrations in defense electronics, industrial automation and equipment, and rail transportation. While the BBU s customer base is highly fragmented, our diverse customer relationships and the broad range of applications into which our products are designed are typically long in duration. This, along with the breadth of market segments and geographies served, has contributed to the stability of the BBU s performance over the past decade. BBU segment revenue has been negatively impacted in recent years by continued weakness in the defense electronics sector, the continued recession in Europe and slower than expected growth from certain new product opportunities.

The BBU offers an extensive product line, with products well-established as important enabling components of conventional power systems architectures. Seven families of DC-DC converter modules are offered across a wide range of input voltage (10 to 425 volts DC) and output power (10 to 600 watts), allowing end users the ability to select easy to use power component products appropriate to their individual applications. The product families differ in maximum power ratings, performance characteristics, package size, and, in certain cases, characteristics specific to the targeted market. We also offer a range of complementary modules and accessories facilitating customer design of complete power systems. Utilizing our modular power components as core elements, we offer configurable products providing complete power solutions configured to a customer s specific needs. These near-custom products exploit the benefits and flexibility of our modular approach to offer a wider range of power levels at higher performance, higher power density, lower cost, and faster delivery than many competitive offerings. Configurable products are designed, developed and manufactured by the BBU, which offers a range of AC-DC and DC-DC configurable products, by its Westcor division, which focuses on high-power AC-DC configurable products, and by VJCL, which offers configurable products addressing the specific requirements of Japanese customers. The BBU s Vicor Custom Power business designs and manufactures low-volume, high value-add power supplies, utilizing, as is the case with our configurable business, our modular power components as core elements. These custom power supplies are designed to meet customers specific requirements, which are often associated with the harsh environments of aerospace and defense applications.

VI Chip Business Unit

This segment consists of VI Chip Corporation, a subsidiary of Vicor that designs, develops, manufactures, and markets a range of advanced power conversion components, including those that enable our Factorized Power ArchitectureTM (FPA), a power system architecture based on proprietary power conversion innovations embodied in a family of highly differentiated modules for implementation of FPA designs. We currently offer the BCM® (Bus Converter Module), an intermediate bus converter; the PRM® (Pre-Regulator Module), a non-isolated regulator; and the VTM® (Voltage Transformation Module), an isolated current multiplier. All three modules are offered in full (i.e., 32.5 by 22.0 by 6.73 mm) and half (i.e., 22.0 by 16.5 by 6.73 mm) sizes. As stated, the BBU offers these VI Chip modules in packages providing thermal advantages and containing complementary circuitry. It is in this packaging we offer the PFM® (Power Factor Module), an isolated AC-DC converter with power factor correction circuitry, and the VI Brick AC Front End module, which integrates filtering, rectification, and transient protection into a complete package.

During 2013, we introduced our latest VI Chip derivation, the ChiP (an acronym for Converter housed in Package), a product platform designed with the goal of setting best-in-class standards for the next generation of scalable power modules. While our original VI Chip modules were designed to facilitate FPA implementations, ChiP modules support all known power distribution architectures. We have designed the ChiP platform to have lower manufacturing costs than the original VI Chip module platform, thereby allowing us to offer highly differentiated products at competitive prices. We have also set forth a product roadmap that contemplates a much wider range of functions and input and output power levels than the original VI Chip module platform. This roadmap includes PFM, BCM, and VTM modules in ChiP packages, as well as the DCM® (Direct Current Module), an isolated DC-

DC converter. Package sizes range from 13 by 23 mm to 61 by 23 mm, with current capability up to 180 amps, voltage capability up 430 volts, and power capability up to 1,500 kilowatts. In addition, the ChiP platform allows for various complementary capabilities, such as telemetry and control features, along with other enabling circuitry, to be incorporated in the module or package. Our goal is to offer ChiP modules and solutions on a cents per watt basis near or equivalent to the prices of competitive product offerings, thereby presenting customers with a highly differentiated, compelling value proposition. In January 2014, we commercially released our first ChiP product, a bus converter module, targeted at datacenter, telecom, and industrial applications. This module, which measures 63 by 23 by 7.3 mm, supplies 1,200 kilowatts at 48 volts, with 98% peak efficiency, and offers power density we believe to be significantly greater than that of competing solutions. This product is capable of bi-directional operation, to support battery backup and renewable energy applications, and can be used in multi-unit parallel arrays to provide multi-kilowatt solutions.

VI Chip serves customers across a range of market segments, with concentrations in aerospace and defense electronics, computing (including the datacenter and supercomputer sub-segments), instrumentation and test equipment, and networking. We are also pursuing opportunities for VI Chip in solid state lighting and electric and hybrid vehicles. VI Chip s customer base is concentrated, with a small number of customers, whether OEMs or their contract manufacturers, representing the majority of demand during any period. We expect the broader product offerings enabled by our ChiP platform will allow us to broaden and diversify the VI Chip customer base.

Picor Business Unit

This segment consists of Picor Corporation, a subsidiary of Vicor. Picor is a fabless (i.e., it utilizes third parties to manufacture its products) designer, developer, and marketer of high performance integrated circuits and related products for use in a variety of power system applications. Picor develops these products to be incorporated into Vicor s products, to be sold as a complement to our products, or for sale to third parties for separate applications. Much of the differentiation of our BBU and VI Chip products has been a result of implementation of our power conversion innovations in proprietary microcontroller circuitry.

In 2012, Picor accelerated the development of an expanded merchant product line, introducing the first products in a new line of Cool-PowerTM non-isolated, point of load regulators incorporating proprietary soft switching topology and Picor s high performance silicon controller architecture. We currently offer 27 variants of our buck (i.e., the device lowers voltage) product, and plan to introduce boost (i.e., the device increases voltage) and buck/boost products. We believe these high performance regulators provide best in class power efficiency, allowing customers to deploy more efficient power distribution designs based on higher input voltages. We believe these products will be an important contributor to our long-term success, as they represent a meaningful element of strategy of offering differentiated solutions across all customer needs, complementing our other component offerings, thereby allowing us to offer a complete solution from AC conversion to DC transformation and regulation at the point of load.

To date, Picor s production largely has been consumed internally. With the recent emphasis on an expanded merchant strategy, Picor is more frequently collaborating with VI Chip in pursuit of high volume opportunities involving highly differentiated solutions utilizing VI Chip and Picor modules. Picor also is pursuing merchant opportunities on its own, as well as working closely with our stocking distribution partners, in pursuit of stand-alone, high volume opportunities. Given the applications for which its merchant products are well-suited, Picor s customers are concentrated in the datacenter and supercomputing segments of the computing market.

See Note 16 Segment Information to the Consolidated Financial Statements for certain financial information by business segment.

Applications, Customers, and Backlog

The applications in which our products are used are in the higher-performance, higher-power segments of the power systems market. As stated, the BBU has customers concentrated in defense electronics, industrial automation and equipment, and rail transportation, while VI Chip and Picor have customers concentrated in aerospace and defense electronics, computing (including the datacenter and supercomputer sub-segments), instrumentation and test equipment, and networking. With our strategic emphasis on larger, high-volume customers, we expect to experience a greater concentration of sales among a relative few customers.

For the year ended December 31, 2013, two customers (NuPower Electronic, Ltd. and Tech-Front Computer, Ltd.) accounted for approximately 10.9% and 10.1% of net revenues, respectively, and our five largest customers represented approximately 29.2% of net revenues. For the year ended December 31, 2012, one customer (Foo Kee Electronics, Ltd.) accounted for approximately 10.1% of net revenues, and our five largest customers represented approximately 25.4% of net revenues. For the year ended December 31, 2011, one customer (AcBel Polytech, Inc.) accounted for approximately 14.9% of net revenues, and our five largest customers represented approximately 32.2% of net revenues.

International revenues, as a percentage of total revenues, were approximately 59.5% in 2013, 51.1% in 2012, and 56.9% in 2011, respectively. International sales have increased from historical levels primarily due to higher volumes of shipments to foreign contract manufacturers utilized by domestic OEMs. As we have substantially expanded our sales and customer support activities and resources internationally, particularly in Asia, we expect international sales to continue to increase as a percentage of total revenue.

As of December 31, 2013, we had a backlog of approximately \$44,659,000, compared to \$31,405,000 as of December 31, 2012. Backlog consists of orders for products for which shipment is scheduled within the following 12 months, subject to normal customer cancellation policies. A portion of our revenue in any quarter is, and will continue to be, derived from orders booked and shipped in the same quarter. Historically, the portion of sales booked and shipped in the same quarter has represented less than one-fifth of our quarterly revenue, as we typically only build product to customer specifications upon receipt of a purchase order. Products sold by the BBU typically have a lead time (i.e., the period between receipt of an order and shipment of the product) of less than six weeks. Products sold by VI Chip typically have a lead time in excess of 10 weeks, although lead times have shortened during periods of sustained volume. Picor, given its fabless model, builds inventories based on expected customer demand and orders from stocking distribution partners. As such, the portion of sales booked and shipped in the same quarter can vary considerably depending on the relative volumes of BBU, VI Chip, and Picor products booked within the quarter.

Competition

The global power conversion industry is highly competitive. The fragmented competitive landscape is made up of many large, diversified manufacturers, as well as many more, smaller manufacturers focused on specialized products or narrowly defined market segments or geographies. Numerous competitors in the market segments in which we compete have significantly greater financial and marketing resources and longer operating histories than we do. Generally, competition is based on product price, product performance, design flexibility (i.e., ease of use), and product availability.

As we shift our strategy to focus more on higher volume OEM opportunities, we are emphasizing the differentiation of our products—superior performance, advantageous design flexibility, and lower total cost of ownership, as well as the integration of our products into complete or near-complete solutions for customers—power conversion requirements. However, in each of our three business segments, because of the differences in products, targeted customers and applications, and the role of distributors in serving customers, competitive characteristics can vary.

With the BBU, our strategy continues to be based largely on a high level of responsiveness to customer requirements enabled by our mass customization capabilities across what we believe to be among the broadest

product lines in the industry. We believe the BBU has a strong competitive position, particularly within a highly fragmented customer base requiring relatively low volumes of high density power system solutions across a variety of input-output configurations. We believe the primary competitive variables in the market segments in which the BBU competes are price and performance, but, along with our mass customization model, we seek to offer differentiating levels of pre-sale and post-sale technical support. The competitive landscape in which the BBU operates is extremely fragmented, but dominated by a number of large global manufacturers possessing financial, operational, and marketing resources far greater than the Company.

With VI Chip, our strategy has been based largely on highly differentiated products offered to customers (e.g., global OEMs in computing, networking, and test and measurement, along with large customers in the defense electronics segment) well-positioned to benefit from the advantages offered by our products. VI Chip currently competes with vendors of switched power component solutions, many of which are the manufacturers with which the BBU competes. Because of its pursuit of higher volume opportunities, VI Chip encounters longer sales cycles and more frequent competition from large global manufacturers in the industry than does the BBU. Further, VI Chip s competitive landscape has broadened to include vendors of solid state (i.e., semiconductor-based) solutions, many of which have significantly broader product lines, well-established customer relationships, and extensive financial, operational, and marketing resources.

Picor also competes with global suppliers of integrated circuits for power conversion applications, many of which have significantly greater financial, operational, and marketing resources, as well as significantly broader product and solution offerings. We believe Picor is developing a strong competitive position based on proprietary topologies, innovative semiconductor design, and SiP packaging. Based on Picor s expanding product roadmap, we anticipate Picor will experience more direct competition with these larger suppliers, as we target their customers with our increasingly silicon-centric power conversion solutions, frequently complemented by VI Chip and VI Brick modules in an integrated power system solution.

Patents and Intellectual Property

An important element of our strategy is to protect our competitive leadership with domestic and foreign patents and patent applications that cover our products and much of their enabling technologies. We believe our competitive leadership is further protected by proprietary trade secrets associated with our use of certain components and materials of our own design, as well as our significant experience with manufacturing, packaging, and testing these complex devices.

We believe our patents afford advantages by building fundamental and multilayered barriers to competitive encroachment upon key features and performance benefits of our principal product families. Our patents cover the fundamental switching topologies used to achieve the performance attributes of our converter product lines; converter array architectures; product packaging design; product construction; high frequency magnetic structures; as well as automated equipment and methods for circuit and product assembly.

In the United States, we have been issued 110 patents, which expire between 2014 and 2031. We also have a number of patent applications pending in the United States, Europe, and Asia. We intend to vigorously protect our rights under these patents. Although we believe patents are an effective way of protecting our technology, there can be no assurances our patents will prove to be enforceable.

In addition to generating revenue from product sales, we seek to license our intellectual property. In granting licenses, we generally retain the right to use our patented technologies and manufacture and sell our products in all licensed geographic areas and fields of use. Licenses are granted and administered through our wholly-owned subsidiary, VLT, Inc., which owns our patents. Revenues from licensing arrangements have not exceeded 10% of our consolidated revenues in any of the last three fiscal years.

Our Organization

We are headquartered in Andover, Massachusetts, where our manufacturing facilities are located. VI Chip Corporation also is headquartered in Andover, Massachusetts. Picor Corporation is headquartered in North

Smithfield, Rhode Island. VLT, Inc. is our wholly-owned licensing subsidiary. VICR Securities Corporation is a subsidiary established to hold certain investment securities. Our Westcor division has a design and assembly facility in Sunnyvale, California. Our six Vicor Custom Power locations are geographically distributed around the United States. VJCL, which is engaged in sales and customer support activities exclusively for the Japanese market, is headquartered in Tokyo, Japan.

As of December 31, 2013, we had 966 full time employees and 36 part time employees. None of our employees are subject to a collective bargaining agreement. We believe our continued success depends, in part, on our ability to attract and retain qualified personnel. Although there is strong demand for qualified personnel, we have not to date experienced difficulty in attracting and retaining sufficient engineering and technical personnel to meet our needs (see Part I, Item 1A Risk Factors).

Sales and Marketing

In 2013, we continued to implement changes to our Sales and Marketing organization, consistent with our 2011 decision to adopt a unified go-to-market strategy and expanded marketing communications effort. During the year, and continuing into the first quarter of 2014, we reorganized our domestic organization, adopting the Technical Support Center model we utilize internationally. Sales, application engineering, and customer support activities are coordinated in Technical Support Centers located in our Andover, Massachusetts, headquarters, Lombard (Chicago), Illinois; and Sunnyvale, California, co-located with our Westcor division. Customer support, market oversight, and management of our foreign distributors takes place in our Technical Support Centers in the following worldwide locations: Hong Kong, China; Shanghai, China; Camberley (London), England; Munich, Germany; Bangalore, India; and Milan, Italy. During 2013, we established a sales office in Seoul, South Korea, and redirected resources from our location in Paris, France, to our Technical Support Centers in Munich and Milan. The activities of all of the above named entities are consolidated in the financial statements presented herein.

Because of the technically complex nature of our products, we maintain an extensive staff of Field Applications Engineers to support our sales activities. Field Application Engineers provide direct technical sales support worldwide by reviewing new applications and technical matters with existing and potential customers, as well as our distributors. Product Line Engineers, located in our Andover headquarters, support Field Application Engineers assigned to all of our Technical Support Centers.

Beginning in 2013, we redirected and expanded Vicor ExpressTM, our in-house distribution group serving customers in the European Union not served by our regional distributors. We are redirecting Vicor Express to focus on customer lead generation through telesales, more robust support of small-volume customers, and close coordination of distributor activities. Similar telesales and customer support efforts are being established in our new domestic Technical Support Centers. Our subsidiary, Vicor B.V., domiciled in the Netherlands, will continue to act as importer of record for direct shipments to customers in the European Union.

In addition to our own sales efforts, we also serve customers through a multi-tiered distribution model. We traditionally have sold our products in North America and South America through a network of independent sales representative organizations and in other areas of the world through independent non-stocking distributors. We announced a stocking distribution relationship with Future Electronics Incorporated in June 2011 and with Digi-Key Corporation in January 2012. We anticipate these relationships will become meaningful contributors to our long-term revenue.

Vicor also reaches customers via our electronic commerce capability through our website, www.vicorpower.com. Registered customers in the U.S., Canada, and certain European countries are able to purchase prototype quantities of selected products online. We expanded our online capabilities in 2013 and intend to enhance existing and add new web-based engineering tools in 2014.

We generally sell our products on the basis of our standard terms and conditions, and we most commonly warrant our products for a period of two years. In a limited number of circumstances, we have entered into supply contracts with certain high-volume customers calling for extended warranty terms.

Manufacturing, Quality Assurance, and Supply Chain Management
Our BBU and VI Chip manufacturing facilities are located in Andover, Massachusetts, where we are headquartered. Picor, given its fabless model, outsources manufacturing, packaging, and testing of its products.

Our primary manufacturing processes consist of assembly of electronic components onto printed circuit boards, automatic testing of components, wave, reflow and infrared soldering of assembled components, encapsulation or over-molding of converter subassemblies, final environmental stress screening of certain products, and product inspection and testing using automated equipment. These processes are largely automated, but their labor components require relatively high levels of skill and training.

We continue to pursue a manufacturing strategy based upon the continuous improvement of product quality, volume throughput, and reduced manufacturing costs. Product quality and reliability are critical to our success and, as such, we emphasize quality and reliability in our design and manufacturing activities. We follow industry best practices in manufacturing and are compliant with ISO 9001 certification standards (as set forth by the International Organization for Standardization). Our quality assurance practices include rigorous testing and, as necessary, burn-in (i.e., extended operation of a product to confirm performance) of our products using automated equipment.

We intend to make continuing investments in automated manufacturing equipment, particularly for our ChiP platform. Based on current estimates of near-term manufacturing volumes, we expect we will invest between \$5 million and \$10 million during 2014 for expansion of our ChiP manufacturing capacity in order to meet anticipated capacity requirements.

Components and materials used in our products are purchased from a variety of vendors. Most of the components are available from multiple sources, whether directly from suppliers or indirectly through distributors. In instances of single source items, we maintain levels of inventories we consider to be appropriate to enable meeting the delivery requirements of customers. Incoming components, assemblies, and other parts are subjected to several levels of inspection procedures, and we maintain robust data on our inventories in order to support our quality assurance procedures. Picor, given its fabless model, relies on a limited number of wafer foundries and suppliers of packaging and test services.

Available Information

We maintain a website with the address www.vicorpower.com and make available free of charge through this website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the Exchange Act), as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission. We also make available on our website our Code of Business Conduct and Ethics, as well as the charters for the Audit and Compensation Committees of our Board of Directors.

While our website sets forth extensive information, including information regarding our products and the applications in which they may be used, such information is not a part of, nor incorporated by reference into, this Annual Report on Form 10-K and shall not be deemed filed under the Exchange Act.

ITEM 1A. RISK FACTORS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Actual results could differ materially from those projected in the forward-looking statements as a result of, among other factors, the risk factors set forth below.

Our future operating results are difficult to predict and are subject to fluctuations.

Our operating results, including revenues, gross margins, operating expenses and net income (loss), have fluctuated on a quarterly and annual basis. We have incurred net losses for five consecutive quarters, and cannot predict when, or if, we will return to profitability. Our future operating results may be materially affected by a number of factors, many of which are beyond our control, including:

the timing of our new product introductions and our ability to meet customer expectations for timely delivery of fully qualified products;

changes in customer demand for our current products and for end products incorporating our products, as well as our ability to respond efficiently to such changes in demand, including changes in order lead times and the volumes of product for which orders are received and the product shipped within an individual quarter;

our ability to manage our supply chain, inventory levels, and manufacturing capacity in the event of delays or cancellation of significant customer orders;

our ability to effectively coordinate changes in the mix of products we manufacture and sell, while managing our ongoing transition in organizational focus from traditional brick power components to our new VI Chip, VI Brick and Picor products;

our ability to provide and maintain a high level of support to an increasing number of demanding, high volume customers;

the ability of our third party suppliers, subcontractors and manufacturers to supply us with sufficient quantities of high quality products or components on a timely basis;

the effectiveness of our efforts to reduce product costs and manage operating expenses;

our ability to utilize our manufacturing facilities at efficient levels, maintaining production capacity and manufacturing yields;

the timing of new product introductions or other competitive actions (e.g., product price reductions) by our competitors;

the ability to hire, retain and motivate qualified employees to meet the demands of our customers;

intellectual property disputes;

potential significant litigation-related costs;

adverse economic conditions in the United States and those international markets in which we compete;

adverse budgetary conditions within the U.S. government, particularly the Department of Defense, which continue to limit spending on current and anticipated programs into which we sell or anticipate to sell our products;

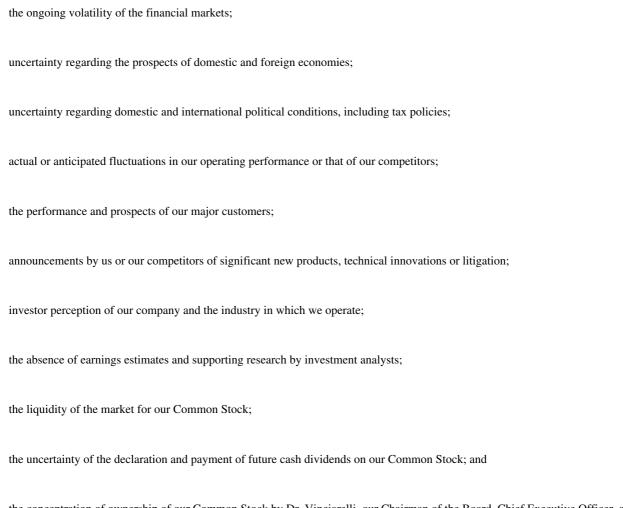
costs related to compliance with increasing worldwide governance, quality, environmental, and other regulations; and

the effects of events outside of our control, including natural disasters, public health emergencies, terrorist activities, international conflicts, information security breaches, communication interruptions, and other *force majeure*.

As a result of these and other factors, we cannot assure you we will not experience significant fluctuations in future operating results on a quarterly or annual basis. In addition, if our operating results do not meet the expectations of investors, the market price of our Common Stock may decline.

Our stock price has been volatile and may fluctuate in the future.

Because of the factors set forth below, among others, the trading price of our Common Stock has fluctuated and may continue to fluctuate significantly:



the concentration of ownership of our Common Stock by Dr. Vinciarelli, our Chairman of the Board, Chief Executive Officer, and President.

We do not actively communicate with investment analysts and, as a consequence, there are no earnings estimates or supporting research coverage of Vicor and our Common Stock. While we seek to be transparent in our financial reporting, public statements, and related disclosures, the absence of research coverage may limit investor interest in our Common Stock. Because our operating results have fluctuated on a quarterly and annual basis, investors may have difficulty in assessing our current and future performance.

In the past, we have declared and paid cash dividends on our Common Stock. The payment of dividends is based on the periodic determination by our Board of Directors that we have adequate capital to fund anticipated operating requirements and that excess cash is available for distribution to shareholders via a dividend. We have no formal policy regarding dividends and, as such, investors cannot make assumptions regarding the possibility of future dividend payments nor the amounts and timing thereof.

The ownership of our Common Stock is concentrated between Dr. Vinciarelli and a limited number of institutional investors. Dr. Vinciarelli owned, as of December 31, 2013, 9,675,480 shares of our Common Stock, as well as 11,023,648 shares of our Class B Common Stock

(convertible on a one-for-one basis into Common Stock), together representing 54.8% of total issued and outstanding shares. Accordingly, the market float for our Common Stock and average daily trading volumes are relatively small, which can negatively impact investors ability to buy or sell shares of our Common Stock in a timely manner.

Dr. Vinciarelli owns 93.7% of our issued and outstanding Class B shares, which possess 10 votes per share. Dr. Estia J. Eichten, a member of our Board of Directors, owns the majority of the balance of Class B shares issued and outstanding. As such, Dr. Vinciarelli, controlling in aggregate 83.1% of our outstanding voting securities, has effective control of our governance.

The ongoing uncertainty in global economies could materially and adversely affect our business and consolidated operating results.

Further disruption and deterioration of global economic conditions may reduce customer purchases of our products, thereby reducing our revenues and earnings. In addition, such adverse conditions may, among other things, result in increased price competition for our products, increased risk of excess and obsolete inventories, increased risk in the collectability of our accounts receivable from our customers, increased risk in potential reserves for doubtful accounts and write-offs of accounts receivable, and higher operating costs as a percentage of revenues.

We compete with many companies possessing far greater resources.

Some of our competitors have greater financial, manufacturing, technical, sales and marketing resources than we have. We compete with domestic and foreign manufacturers of integrated power supplies and power conversion components. With the growth of our VI Chip and Picor product lines, we increasingly are competing with global manufacturers of power management products with far larger organizations and broader product lines. Competition is generally based on design and quality of products, product performance, features and functionality, and product pricing, availability and capacity, with the relative importance of these factors varying among products, markets and customers. Existing or new competitors may develop products or technologies that more effectively address the demands of our customers and markets with enhanced performance, features and functionality or lower cost. If we fail to develop and commercialize leading-edge technologies and products that are cost effective and maintain high standards of quality, and introduce them to the market on a timely basis, our competitive position and results of operations could be materially adversely affected.

Our future success increasingly depends upon our ability to develop and market differentiated, leading-edge power conversion products for larger customers, potentially contributing to lengthy product development and sales cycles that may result in significant expenditures before revenues are generated. Our future operating results are dependent on the growth in such customers businesses and on our ability to profitably develop and deliver products meeting customer requirements.

The power system industry and the industries in which many of our customers operate are characterized by intense competition, rapid technological change, product obsolescence and price erosion for mature products, each of which could have an adverse effect on our results of operations. We are following a strategy based on the development of differentiated products addressing what we believe to be the long-term limitations of traditional power architectures. The development of such new products is often a complex, time-consuming and costly process involving significant investment in research and development, with no assurance of return on investment. There can be no assurance we will be able to develop and introduce new and improved products in a timely or efficient manner or new and improved products, if developed, will achieve market acceptance.

Our future success depends substantially upon customer acceptance of our innovative products. As we have been in the early stages of market penetration for these products, we have experienced lengthy periods during which we have focused our product development efforts on the specific requirements of a limited number of large customers, followed by further periods of delay before meaningful purchase orders are received. These lengthy development and sales cycle times increase the possibility a customer may decide to cancel or change product plans, which could reduce or eliminate our sales to that customer. As a result, we may incur significant product development expenses, as well as significant sales and marketing expenses, before we generate the related revenues for these products. Furthermore, we may never generate the anticipated revenues from a product after incurring such expenses if our customer cancels or changes its product plans.

We are shifting our market strategy to focus on larger opportunities with global manufacturers. Our growth is therefore dependent on the growth in the sales of these customers products as well as their own development of new products. If we fail to anticipate changes in our customers businesses and their changing product needs or successfully identify and enter new markets, our results of operations and financial position could be negatively

impacted. We cannot assure you the markets we serve will grow in the future, our existing and new products will meet the requirements of these markets, or we can maintain adequate gross margins or profits in these markets.

Further reductions of spending by the U.S. Department of Defense or a pronounced shift in the nature of such spending may negatively influence our operating results.

Customers in the defense electronics segment historically have contributed a meaningful portion of our revenue, primarily in the BBU. However, shifts in Department of Defense spending priorities and ongoing budget constraints have contributed to a decline in such revenue as a percentage of our consolidated revenue. Defense electronics customers have represented the majority of revenue for Vicor Custom Power, which designs and manufactures sophisticated power solutions for primarily C4I (Command, Control, Communications, Computing, and Intelligence) applications. Given uncertainty regarding project funding and the overall federal budget, we may experience further declines in orders and revenue from defense contractors.

Our operating results recently have been influenced by a limited number of customers, and our future results may be similarly influenced.

Since it was established, our VI Chip subsidiary has derived a substantial portion of its revenue from one customer, whether through sales directly to the customer or indirectly to the customer is contract manufacturers. Similarly, our Picor subsidiary has derived a substantial portion of its third-party revenue from a limited number of customers. This concentration of revenue is a reflection of the relatively early stage of adoption of the technologies, architectures and products offered by these subsidiaries, and their targeting of market leading innovators as initial customers. Our current sales and marketing strategy is, in part, focused on accelerating the adoption of VI Chip and Picor products by a diversified customer base across a number of identified market segments. However, we cannot assure you our new strategy will be successful and such diversification of customers will be achieved.

Revenue of the VI Chip segment and the Vicor Custom Power business within the BBU has come from either a limited number of customers or from a limited number of significant customer programs. A decline in or deferral of demand from one or several of these large customers or the discontinuation of certain programs, or declines in our other end-user markets in general, could have a material adverse impact on our results of operations.

We rely on third-party vendors and subcontractors for supply of components and assemblies and, therefore, cannot control the availability or quality of such components and assemblies.

We depend on third party vendors and subcontractors to supply components and assemblies used in our products, some of which are supplied by a single vendor, and have experienced shortages of certain semiconductor components, incurred additional and unexpected costs to address the shortages, and experienced delays in production and shipping. If suppliers or subcontractors cannot provide their products or services on time or to our specifications, we may not be able to meet the demand for our products and our delivery times may be negatively affected. In addition, we cannot directly control the quality of the products and services provided by third parties. In order to grow revenue, we likely will need to identify and qualify new suppliers and subcontractors to supplant or replace existing suppliers and subcontractors. This may cause disruptions in production, delays in shipping, or increases in prices paid to third-parties.

We may not be able to procure necessary key components for our products, or we may purchase excess raw material inventory or unusable inventory, possibly impacting our operating results.

The power systems industry, and the electronics industry as a whole, can be subject to pronounced business cycles and otherwise subject to sudden and sharp changes in demand. Our success, in part, is dependent on our ability to forecast and procure inventories of raw materials and components to match production schedules and customer delivery requirements. Many of our products, notably VI Chip modules and Picor components, require

raw materials supplied by a limited number of vendors and, in some instances, a single vendor. During certain periods, key materials required to build our products may become unavailable in the timeframe required for us to meet our customers—needs. Our inability to secure sufficient materials and components to build products for our customers has, in the past, negatively impacted our sales and operating results and could do so again. We may choose to mitigate this risk by increasing the levels of inventory for certain raw materials and components. Such increased inventory levels may increase the potential risk for excess and obsolescence should our forecasts fail to materialize or if there are negative factors impacting our customers—end markets, leading to order cancellation. If we purchase excess inventory or determine certain inventory is unusable, we may have to record additional inventory reserves or write-off the unneeded inventory, which could have an adverse effect on our gross margins and on our operating results.

Our revenues, profits, and cash flow may not increase sufficiently to offset the expense of additional production capacity.

We have made significant additions to our manufacturing equipment and capacity over the past several years, including equipment for both our new VI Chip products and for BBU products. If overall revenue levels do not increase enough to offset the increased fixed costs, or if there is deterioration in our overall business, our future operating results could be adversely affected. In addition, asset values could be impaired if the additional capacity is underutilized for an extended period of time, resulting in impairment charges that could have a material adverse effect on our financial position and results of operations.

If we were unable to use our manufacturing facility in Andover, Massachusetts, we would not be able to manufacture for an extended period of time.

All modular power components, whether for direct sale to customers or for sale to our subsidiaries and divisions for incorporation into their respective products, are manufactured at our Andover, Massachusetts, production facility. Substantial damage to this facility due to fire, natural disaster, power loss or other events could interrupt manufacturing. Any prolonged inability to utilize all or a significant portion of this facility could have a material adverse effect on our results of operations.

We are exposed to foreign economic, political and other risks.

For the years ended December 31, 2013, 2012 and 2011, our revenues from sales outside the United States were 59.5%, 51.1%, and 56.9%, respectively, of the Company s total revenues. We expect international sales will continue to be a significant component of total sales, since many of the global manufacturers we target as customers increasingly utilize offshore contract manufacturers and rely upon those contract manufacturers to place orders directly with us. We also expect international revenue from our distributors to increase.

While our currency risks are limited, as our sales are denominated in dollars worldwide, with the exception of Japan, our international activities expose us to special risks including, but not limited to, regulatory requirements, economic and political instability, transportation delays, foreign currency controls and market fluctuations, trade barriers and tariffs, and foreign exchange rates. In addition, our international customers business may be negatively affected by the ongoing crisis in the global credit and financial markets. Sudden or unexpected changes in the foregoing could have a material adverse effect on our operating results.

We may be unable to adequately protect our proprietary rights, which may limit our ability to compete effectively.

We operate in an industry in which the ability to compete depends on the development or acquisition of proprietary technologies that must be protected to preserve the exclusive use of such technologies. We devote substantial resources to establish and protect our patents and proprietary rights, and we rely on patent and intellectual property law to protect such rights. This protection, however, may not prevent competitors from independently developing products similar or superior to our products. We may be unable to protect or enforce

current patents, may rely on unpatented technology that competitors could restrict, or may be unable to acquire patents in the future, and this may have a material adverse effect on our competitive position. In addition, the intellectual property laws of foreign countries may not protect our rights to the same extent as those of the United States. We have been and may need to continue to defend or challenge patents. We have incurred and expect to incur significant costs in and devote significant resources to these efforts which, if unsuccessful, may have a material adverse effect on our operating results and financial position.

We face intellectual property infringement claims that could be disruptive to operations and costly to resolve and may encounter similar infringement claims in the future.

The power supply industry is characterized by vigorous protection and pursuit of intellectual property rights. We have in the past and may in the future receive communications from third parties asserting that our products or manufacturing processes infringe on a third party s patent or other intellectual property rights. Such assertions, if publicly disclosed, have in the past and may in the future inhibit the willingness of potential customers to purchase certain of our products. In the event a third party makes a valid intellectual property claim against us and a license is not available to us on commercially reasonable terms, or at all, we could be forced to either redesign or stop production of products incorporating that technology, and our operating results could be materially and adversely affected. In addition, litigation may be necessary to defend us against claims of infringement, and this litigation could be costly and divert the attention of key personnel. An adverse outcome in these types of matters could have a material adverse impact on our operating results and financial condition.

In January 2011, we were named, along with our customer, Cisco Systems, Inc., in a complaint for patent infringement filed by SynQor, Inc. (see Part I Item 3 Legal Proceedings). We have filed a counterclaim asserting SynQor has engaged in unfair and deceptive trade practices and tortiously interfered with our ability to sell products. We also maintain SynQor s claims are baseless and the patents in question are invalid and were obtained through inequitable conduct before the U.S. Patent and Trademark Office. However, we believe SynQor s actions have inhibited our ability to sell our products to potential customers fearful of the threat of litigation by SynQor. Pre-trial proceedings began in 2013, and the trial is scheduled to begin in July 2014. We have incurred substantial legal fees defending this matter and expect to continue to do so in 2014. Neither we nor our counsel currently has sufficient information upon which to base any conclusion regarding the outcome of these legal proceedings.

Any expenses or liability resulting from litigation could adversely affect our operating results and financial condition.

From time to time, we may be subject to claims or litigation, including intellectual property litigation as described elsewhere in this Annual Report on Form 10-K. Any such claims or litigation may be time-consuming and costly, divert management resources, require us to change our services, require us to credit or refund subscription fees, or have other adverse effects on our business. Any of the foregoing could have a material adverse effect on our operating results and could require us to pay significant monetary damages. In addition, we receive and must respond on a periodic basis to subpoenas from law enforcement agencies seeking information in connection with criminal investigations. While we have in place a procedure to respond to such subpoenas, any failure on our part to properly respond to such subpoena requests could expose us to litigation or other proceedings and adversely affect our business, financial condition, and operating results.

The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. An estimated loss from a loss contingency such as a legal proceeding or claim is accrued by a charge to income if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. Disclosure of a contingency is required if there is at least a reasonable possibility that a loss has been incurred. In determining whether a loss should be accrued, we evaluate, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Changes in these factors could materially impact our financial statements.

We may face legal claims and litigation from product warranty or other claims that could be costly to resolve.

We have in the past and may in the future encounter legal action from customers, vendors or others concerning product warranty or other claims. We generally offer a two-year warranty from the date title passes from us for all of our standard products. We invest significant resources in the testing of our products; however, if any of our products contain defects, we may be required to incur additional development and remediation costs, pursuant to our warranty policies. These issues may divert our technical and other resources from other product development efforts and could result in claims against us by our customers or others, including liability for costs associated with product returns, which may adversely impact our operating results. If any of our products contain defects, or have reliability, quality or compatibility problems, our reputation may be damaged, which could make it more difficult for us to sell our products to existing and prospective customers and could adversely affect our operating results. We are currently party to a limited number of supply agreements with certain customers contractually committing us to warranty and indemnification requirements exceeding those to which we have been exposed in the past. While we may increase our level of insurance coverage for such exposure, we have not yet done so and, we could incur significant financial cost, operational disruption, and damage to our competitive position and image if faced with a significant product warranty or other claim.

Our ability to successfully implement our business strategy may be limited if we do not retain our key personnel and attract and retain skilled and experienced personnel.

Our success depends on our ability to retain the services of our executive officers. The loss of one or more members of senior management could materially adversely affect our business and financial results. In particular, we are dependent on the services of Dr. Vinciarelli, our founder, Chairman of the Board, Chief Executive Officer, and President. The loss of the services of Dr. Vinciarelli could have a material adverse effect on our development of new products and on our results of operations. In addition, we depend on highly skilled engineers and other personnel with technical skills that are in high demand and are difficult to replace. Our continued operations and growth depend on our ability to attract and retain skilled and experienced personnel in a very competitive employment market. If we are unable to attract and retain these employees, our ability to successfully implement our business strategy may be harmed.

Disruption of our information technology infrastructure could adversely affect our business.

We depend heavily on information technology infrastructure to achieve our business objectives, particularly our computer-integrated manufacturing processes that control all aspects of our operations in our manufacturing facility in Andover, Massachusetts. If a problem occurs impairing this infrastructure, the resulting disruption could impede our ability to record or process orders, manufacture and ship in a timely manner, or otherwise carry on business in the normal course. While we carry business interruption insurance that would mitigate losses to an extent, such insurance may be insufficient to compensate us for the potentially significant losses. Any such events, if prolonged, could have a material and adverse effect on our operating results and financial condition.

Our computing and communications systems are designed to protect us from network disruptions and security breaches. However, we are subject to network disruptions or security breaches caused by computer viruses, illegal break-ins or malicious hacking, sabotage, acts of vandalism by third parties, or terrorism. Our security measures or those of our third party service providers may not detect or prevent such network disruptions or security breaches. Any such compromise of our systems security could result in the unauthorized publication of our confidential business or proprietary information, cause an interruption in our operations, result in the unauthorized release of customer or employee data, result in a violation of privacy or other laws, expose us to a risk of litigation or damage our reputation, which could have a material and adverse effect on our operating results and financial condition, as well as significantly harm our business.

If we fail to maintain an effective system of internal controls or discover material weaknesses in our internal controls over financial reporting, we may not be able to report our financial results accurately or timely or detect fraud, which could have a material adverse effect on our business.

An effective internal control environment is necessary for us to produce reliable financial reports and is an important part of our effort to prevent financial fraud. Section 404 of the Sarbanes-Oxley Act of 2002 requires our management to report on, and our independent registered public accounting firm to attest to, the effectiveness of our internal control over financial reporting. We have an ongoing program to perform the system and process evaluation and testing necessary to comply with these requirements and to continuously improve and remediate internal controls over financial reporting.

While management evaluates the effectiveness of our internal controls on a regular basis, these controls may not always be effective. There are inherent limitations on the effectiveness of internal controls, including collusion, management override, and failure in human judgment. In addition, control procedures are designed to reduce rather than eliminate business risks. In the event that our Chief Executive Officer, Chief Financial Officer, or independent registered public accounting firm determines that our internal controls over financial reporting are not effective as defined under Section 404, we may be unable to produce reliable financial reports or prevent fraud, which could materially adversely affect our business. In addition, we may be subject to sanctions or investigation by government authorities or self-regulatory organizations, such as the Securities and Exchange Commission or The NASDAQ Stock Market, LLC. Any such actions could affect investor perceptions of the Company and result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements, which could cause the market price of our common shares to decline or limit our access to capital.

New regulations related to conflict minerals could adversely impact our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act contains provisions to improve transparency and accountability concerning the supply of certain minerals, known as conflict minerals (including gold, tantalum, tin, and tungsten, and their related ores), originating from the Democratic Republic of Congo (DRC) and adjoining countries. As a result, in August 2012 the SEC released final rules for annual disclosure and reporting for those companies who use conflict minerals mined from the DRC and adjoining countries in their products. While these new requirements will require due diligence efforts in 2013, with initial disclosure requirements beginning in May 2014, we began to implement processes within our supply chain to comply beginning in 2012. There have been and will continue to be costs associated with complying with these disclosure requirements, including due diligence to determine the sources of conflict minerals used in our products and other potential changes to products, processes, or sources of supply as a consequence of such verification activities. The implementation of these rules could adversely affect the sourcing, supply, and pricing of materials used in our products. As there may be only a limited number of suppliers offering conflict free conflict minerals, we cannot be sure that we will be able to obtain necessary conflict minerals from such suppliers in sufficient quantities or at competitive prices. Also, we may face reputational challenges if we determine that certain of our products contain minerals not determined to be conflict free or if we are unable to sufficiently verify the origins for all conflict minerals used in our products through the procedures we may implement.

ITEM 1B. UNRESOLVED STAFF COMMENTS None.

ITEM 2. PROPERTIES

Our corporate headquarters building in Andover, Massachusetts, which we own, provides approximately 90,000 square feet of office space for our sales, marketing, engineering and administration personnel and are used by and support all business segments. We also own a building of approximately 230,000 square feet in Andover, Massachusetts, which hou