# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549 Form 10-K

Form 10-K

☑ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
 OF THE SECURITIES EXCHANGE ACT OF 1934
 For the fiscal year ended December 31, 2012
 □ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to

Commission file number 0-18277

# VICOR CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

25 Frontage Road, Andover, Massachusetts (Address of principal executive offices) (IRS employer identification no.) **01810** (Zip code)

04-2742817

Registrant's telephone number, including area code: (978) 470-2900

(978) 470-2900

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

Common Stock, \$.01 par Value (Title of Class) <u>The NASDAQ Stock Market, LLC</u> (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 🗵

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

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

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  $\square$  No  $\square$ 

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.

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 $\Box$	Accelerated Filer 🗹	Non-accelerated Filer $\Box$	Smaller Reporting Company 🗆
		(Do not check if a smaller reporting company)	

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

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$138,170,000 as of June 30, 2012.

On February 28, 2013, there were 30,043,777 shares of Common Stock outstanding and 11,767,052 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 2013 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 "Vicor®," "the Company," "our company," "we," "us," "our," and 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," "intend," "estimate," "plans," "assumes," "may," "will," "would," "should," "continue," "prospective," "project," and other similar expressions identify forward-looking statements. Forward-looking statements also include statements regarding: the transition of our business strategically and organizationally from serving a highly diversified customer base to serving an increasing number of large customers; 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 its 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: hire and retain key personnel; 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; 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, Item 3 — "Legal Proceedings," and under Part II, Item 7 — "Management's Discussion and Analysis of Financial Condition and Results of Operations". 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 power components and complete power systems. Power systems are incorporated into virtually all electronic equipment. In equipment utilizing Alternating Current ("AC") voltage from a primary 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 source (for example, a generator or battery), the initial DC voltage frequently requires further conversion to one or more lower 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 a myriad of application-specific configurations.

Since our founding, our product strategy has been driven by innovations in design, largely enabled by our focus on the development of differentiated technologies, which often are implemented in proprietary semiconductor circuitry. Many of our products incorporate a high frequency electronic power conversion technology called zero current / zero voltage switching ("ZCS / ZVS"), which enabled the design of DC-DC converter modules that were much smaller and more efficient than conventional alternatives. Emphasizing the superior power density and performance advantages of this technology, our primary product strategy since our founding has been to 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 density DC-DC converters, which provide the isolation, transformation, regulation, filtering, and/or input protection necessary to power and protect sophisticated electronic loads. A secondary and highly complementary product strategy has been to incorporate our component-level building blocks into complete power systems representing turnkey AC-DC and DC-DC solutions for our customers' power needs.

Our product strategy is focused increasingly on the next generation of component-level building block, the VI Chip<sup>™</sup> module and derivations thereof, notably the VI Brick<sup>™</sup>, which expands the applicability of VI Chip technology with broadened product offerings and innovative packaging solutions. The VI Chip module incorporates our latest advances in switching topologies, other proprietary power conversion innovations, and advanced manufacturing and packaging innovations. We believe VI Chip technology offers unprecedented power conversion density (i.e., the output power in Watts as a function of the size of the component in cubic inches), performance (i.e., benchmarks related to the capabilities of the component, such as conversion efficiency), and flexibility (i.e., the ability of our customers to implement a broad range of possible configurations).

Our product roadmap is focused on the development of a full line of products capable of delivering power conversion and power management solutions, from the AC source (e.g., the wall outlet) to the DC point of load, that exploit our expertise with high power levels. Our Picor subsidiary, which develops microcontroller solutions enabling our innovations in switching topology, is pursuing a merchant strategy focused on high performance, low voltage products for application at or near the point of load. These products complement 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. During 2012, Picor introduced the first products in its new line of Cool-Power™ point of load regulators incorporating Zero-Voltage Switching ("ZVS") topology. We believe this line of high performance regulators provides best in class power efficiency, allowing customers to deploy more efficient power distribution designs that rely on a higher input voltage source.

The applications in which these next-generation power conversion and power management products are used are in the higher-performance, higher-power segments of the power systems market, and our customers generally are global original equipment manufacturers ("OEMs").

Our business segments are organized by key product lines:

 Our Brick Business Unit ("BBU") segment designs, develops, manufactures and markets modular power converters in three formats: our wellestablished encapsulated modules, known as bricks; our line of modular power converters incorporating our VI Chip technology into encapsulated packaging, which we market as VI Brick modules; and our line of intermediate bus converters, also marketed under the VI Brick name, which are open-frame (i.e., not encapsulated) devices utilizing our VI Chip and Picor technology. The BBU also designs, develops, manufactures and markets a line of "configurable" products, which are complete power supplies assembled using our modular power components. The BBU includes the operations of our Westcor<sup>TM</sup> division, which is focused only on AC-input configurable products, the operations of Vicor Custom Power<sup>TM</sup>, which is our turnkey custom power solutions business, and Vicor Japan Company, Ltd. ("VJCL"), our majority-owned Japanese subsidiary.

- Our VI Chip Business Unit consists of VI Chip Corporation, a majority-owned subsidiary of Vicor that designs, develops, manufactures and markets a range of advanced power conversion components, including those that enable our Factorized Power Architecture™ ("FPA"). In 2003, we introduced FPA, a new power system architecture based on an array of proprietary power conversion innovations building upon our long-standing leadership in the design of power conversion technologies. We believe FPA provides power system designers enhanced performance at a lower cost than can be attained with conventional power architectures.
- Our Picor® Business Unit ("Picor") consists of Picor Corporation, a majority-owned 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 semiconductor circuitry.

Our products are sold worldwide to customers ranging from smaller, independent manufacturers of highly specialized electronic devices to larger 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. The customer applications we address include, in alphabetical order, aerospace and defense electronics, enterprise and high performance computing, industrial automation, telecommunications and networking infrastructure, test and measurement instrumentation, and vehicles and transportation.

Vicor B.V., a wholly-owned subsidiary incorporated in the Netherlands, serves as a European distribution center. VLT, Inc. is our wholly-owned licensing subsidiary. VICR Securities Corporation is our wholly-owned subsidiary, established to hold certain investment securities.

We are headquartered in Andover, Massachusetts, where our manufacturing facility is located. VI Chip Corporation also is headquartered in Andover, Massachusetts. Our Westcor division has a design and assembly facility in Sunnyvale, California. VJCL, which is engaged in sales and customer support activities exclusively for the Japanese market, is located in Tokyo, Japan. Our six Vicor Custom Power locations are geographically distributed around the United States. We have customer support and engineering offices, which we refer to as Technical Support Centers, in the United States, Europe (separate subsidiaries in the United Kingdom, France, Germany, and Italy), and Asia (separate subsidiaries in Hong Kong and Shanghai, China, along with a liaison office in Bangalore, India). Picor Corporation is headquartered in North Smithfield, Rhode Island, and also has personnel at our Andover, Massachusetts, headquarters.

The activities of all of the above named entities are consolidated in the financial statements presented herein. Our Shanghai and Bangalore Technical Support Centers were formally established in January 2013.

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.

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. 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.

### Market Background, Product Trends and Vicor Strategy

The market for power supplies and their enabling components continues to evolve in response to advancing technologies and corresponding changes in customer requirements, notably increased conversion efficiency. Similarly, we adapted our strategy to address evolving market challenges and opportunities, leveraging what we believe to be superior technologies. Many of the ongoing changes in the market, particularly in those segments in which we compete, have been characterized by improvement in product performance (e.g., power conversion efficiency), reduction in product form factor (i.e., size), and increased design flexibility (i.e., the ability of customers to address their power requirements with a broad range of alternative solutions). Product trends have been characterized by further improvement in overall power supply performance, further reduction in form factor, and greater flexibility in the way designers implement power supply solutions.

In response to market and technology trends and changes in our customer requirements, we have implemented a strategy addressing both the realities of the current power conversion marketplace and our vision of the long-term direction of that marketplace. Our strategy involves maintaining a viable, profitable legacy business in bricks and brick-based system solutions, while investing in the next generation of power management components incorporating VI Chip and Picor advances.

Given our extensive experience with power conversion technologies and our understanding of trends in both technology and our markets, we concluded the appropriate complement to maintaining our legacy business would be to seek to redefine the competitive landscape in the long-term in targeted market segments with our innovative, flexible new power distribution architecture and our next generation of advanced designs appropriate for applications requiring superior conversion efficiency and power density.

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 continue to believe traditional power architectures, in the longer run, may not provide the performance necessary to address future power system requirements, given the 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. Our overall strategy is to develop differentiated products to address these trends, while providing competitively superior performance and reliability at a lower overall cost.

### **Our Products**

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.

Our principal product lines are:

## Bricks: Modular Power Converters

Brick DC-DC power converters are well-established as an important enabling component of conventional power systems architectures. The BBU currently offers seven families of high power density, component-level DC-DC power converters: the VI-200<sup>TM</sup>, VI-J00<sup>TM</sup>, MI-200<sup>TM</sup>, MI-J00<sup>TM</sup> families, our first generation of products, and the Maxi, Mini and Micro families of our FasTrak<sup>TM</sup> brand, our second generation of products. Designed to be mounted directly on a printed circuit board chassis using contemporary manufacturing processes, each brick family is a comprehensive set of products offered in a wide range of input voltage (10 to 425 Volts DC) and output power (10 to 600 Watts). This allows end users 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. All of our traditional brick modules are encapsulated with a dielectric, elastomeric, thermally conductive material, thereby providing electrical insulation, thermal conductivity, and environmental protection of the electronic circuitry.

In order to maintain our competitive position in the brick market, in 2012 we began an upgrade of the conversion technologies in our brick product families, markedly improving conversion efficiency in those products for which the redesigns have been completed. We expect to continue this initiative through 2013.

Our Custom Module Design System<sup>TM</sup> ("CMDS"), a core component of the Vicor PowerBench<sup>TM</sup> tool suite on our website, is a proprietary system enabling our customers to specify on-line, and verify in real time, the performance and attributes of its DC-DC converters. Not merely a product configuration tool, the CMDS enables the comprehensive design of DC-DC converters in all of our established brick form factors (i.e., full, half and quarter size), using patented web-based technology. CMDS is an important element of the BBU's mass customization strategy.

The VI Brick combines the superior technical attributes of our VI Chip technology with robust packaging allowing for incorporation of complementary circuitry expanding functionality, offering superior thermal characteristics, and facilitating a range of board mounting alternatives. VI Brick models include high current density DC-DC converters, a wide range of highly efficient bus converters, and individual models for both regulation and transformation. We continue to focus our product development efforts within the BBU on the design of VI Brick modules, notably focusing on VI Brick implementations of VI Chip's innovative PFM<sup>TM</sup> and DCM<sup>TM</sup> modules, the first of which, a PFM-based AC front-end module, was introduced in 2012. We plan to introduce several DCM-based VI Bricks in 2013.

In 2011, we announced the introduction of a line of Intermediate Bus Converters ("IBCs") under the VI Brick brand, utilizing our patented Sine Amplitude Converter<sup>TM</sup> topology, the same ZCS / ZVS resonant converter technology powering our VI Chip bus converter line. Switching at approximately 10 times the frequency of competing square wave converters, our VI Brick IBCs cut transient response time by a factor of 10, eliminating the need for external bulk capacitors, while offering double the power density and half the conversion loss of competitive devices.

We offer online, within the Vicor PowerBench<sup>™</sup> tool suite, a proprietary IBC Power Simulation tool, which we believe to be an industry-first online simulation capability providing a means for power systems designers to interactively model the electrical and thermal performance of intermediate bus converters in application–specific operating conditions and thermal environments.

# Accessory Power System Components

Accessory power system components, also in encapsulated module format and, used with our power conversion modules, integrate other important functions of the power system, facilitating the design of complete power systems by interconnecting several modules. These other functions include input filtering, transient protection, AC line rectification, and power factor correction. In general, our broad line of proprietary accessory components are used to condition and/or filter the input and output voltages of the modular power components and, therefore, represents an important complement to our converter component lines.

Examples of accessory products include our VI-HAM<sup>TM</sup> (Harmonic Attenuator Module), a universal-AC-input, power-factor-correcting front end for use with compatible DC-DC power converters, and our VI-AIM<sup>TM</sup> (AC Input Module), which provides input filtering, transient protection and rectification of the AC line.

### Configurable Products

Utilizing our modular power components as core elements, we have developed several configurable product families that provide complete power solutions configured to a customer's specific needs. These "near-custom" products exploit the benefits and flexibility of the modular approach to offer higher performance, higher power densities, lower costs, 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 power supplies, and by VJCL, which offers configurable power supplies addressing the specific requirements of Japanese customers.

Most information technology, process control, and industrial electronic products operate directly off of AC lines and, as such, require circuitry to convert AC line voltage into the required DC voltage. Our Westcor AC-DC power systems, the FlatPAC<sup>TM</sup>, VIPAC<sup>TM</sup> Power System, and LoPAC<sup>TM</sup> families, incorporate front-end AC-DC circuitry subassemblies, thereby providing a complete power solution from AC line input to one or more DC outputs. These configurable products are characterized by their low-profile design and are configurable in a range of sizes and outputs.

Many telecommunications switching, transportation and defense electronic products are powered from central DC sources (e.g., generators or banks of batteries). Our configurable DC-DC power systems, the VIPAC Array, ComPAC<sup>TM</sup>, and MegaMod<sup>TM</sup> families, also are characterized by a low-profile design, including rugged, compact assemblies for chassis-mounted, bulk power applications.

Our highest power configurable product line, the MegaPAC<sup>TM</sup> family, is also among our most flexible solutions. A MegaPAC consists of a fan-cooled chassis with up to 10 slots into which are placed ConverterPAC<sup>TM</sup> modules, which incorporate our brick power conversion modules, allowing for a broad range of customer-specific configurations. The MegaPAC itself can be configured to accept either AC or DC inputs, and output power can be as high as 4,000 Watts with up to 20 outputs.

The VIPAC family of power systems is a class of user defined, integrated modular power solution that leverages the latest advances in Maxi, Mini, and Micro DC-DC converter technology and modular front-end components. VIPAC combines application-specific front end units, a choice of advantageous chassis styles and, in AC input versions, remotely located hold-up capacitors to provide fast, flexible and highly reliable power solutions for a wide range of demanding applications.

The web-based Vicor Computer Assisted Design ("VCAD") tool, a component of Vicor PowerBench, can be utilized by the customer to specify and verify, in real time, that customer's desired configuration of our VIPAC family of configurable products from a broad range of inputs, outputs, packaging and optional features. Similarly, our web-based Vicor System Product Online Configurator ("VSPOC"), also a component of Vicor PowerBench, allows customers to configure and order Westcor AC-DC power supplies.

### Customer Specific Power System Products

Certain customers rely on us to design, develop and manufacture customized power systems to meet performance and/or form factor requirements that cannot be met with off-the-shelf system solutions. By utilizing our power components as building-blocks in developing these custom power systems, we have been able to meet such customers' needs with reliable, high power density, turnkey solutions. These low-volume, high value-add products, besides meeting customers' specific requirements, frequently are designed to function reliably in the harsh environments associated with aerospace and defense applications. We believe our VI Chip and Picor

products will provide a competitive advantage to our Vicor Custom Power operations, as the relatively small size and lower weight of these products are well suited to aerospace and defense applications.

We pursue custom opportunities through our Vicor Custom Power network, which consists of six regional design, assembly and customer support locations. Of the six locations, one is a division, three are either wholly-owned or majority-owned subsidiaries, and two are less than 50%-owned subsidiaries.

### VI Chip Products

We have pioneered an innovative new board level power architecture, FPA, which separates (or "factorizes") the basic functions of DC-DC power conversion (voltage transformation, regulation, and isolation) into separate power components called VI Chip modules. Our VI Chip modules represent the next generation of modular power components, providing power systems designers the ability to address increasingly challenging requirements. With each new generation of microprocessor, application-specific integrated circuit, and memory, the trend has been toward lower voltages, higher currents, higher speeds and more on-board voltages. System designers must contend with a range of lower voltages, improve overall power system efficiency, and deliver the solution in an ever-smaller form factor.

We believe FPA provides power system designers superior power density, conversion efficiency, transient responsiveness, noise performance, reliability, and design flexibility at a lower overall cost than attained with conventional board level power architectures. We currently offer three VI Chip modules for implementation of FPA designs: the BCM<sup>TM</sup> (Bus Converter Module), an intermediate bus converter; the PRM<sup>®</sup> (Pre-Regulator Module), a non-isolated regulator; and the VTM<sup>®</sup> (Voltage Transformation Module), an isolated current multiplier. All three modules are offered in full (i.e., 1.1 square inch) and half (i.e., 0.57 square inch) sizes.

The BCM provides an isolated, unregulated intermediate bus voltage, at efficiencies up to 96%, to power non-isolated converters at the point-of-load from a narrow range DC input. The PRM is a non-isolated regulator, operating at up to 97% efficiency, capable of both bucking (i.e., reducing) and boosting (i.e., increasing) an input voltage and providing a regulated, adjustable output voltage or "factorized bus". VTMs are designed to meet the demands of advanced microprocessor and memory applications at or near the point of load with fixed ratio voltage transformation and extremely fast transient response, while providing isolation from input to output.

We have successfully deployed BCM, PRM and VTM modules in FPA implementations in several demanding application categories for which they are well suited, including high performance computing, advanced test and measurement, and defense electronics.

As addressed above in the context of its use in a VI Brick product, VI Chip also offers the PFM, an isolated AC-DC voltage converter, enabled by VI Chip's Adaptive Cell<sup>TM</sup> topology, a high frequency, soft switching technology derived from our earlier advances in ZCS/ZVS topologies. The PFM offers active power factor correction in a single stage for use in implementations of FPA or other board-level power architectures across the worldwide range of AC supply voltage levels. The PFM is indicative of our renewed commitment to the AC-DC segment of the power conversion market, and is an important element of our strategy to offer differentiated power components from the AC source to the point of load. In 2012, we introduced a VI Brick front-end module incorporating AC current rectification and filtering, as well as transient voltage suppression in an encapsulated package. This PFM-based VI Brick solution has been well-received, as we believe it allows much greater flexibility and creativity in end-product design, while its differentiated performance should appeal to worldwide customers seeking to maximize the power efficiency of their own products. We anticipate introducing the second generation PFM in 2013, which utilizes our advanced "Panel Molding" manufacturing technology, allowing for higher performance and lower manufacturing costs. We expect this new PFM will be offered initially on a stand-alone basis and, later, in a VI Brick package format.

During 2012, we continued our work with customers sampling our latest VI Chip innovation, the DCM, an isolated, regulated DC-DC voltage transformer offering very high conversion efficiency across a wide range of voltage inputs. Full release to production of the DCM product line was delayed as we shifted the core product design from first generation packaging to the second generation "Panel Molding" packaging process. Like the PFM, the DCM is a low profile, light weight solution enabled by our Adaptive Cell topology. Unlike the PFM, we will be producing the DCM only in our second generation packaging. We are targeting the DCM for use across a range of demanding, high voltage applications, such as electric vehicles, for which its small size, low weight, high efficiency, and high power density are especially well-suited. We intend to introduce in 2013 the second generation DCM, which, because of the improved efficiency and power density afforded by our manufacturing technology, will allow for a broadened range of applications and packaging alternatives. To this end, we also intend to introduce in 2013 our third generation brick DC-DC module, which will be a Brick enabled by VI Chip and Picor technology. Because the VI Brick format allows for incorporation of complementary circuitry, we believe this new brick will be the highest performance DC-DC converter module in the market, offering improved efficiency and power density in a best-in-class form factor.

The PFM and DCM modules are Vicor's new flagship products for our vision of a far-reaching power component methodology. Across major electronic markets, requirements for power systems operating from AC- or DC-input voltages will be addressed more predictably and cost-effectively with modular components that support efficient power distribution and dense power conversion with the requisite flexibility and scalability.

### **Picor Products**

Picor designs, develops, and markets high performance integrated circuits and related products for use in a variety of power system applications. Picor develops these products to be incorporated into our BBU and VI Chip modules, to be sold as a complement to our products, or for sale to third parties for separate applications. We believe Picor is competitively differentiated among vendors of power path management, filter, converter solutions targeted at a wide range of industries and applications, as our products have been designed with emphasis on high performance operation, board space savings, and reduced design complexity.

In 2012, Picor introduced the first non-isolated products in its Cool-Power<sup>®</sup> family, releasing six System in Package ("SiP") models in the PI33XX series of ZVS buck regulators. Picor intends to introduce boost and buck-boost versions of the Cool-Power regulator product family in 2013.

### MIL-COTS Products

We offer versions of our commercial-off-the-shelf brick converters and accessories, configurable power supplies, VI Chip modules, and certain Picor components that comply with certain specification standards established by the U.S. Department of Defense. These "MIL-COTS" products meet or exceed the performance and reliability requirements associated with use in harsh and demanding environments.

#### Sales and Marketing

In 2012, 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. Our unified go-to-market strategy is focused on certain defined market segments that are the responsibility of our Business Creation Teams focused on the requirements of customers in specific market segments. Each team consists of product marketing, applications engineering, field application engineering, and regional sales personnel.

Specific sales activities are managed by a staff of Area Sales Directors, Regional and National Account Sales Managers, and sales personnel in the following locations: our world headquarters in Andover, Massachusetts; a Technical Support Center in Lombard (Chicago), Illinois; our Westcor division in Sunnyvale, California; our Vicor Custom Power location in Milwaukie (Portland), Oregon; and our subsidiary in Tokyo,

Japan. 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; Bangalore, India; Milan, Italy; Paris, France; and Munich, Germany.

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 locations.

In addition to direct 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. While initial dollar and unit volumes sold through these two stocking distributors are relatively small, these volumes have shown promising growth, and 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 intend to expand our online capability in the near future to include customers from other countries.

We also sell directly to customers through Vicor Express<sup>TM</sup>, an in-house distribution group serving the customers in the European Union not served by our regional distributors. Through advertising and periodic mailing of its catalogs, Vicor Express generally offers customers rapid delivery on small quantities of certain standard products. Our subsidiary, Vicor B.V., domiciled in the Netherlands, acts as importer of record for shipments to customers in the European Union.

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.

### **Applications and Customers**

The applications in which our power conversion and power management products are used are in the higher-performance, higher-power segments of the power systems market. Our products are sold worldwide to customers ranging from smaller, independent manufacturers of highly specialized electronic devices to global OEMs and their contract manufacturers. Industries served include aerospace and defense electronics, enterprise and high performance computing, industrial equipment and automation, telecommunications and network infrastructure, and vehicles and transportation markets.

During 2012, one customer (Foo Kee Electronics, Ltd.) accounted for approximately 10.1% of net revenues. For the year ended December 31, 2011, one customer (AcBel Polytech, Inc.) accounted for approximately 14.9% of net revenues. For the year ended December 31, 2010, two customers (SRCTec, Inc. and AcBel Polytech, Inc.) accounted for approximately 12.3% and 11.5% of net revenues, respectively.

International sales, as a percentage of total net revenues, were approximately 51.1% in 2012, 56.9% in 2011, and 49.2% in 2010, respectively. International sales have increased from historical levels primarily due to higher volumes of shipments to offshore contract manufacturers utilized by domestic OEMs. During 2012, net revenues from customers in Hong Kong, China and Taiwan accounted for approximately 12.5% and 9.0%, respectively, of total net revenues (11.8% and 15.3%, respectively, in 2011, and 11.4% and 11.8%, respectively, in 2010).

### Backlog

As of December 31, 2012, we had a backlog of approximately \$31,400,000 compared to \$54,200,000 on December 31, 2011. Backlog consists of orders for products for which shipment is scheduled within the following 12 months. 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 shipped in the same quarter can vary considerably depending on the relative volumes of BBU and VI Chip products booked within the quarter.

### **Research and Development**

As a basic element of our long-term strategy, we are committed to the continued advancement of power conversion technology and power component product development. We incurred approximately \$38,800,000, \$39,000,000, and \$36,000,000 in research and development expenses in 2012, 2011, and 2010, respectively, representing approximately 17.7%, 15.4%, and 14.4% of revenues in 2012, 2011, and 2010, 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.

### Manufacturing, Supply Chain and Quality Assurance

Our principal 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. We intend to make continuing investments in automated manufacturing equipment, particularly for our VI Chip and VI Brick products. Based on current estimates of near-term manufacturing volumes, we expect our current manufacturing capacity is sufficient to meet these volumes and do not have plans for significant capital expenditures to expand our capacity.

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.

Our compliance with applicable environmental laws has not had a material effect on our financial condition or operating results.

In 2012, we began to implement processes within our supply chain to comply with Section 1502 of the Dodd–Frank Wall Street Reform and Consumer Protection Act (the "Act"). The Act requires public companies to conduct due diligence on and disclose whether certain minerals (including gold, tantalum, tin, and tungsten, and their related ores), known as conflict minerals, that originate from mines in the Democratic Republic of Congo or certain adjoining countries, are used in products that we manufacture. The first report regarding our use of conflict minerals is due by May 31, 2014 for the 2013 calendar year.

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.

#### Competition

The power conversion industry is highly competitive. It remains highly fragmented, despite significant consolidation during the prior decade. Numerous power supply manufacturers target market segments and applications similar to those we target. Several of these competitors have significantly greater financial and marketing resources and longer operating histories than we do.

With the BBU, our strategy continues to be largely based on differentiated responsiveness to customer requirements enabled by our mass customization capabilities. We believe we have a strong competitive position, particularly with customers who need small, high density power system solutions requiring a variety of input-output configurations. We compete on the basis of differentiation, offering a broad product line and mass customization abilities. We also compete by emphasizing technical innovation, product performance, and service and technical support. We believe the principal competitive variables in the market segments in which the BBU competes are price, performance, and the level of service and technical support offered.

With VI Chip, our strategy is largely based on differentiated products offered to an increasing number of larger potential customers well-positioned to benefit from the advantages offered by our products (e.g., global original equipment manufacturers in computing, networking, and test and measurement). VI Chip currently competes with vendors of power component solutions, many of which are the manufacturers with which the BBU competes. In the coming years, we anticipate a significantly broadened market for VI Chip technology, as awareness of its advantages spreads and a broader audience of potential customers is reached. We also anticipate the expected success of the PFM and DCM, in both VI Chip and VI Brick implementations, will accelerate adoption of our broadened VI Chip product line, as we will be well-positioned to offer comprehensive AC-DC and DC-DC solutions across a wider range of applications.

Picor and, to a lesser extent, VI Chip compete with suppliers of integrated circuits for power conversion applications, many of which have significantly greater financial and marketing resources and longer operating histories. 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**

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.

We have been issued 107 patents in the United States (which expire between 2013 and 2031). We also have a number of patent applications pending in the United States, Europe and the Far East. 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.

### Licensing

In addition to generating revenue from product sales, licensing is an element of our strategy for building worldwide product and technology acceptance and market share. 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.

### Employees

As of December 31, 2012, we had 1,021 full time employees and 25 part time employees.

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").

None of our employees are subject to a collective bargaining agreement.

# 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.

We have incurred nine consecutive quarters of declining earnings per share. Our operating results, including revenues, gross margins, operating expenses and net income (loss), have fluctuated on a quarterly and annual basis. Our future operating results may be materially affected by a number of factors, many of which are beyond our control, including:

- adverse economic conditions in the United States and international markets for our products, especially in light of weakening domestic economic indicators and the ongoing recession in Europe;
- adverse budgetary conditions within the U.S. government, particularly the Department of Defense, which may impact spending on current and anticipated programs into which we sell or anticipate to sell our products;
- the timing of new product introductions or other competitive actions (e.g., product price reductions) by our competitors;
- 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 manufactures 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 ability to hire, retain and motivate qualified employees to meet the demands of our customers;
- intellectual property disputes;
- potential significant litigation-related costs;
- · costs related to compliance with increasing worldwide governance, quality, environmental, and other regulations; and
- the effects of public health emergencies, natural disasters, security risks, terrorist activities, international conflicts and other events beyond our control.

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.

During 2012, the trading price of a share of our Common Stock declined 33.9%, while the NASDAQ Composite Index, in which we are included, rose 14%. 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 ongoing volatility of the financial markets;
- uncertainty regarding the prospects of domestic and foreign economies;
- uncertainty regarding domestic and international political conditions, including tax policies;
- actual or anticipated fluctuations in our operating performance or that of our competitors;
- the performance and prospects of our major customers;
- · announcements by us or our competitors of significant new products, technical innovations or litigation;
- investor perception of our company and the industry in which we operate;
- the absence of earnings estimates and supporting research by investment analysts;
- the liquidity of the market for our Common Stock;
- the uncertainty of the declaration and payment of future cash dividends on our Common Stock; and
- 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 securities. 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, 2012, 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 50.4% of total issued and outstanding shares. Certain institutional investors have been long-term owners of our Common Stock and held in aggregate, as of December 30, 2012 (the most recent reporting date for institutional holders), approximately 12% of our 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 81.3% of our outstanding voting securities, has effective control of our governance.

On November 19, 2012, we announced our intent to commence a tender offer for shares of our Common Stock representing up to \$20,000,000 in aggregate value and commenced this tender offer on November 26, 2012, with an expiration date of December 21, 2012. On December 24, 2012, we announced the extension of the tender offer through January 23, 2013, and on January 24, 2013, we again announced further extension of the tender offer through March 1, 2013. As of March 6, 2013, the most recent date for which information is available related to the preliminary total number of shares accepted for purchase in the tender offer, we will purchase no less than 2,031,955 shares of our Common Stock for aggregate consideration of approximately \$10,932,000. Based on this preliminary calculation, after the purchase of 2,031,995 shares of our Common Stock associated with this tender offer, and based on reported ownership data as of December 31, 2012, the most recent date for which such information is available, Dr. Vinciarelli will own shares of our Common Stock and shares of our Class B Common Stock in aggregate representing 82.2% of share voting power.

Our purchase of shares of Common Stock pursuant to this tender offer will reduce the number of shares that might otherwise be traded publicly and may reduce our total number of shareholders; however, we believe there will be a sufficient number of shares of our Common Stock outstanding and publicly traded following completion of our tender offer to ensure a continued trading market for our Common Stock.

# The ongoing disruptions in the global economy, as well as continued uncertainty in global financial markets, could materially and adversely affect our business and consolidated operating results.

Further disruption and deterioration in inter-related 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 continue 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 the BBU's revenue. 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 revenues represented approximately 31.5% of BBU revenue in 2012, in contrast to approximately 29.0% and 37.2% of BBU revenue in 2011 and 2010, respectively. 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's 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.

Growth in the VI Chip segment and the Vicor Custom Power business within the BBU over the last several years 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. During 2012, certain large VI Chip customers, due to uncertain conditions in their own businesses, deferred placing purchase orders with us or deferred delivery of scheduled product shipments.

This contributed to the marked decline in bookings we experienced in 2012, and caused us to incur additional costs associated with managing our inventory levels and scheduling our production activity.

# 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, as was the case in the fourth quarter of 2012.

### Our revenues and profits may not increase enough 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, 2012, 2011 and 2010, our net revenues from sales outside the United States were 51.1%, 56.9%, and 49.2%, respectively, of the Company's total net 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. In addition, during 2012 we established Technical Support Centers in Shanghai, China and Bangalore, India thereby increasing the number of our employees located outside of the United States and the percentage of resources and spending directed toward foreign activities.

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 affect 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, SynQor's actions have inhibited our ability to sell product to potential customers fearful of the threat of litigation by SynQor. We also have incurred substantial legal fees defending this matter.

#### 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. During 2012, we entered into 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 affect 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 structure and procedures for 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 will 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 houses all Massachusetts manufacturing activities. Our Westcor division owns and occupies a building of approximately 31,000 square feet in Sunnyvale, California.

All other domestic and foreign facilities are leased from third-party lessors on arms' length terms.

### ITEM 3. LEGAL PROCEEDINGS

As disclosed in prior filings, on January 28, 2011, SynQor, Inc. ("SynQor") filed a complaint for patent infringement against Ericsson, Inc. ("Ericsson"), Cisco Systems, Inc. ("Cisco") and us in U.S. District Court for the Eastern District of Texas ("the Texas Action"). This immediately followed a complaint filed by us on January 26, 2011 in U.S. District Court for the District of Massachusetts, in which we sought a declaratory judgment that our bus converter products do not infringe any valid claim of certain of SynQor's U.S. patents, and that the claims of those patents are invalid. With respect to us, SynQor's complaint alleges our products, including, but not limited to, unregulated bus converters used in intermediate bus architecture power supply systems, infringe certain SynQor patents. SynQor seeks, amongst other items, an injunction against further infringement and an award of unspecified compensatory and enhanced damages, interest, costs and attorney fees. On February 8, 2011, SynQor filed a motion for preliminary injunction seeking an order enjoining us from manufacturing, using, selling, and offering for sale in the United States and/or importing into the United States certain identified unregulated bus converters, as well as any other bus converters not significantly different from those products. On February 17, 2011, we withdrew our Massachusetts action without prejudice to allow the litigation to proceed in Texas. On May 16, 2011, SynQor announced it was withdrawing its motion for preliminary injunction against us. On September 20, 2011, SynQor filed an amended complaint in the Texas Action. The amended complaint repeated the allegations of patent infringement against us contained in SynQor's original complaint, and included additional patent infringement allegations with respect to U.S. Patent No. 8,023,290 (" '290 patent"), which was issued on that day. As with SynQor's original complaint, the amended complaint alleged that our products, including but not limited to our unregulated bus converters used in intermediate bus architecture power supply systems, infringed the asserted patents. On October 4, 2011, we filed an answer and counterclaims to SynQor's amended complaint, in which we allege the '290 patent is unenforceable because it was procured through inequitable conduct before the U.S. Patent and Trademark Office and seek damages against SynQor for SynQor's unfair and deceptive trade practices and tortious interference with prospective economic advantage in connection with SynQor's allegations of patent infringement against us. We do not believe any of our products, including our unregulated bus converters, infringe any valid claim of the SynQor patents, either alone or when used in an intermediate bus architecture implementation. We believe SynQor's claims lack merit and, therefore, we continue to vigorously defend ourselves against SynQor's patent infringement allegations.

On February 22, 2007, we announced an agreement in principle with Ericsson, Inc., the U.S. affiliate of LM Ericsson, to settle a lawsuit brought by Ericsson against us in California state court. Under the terms of the settlement agreement entered into on March 29, 2007, after a court ordered mediation, we paid \$50,000,000 to Ericsson, of which \$12,800,000 was reimbursed by our insurance carriers. Accordingly, we recorded a net loss of \$37,200,000 from the litigation-related settlements in the fourth quarter of 2006. We have been seeking further reimbursement from its insurance carriers. On November 14, 2008, a jury in the United States District Court for the District of Massachusetts found in favor of us in a lawsuit against certain of its insurance carriers with respect to the Ericsson settlement. The jury awarded \$17,300,000 in damages to us, although the verdict is subject to challenge in the trial court and on appeal. Both parties filed certain motions subsequent to the ruling and, on March 2, 2009, the judge in the case rendered his decision on the subsequent motions, reducing the jury award by \$4,000,000. On March 26, 2009, the U.S. District Court, District of Massachusetts (the "Court") issued its judgment in the matter, affirming the award of \$13,300,000, plus prejudgment interest from the date of breach on March 29, 2007 through March 26, 2009, the date of judgment in the amount of approximately \$3,179,000. The insurance carriers filed their appeal to this total judgment in the amount of approximately \$16,479,000 and an oral argument was held in early February 2010 on the insurer's appeal. On March 16, 2012, the U.S. Court of Appeals for the First Circuit vacated the judgment in our favor and remanded the case for proceedings consistent with the Court's opinions. On October 3, 2012, a stipulation of dismissal with prejudice was filed with the Court, reflecting the contemporaneous settlement agreement between us and the insurance carriers in which we received a cash payment of \$1,975,000 in exchange for

In addition, we are involved in certain other litigation and claims incidental to the conduct of its business. While the outcome of lawsuits and claims against us cannot be predicted with certainty, we do not expect any current litigation or claims to have a material adverse impact on our financial position or results of operations.

# ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

# PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our Common Stock is listed on The NASDAQ Stock Market, LLC, under the trading symbol "VICR." Shares of our Class B Common Stock are not registered with the Securities and Exchange Commission, are not listed on any exchange nor traded on any market, and are subject to transfer restrictions under our Restated Certificate of Incorporation, as amended.

The following table sets forth the quarterly high and low sales prices for the Common Stock as reported by The NASDAQ Stock Market for the periods indicated:

2012	High	Low
First Quarter	\$10.42	\$ 7.50
Second Quarter	8.39	5.78
Third Quarter	7.41	5.93
Fourth Quarter	6.87	5.00
2011	High	Low
First Quarter	\$17.58	\$14.05
Second Quarter	17.40	14.81
Third Quarter	16.74	8.15
Fourth Quarter	10.69	7.00

As of February 28, 2013, there were 209 holders of record of our Common Stock and 16 holders of record of our Class B Common Stock. These numbers do not reflect persons or entities that hold their shares in nominee or "street name" through various brokerage firms.

### **Dividend Policy**

We do not have a policy mandating the declaration of cash dividends at any particular time or on a regular basis.

Dividends are declared at the discretion of our Board of Directors and depend on actual cash from operations, our financial condition and capital requirements, the recommendation of our management, and any other factors the Board of Directors may consider relevant.

On July 22, 2011, the Company's Board of Directors approved a cash dividend of \$0.15 per share of the Company's Common Stock. The total dividend of approximately \$6,272,000 was paid on August 31, 2011 to shareholders of record at the close of business on August 9, 2011.

From time to time, excess cash held at the subsidiary level is transferred to the Company via cash dividends declared by the subsidiary. Because we own less than 100% of the common stock of certain subsidiaries, such subsidiary dividends can result in payments to outside shareholders of those subsidiaries. During the year ended December 31, 2012, three of our subsidiaries paid a total of \$1,600,000 in cash dividends, of which an aggregate of \$1,222,000 was paid to us and \$378,000 was paid to outside shareholders (i.e., paid to certain subsidiary employees who own common stock in the subsidiary). During the year ended December 31, 2011, two of our subsidiaries paid a total of \$2,000,000 in cash dividends, of which an aggregate of \$1,310,000 was paid to us and \$690,000 was paid to outside shareholders. Dividends paid to outside shareholders are accounted for as a reduction in noncontrolling interest.

# **Issuer Purchases of Equity Securities**

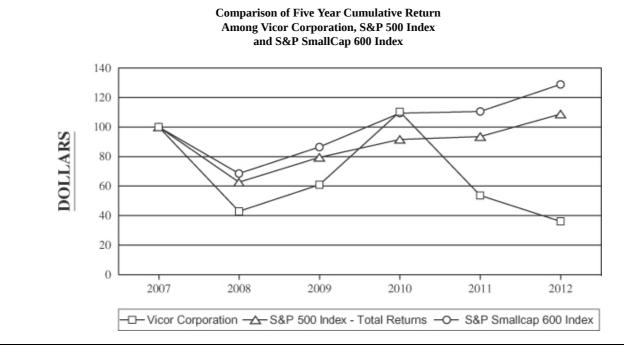
	Total Number of Shares (or Units)	Average Price Paid	Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans	Maximum Number (of Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or
Period	Purchased	per Share (or Unit)	or Programs	Programs
October 1 — 31, 2012		\$ —		\$ 8,541,000
November 1 — 30, 2012	—	\$ —	—	\$ 8,541,000
December 1 — 31, 2012	—	\$ —	—	\$ 8,541,000
Total		\$ —		\$ 8,541,000

In November 2000, our Board of Directors authorized the repurchase of up to \$30,000,000 of our Common Stock (the "November 2000 Plan"). The November 2000 Plan authorizes us to make such repurchases from time to time in the open market or through privately negotiated transactions. The timing and amounts of stock repurchases are at the discretion of management based on its view of economic and financial market conditions. We did not repurchase shares of Common Stock during the year ended December 31, 2012.

### Stockholder Return Performance Graph

The graph set forth below presents the cumulative, five-year stockholder return for each of the Company's Common Stock, the Standard & Poor's 500 Index ("S&P 500 Index"), a value-weighted index made up of 500 of the largest, by market capitalization, listed companies, and the Standard & Poor's SmallCap 600 Index ("S&P SmallCap 600 Index"), a value-weighted index of 600 listed companies with market capitalizations between \$200,000,000 and \$1,000,000,000.

The graph assumes an investment of \$100 on December 31, 2007, in each of our Common Stock, the S&P 500 Index, and the S&P SmallCap 600 Index, and assumes reinvestment of all dividends. The historical information set forth below is not necessarily indicative of future performance.



	2007	2008	2009	2010	2011	2012
Vicor Corporation	\$100.00	\$ 43.57	\$ 61.30	\$ 110.19	\$ 54.19	\$ 36.90
S&P 500 Index	\$100.00	\$ 62.99	\$ 79.67	\$ 91.67	\$ 93.61	\$ 108.59
S&P SmallCap 600 Index	\$100.00	\$ 68.93	\$ 86.55	\$ 109.32	\$ 110.43	\$ 128.46

Our equity plan information required by this item is incorporated by reference to the information in Part III, Item 12 of this Annual Report on Form 10-K.

# ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data with respect to our statements of operations for the years ended December 31, 2012, 2011, and 2010, and with respect to our balance sheets as of December 31, 2012 and 2011, are derived from our Consolidated Financial Statements, which appear elsewhere in this report and which have been audited by Grant Thornton LLP, our independent registered public accounting firm. The following selected consolidated financial data with respect to our statements of operations for the years ended December 31, 2009 and 2008, and with respect to our balance sheets as of December 31, 2010, 2009 and 2008 are derived from our Consolidated Financial Statements, which are not included herein.

	Year Ended December 31,					
Statement of Operations Data	2012	2011	2010	2009	2008	
		(In thous	ands, except per sh	iare data)		
Net revenues	\$218,507	\$252,968	\$250,733	\$ 197,959	\$205,368	
Income (loss) from operations	(2,785)	13,686	29,122	4,773	(1,142)	
Consolidated net income (loss)	(3,798)	9,309	33,539	4,093	(1,778)	
Net income attributable to noncontrolling interest	279	466	214	1,295	1,817	
Net income (loss) attributable to Vicor Corporation	(4,077)	8,843	33,325	2,798	(3,595)	
Net income (loss) per share — basic and diluted attributable to Vicor Corporation	(0.10)	0.21	0.80	0.07	(0.09)	
Weighted average shares — basic	41,811	41,797	41,700	41,665	41,651	
Weighted average shares — diluted	41,811	41,856	41,772	41,671	41,651	
Cash dividends per share	\$ —	\$ 0.15	\$ 0.30	\$ —	\$ 0.30	

	As of December 31,					
Balance Sheet Data	2012	2011	2010	2009	2008	
			(In thousands)			
Working capital	\$128,498	\$124,386	\$105,454	\$ 74,791	\$ 65,297	
Total assets	202,581	208,141	204,912	180,577	171,922	
Total liabilities	20,608	23,431	25,900	24,511	20,496	
Total equity	181,973	184,710	179,012	156,066	151,426	

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

### Overview

We design, develop, manufacture, and market modular power components and complete power systems. We sell our products primarily to customers in the higher-performance, higher-power segments of the power systems market, including aerospace and defense electronics, enterprise and high performance computing, industrial equipment and automation, telecommunications and network infrastructure, and vehicles and transportation.

We have organized our business segments according to our key product lines. The BBU segment designs, develops, manufactures and markets our modular power converters and configurable products, and also includes the operations of our Westcor division, the six entities comprising Vicor Custom Power, and the BBU operations of VJCL. The VI Chip segment includes VI Chip Corporation, which designs, develops, manufactures and markets our FPA products. The VI Chip segment also includes the VI Chip business conducted through VJCL. The Picor segment include Picor Corporation, which designs, develops, manufactures and markets integrated circuits and related products for use in a variety of power management and power system applications. Picor develops these products to be sold as part of our products or to third parties for separate applications.

Our bookings, revenues, and operating results in 2012 have been negatively impacted by general economic conditions. Some of the markets in which we have historically focused remain in a weakened state. In particular, expenditures in the defense electronics sector have declined from historical levels as a result of governmental

budget constraints and we have been impacted by the continued recession in Europe. In addition, VI Chip and Picor continue to be dependent on a limited number of customers, and we have experienced slower than expected growth from certain new product opportunities.

For the year ended December 31, 2012, revenues decreased 13.6% to \$218,507,000 from \$252,968,000 in 2011. Export sales as a percentage of total revenues were approximately 51.1% in 2012 and 56.9% in 2011. Gross margin decreased to \$91,651,000 in 2012 from \$106,694,000 in 2011, due to the decrease in revenues. Gross margin, as a percentage of revenue, decreased to 41.9% in 2012 from 42.2% in 2011, primarily due to an increase of approximately \$1,400,000 to inventory reserves recorded in the fourth quarter of 2012 for potential excess and obsolete inventory charged against cost of revenues, partially offset by a shift in product mix to a higher proportion of higher-margin BBU products. During the fourth quarter of 2012, we recorded an impairment to goodwill of \$2,012,000 based on our annual assessment of the carrying value of the goodwill related to VJCL and an increase in our income tax valuation allowance against certain deferred tax assets of \$1,489,000. In addition, we recorded a gain from a litigation-related settlement of \$1,975,000 from the contemporaneous settlement agreement between us and certain insurance carriers. We reported a net loss in 2012 of \$(4,077,000) as compared to net income of \$8,843,000 in 2011, and a net loss per share of \$(0.10) in 2012, as compared to a diluted income per share of \$0.21 in 2011.

Backlog, representing the total of orders for products received for which shipment is scheduled within the next 12 months, was approximately \$31,400,000 at the end of 2012 as compared to \$54,200,000 at the end of 2011.

Operating expenses for 2012, including the impairment to goodwill and the gain from litigation-related settlement discussed above, increased \$1,428,000, or 1.5%, to \$94,436,000 from \$93,008,000 in 2011, due to increases in selling, general and administrative expenses of \$1,614,000, offset by a decrease in research and development expenses of \$223,000. The key increases in selling, general and administrative expenses were compensation expenses of \$3,052,000, travel expenses of \$637,000, and advertising expenses of \$208,000, partially offset by decreases in legal fees of \$880,000, commissions expense of \$631,000, depreciation and amortization of \$526,000, and outside services expense of \$188,000. The key decreases in research and development expenses were compensation expenses of \$680,000 and outside services expense of \$136,000, partially offset by increases in project and pre-production materials of \$346,000, deferred costs of \$128,000, and computer expenses of \$89,000.

"Other income, net" decreased \$152,000 to \$194,000 in 2012 from \$346,000 in 2011. The primary reasons for the decline were decreases in credit gains on available for sale securities of \$311,000 and interest income of \$123,000, partially offset by a decrease in foreign currency losses of \$280,000.

In 2012, depreciation and amortization totaled \$10,423,000 and capital additions were \$7,396,000, compared to \$11,005,000 and \$7,466,000, respectively, for 2011.

Inventories decreased by approximately \$5,797,000, or 16.2%, to \$29,955,000 at the end of 2012 as compared to \$35,752,000 at the end of 2011. The decrease was primarily due to decreases in VI Chip and BBU inventories of approximately \$4,989,000 and \$1,669,000, respectively, partially offset by an increase in Picor inventories of approximately \$861,000. The overall decrease reflects an effort to manage the level of raw materials, in particular, in light of reduced bookings.

In February 2013, we initiated a workforce reduction. As a result, we will record a pre-tax charge in the first quarter of 2013 of approximately \$1,300,000 for the cost of severance and other employee-related costs, based on each employee's respective length of service.

The following table sets forth certain items of selected consolidated financial information as a percentage of net revenues for the years ended December 31. This table and the subsequent discussion should be read in conjunction with the selected financial data and the Consolidated Financial Statements and related footnotes contained elsewhere in this report.

	Year Ended December 31,		
	2012	2011	2010
Net revenues	100.0%	100.0%	100.0%
Gross margin	41.9%	42.2%	45.7%
Selling, general and administrative expenses	25.5%	21.4%	19.7%
Research and development expenses	17.7%	15.4%	14.4%
Income (loss) before income taxes	(1.2)%	5.5%	11.8%

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

Management's Discussion and Analysis of Financial Condition and Results of Operations is based upon our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates and judgments, including those related to allowance for doubtful accounts, product warranties, inventories, investments, intangible assets, income taxes, impairment of long-lived assets, share-based compensation, contingencies and litigation. We base our estimates and judgments on historical experience, knowledge of current conditions and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We also have other policies that we consider key accounting policies, such as our policy for revenue recognition, including the deferral of revenue on sales to distributors until the products are sold to the end user; however, the application of these policies does not require us to make significant estimates or judgments that are difficult or subjective.

### Allowance for Doubtful Accounts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments, based on assessments of customers' credit-risk profiles and payment histories. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

#### Inventories

We employ a variety of methodologies to estimate allowances for its inventory for estimated obsolescence or unmarketable inventory, based upon its known backlog and historical usage, and assumptions about future demand and market conditions. For BBU products produced at our Andover facility, our principal manufacturing location, the model used is based upon a comparison of on-hand quantities to projected demand, such that amounts of inventory on hand in excess of a three-year projected usage are fully reserved. Since VI Chip and Picor products are still at a relatively early stage, a one-year projected usage assumption is used. While we have used our best efforts and believe we have used the best available information to estimate future demand, due to uncertainty in the economy and our business and the inherent difficulty in predicting future demand, it is possible actual demand for our products will differ from our estimates. If actual future demand or market conditions are less favorable than those projected by management, additional inventory reserves for existing inventories may need to be recorded in future periods.

During the fourth quarter of 2012, we recorded an increase of approximately \$1,400,000 to the inventory reserves for potential excess and obsolete inventories. Over 75% of the charge was for VI Chip raw material and component inventories associated with products for which we had earlier forecast reasonable revenue during 2012 and into 2013. However, due to extended delays in receipt of purchase orders and limited visibility into when we might actually consume these parts, they were deemed excess based on our quantitative methodology and certain qualitative considerations.

### Fair Value Measurements

We account for certain financial assets at fair value, defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. As such, fair value is a market-based measurement that is determined based on assumptions that market participants would use in pricing an asset or liability. If management made different assumptions or judgments, material differences in fair values could occur.

### Long-Term Investments

Our long-term investments are classified as available-for-sale securities. Available-for-sale securities are carried at fair value, with unrealized gains and losses, net of tax, attributable to credit loss recorded through the statement of operations and unrealized gains and losses, net of tax, attributable to other non-credit factors reported in "Accumulated other comprehensive (loss) income," a component of Total Equity. In determining the amount of credit loss, we compare the present value of cash flows expected to be collected to the amortized cost basis of the securities, considering credit default risks probabilities and changes in credit ratings as significant inputs, among other factors. We periodically evaluate if an investment is considered impaired, whether an impairment is other than temporary, and the measurement of an impairment loss. We consider a variety of impairment indicators such as, but not limited to, a significant deterioration in the earnings performance, credit rating, or asset quality of the investment.

As of December 31, 2012, we held auction rate securities that had experienced failed auctions totaling \$6,100,000 at par value, all of which had been purchased through and are held by a broker-dealer affiliate of Bank of America, N.A. (the "Failed Auction Securities"). The Failed Auction Securities held by us were AAA/Aaa/A3 rated by the major credit rating agencies, are collateralized by student loans, and are guaranteed by the U.S. Department of Education under the Federal Family Education Loan Program. We are not aware of any reason to believe any of the issuers of the Failed Auction Securities held by us are presently at risk of default. Through December 31, 2012, we have continued to receive interest payments on the Failed Auction Securities in accordance with the terms of their respective indentures. We believe all of our auction rate security investments will ultimately be liquidated without significant loss primarily due to the overall quality of the issues held and the collateral securing the substantial majority of the underlying obligations. However, current conditions in the auction rate securities market have led us to conclude the recovery period for the Failed Auction Securities exceeds 12 months. As a result, we have continued to classify the Failed Auction Securities as long-term as of December 31, 2012.

### Long-Lived Assets

We review property, plant and equipment and finite-lived intangible assets for impairment whenever events or changes in circumstances indicate the carrying value of such assets may not be recoverable. We determine whether the carrying value of an asset or asset group is recoverable based on comparison to the undiscounted expected future cash flows the assets are expected to generate over their remaining economic lives. If an asset is not recoverable, the impairment loss is equal to the amount by which the carrying value of the asset exceeds its fair value, which is determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. Evaluation of impairment of long-lived assets requires estimates of future operating results that are used in the preparation of the expected future undiscounted cash flows. Actual future

operating results and the remaining economic lives of our long-lived assets could differ from the estimates used in assessing the recoverability of these assets. These differences could result in impairment charges, which could have a material adverse impact on our results of operations.

#### Goodwill

Goodwill is subject to an annual impairment test, at the reporting unit level, or more frequently if indicators of potential impairment exist. We perform the annual test in the fourth quarter. While a qualitative option is available, the performance of the quantitative test involves a two-step process. The first step of the impairment test involves comparing the fair values of the reporting unit with its carrying value, including goodwill. We generally determine the fair value of the reporting unit using the income approach methodology of valuation that includes the discounted cash flow method, as well as other generally accepted valuation methodologies, which requires significant judgment by management. If the carrying amount of the reporting unit exceeds the reporting unit's fair value, we perform the second step of the goodwill impairment test to determine the amount of the impairment loss. The second step of the goodwill impairment test involves comparing the implied fair value of the affected reporting unit's goodwill with the carrying value of that goodwill. The amount by which the carrying value of the goodwill exceeds its implied fair value, if any, is recognized as an impairment loss. These impairment tests may result in impairment losses that could have a material adverse impact on our results of operations.

In 2010, we performed the first step of the quantitative goodwill impairment assessment and determined no impairment was indicated as the estimated fair value of VJCL exceeded its carrying value by approximately 15%. In 2011, we made a qualitative assessment of whether goodwill impairment existed and determined it was more likely than not the fair value of VJCL exceeded its carrying value. Therefore, we did not perform the quantitative two-step impairment test. In 2012, we performed the first step of the quantitative impairment assessment for VJCL and determined the carrying value of VJCL exceeded its fair value. We therefore performed the second step of the evaluation to calculate the impairment and, as a result, recorded a full impairment charge of \$2,012,000 during the fourth quarter of 2012. The primary factor contributing to the impairment charge in 2012 was the reduction of forecasted cash flows due to lower cumulative forecasted revenues and related gross margins, which in turn was due to lower forecasted revenue growth rates primarily due to the continued lack of growth in the Japanese economy as a whole. In addition, we applied a higher discount rate and a lower long term growth rate compared to the 2010 quantitative assessment, based on current economic conditions.

### Stock-Based Compensation

We record stock-based compensation expense based on the fair value of stock-based awards measured at the grant date and recognized over the relevant service period. We estimate the fair value of each stock-based award on the measurement date using either the current market price or the Black-Scholes option valuation model. The Black-Scholes option valuation model incorporates assumptions as to stock price volatility, the expected life of options, forfeiture rate, a risk-free interest rate and dividend yields.

For performance-based awards with vesting provisions tied to achievements of certain performance conditions, we assess, on an ongoing basis, the probability of whether the performance criteria will be achieved. If and when achievement of the performance criteria is deemed probable, we begin to recognize the associated compensation expense for the applicable awards over the relevant performance period.

Many of these assumptions are highly subjective and require the exercise of management judgment. If management made different estimates or judgments, material differences in the amount of stock-based compensation could occur.

### **Product Warranties**

We generally warrant our products for a period of two years. During 2012, we entered into supply agreements with certain customers contractually committing us to warranty and indemnification requirements

exceeding our standard two year warranty period. We maintain allowances for estimated product returns under warranty based upon a review of known or potential product failures in the field and upon historical patterns of product returns. If unforeseen product issues arise or product returns increase above expected rates, additional allowances may be required.

### Income Taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of tax credits, benefits, and deductions, and in the calculation of certain assets and liabilities which arise from differences in the timing and of the recognition of revenue and expense for tax and financial statement purposes, as well as the interest and penalties relating to uncertain tax positions. Significant changes to these estimates may result in an increase of decrease to our tax provision in a subsequent period.

Significant management judgment is also required in determining whether deferred tax assets will be realized in full or in part. We assess the need for the valuation allowance on a quarterly basis. We record a valuation allowance to reduce our deferred tax assets to the amount we believe is more likely than not to be realized. In assessing the need for a valuation allowance, we consider all positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and past financial performance. We believe it is more likely than not our net federal deferred tax assets of approximately \$5,299,000 as of December 31, 2012 will be realized, based upon our assessment of all available evidence, both positive and negative. We believe the weight of positive evidence, including recent cumulative income and income in the carryback period for federal tax purposes, as well as a potential taxplanning strategy and projected income in the future, overcomes the negative evidence of our operating loss in the fourth quarter of 2012 and an expected operating loss for the first quarter of 2013. During the fourth quarter of 2012, though, we recorded an increase to the valuation allowance of approximately \$1,489,000 for all remaining state deferred tax assets not previously covered by a valuation allowance due to the following factors: (1) we cannot forecast sufficient future taxable income, of the appropriate nature, based on our quarterly assessment; (2) we do not have the ability to carryback state net operating losses or credits to utilize against state taxable income; and (3) state tax net operating losses and credits have a shorter carryforward period to be utilized than do the federal tax attributes. As a result, as of December 31, 2012, we had a valuation allowance of approximately \$11,480,000 primarily against certain state deferred tax assets, for which realization cannot be considered more likely than not at this time. Such deferred tax assets principally relates to state tax net operating loss and credit carryforwards in certain tax jurisdictions for which sufficient taxable income for utilization cannot be projected at this time which may result in the net operating losses or credits or both potentially expiring without being utilized due to shorter carryforward periods. The valuation allowance against these deferred tax assets may require adjustment in the future based on changes in the mix of temporary differences, changes in tax laws, and operating performance. Additionally, changes in the assumptions or other circumstances may require additional valuation allowances to be recorded if actual reversals of temporary differences differ from those estimates or if estimates of projected future taxable income change. If and when we determine the valuation allowance should be released, the adjustment would result in a tax benefit in the Consolidated Statements of Operations and may include a portion to be accounted for through "Additional paid-in capital", a component of Stockholders' Equity. The amount of the tax benefit to be recorded in a particular quarter could be material.

We follow a two-step process to determine the amount of tax benefit to recognize in our financial statements. The tax position must first be evaluated to determine the likelihood that it will be sustained upon examination by a tax authority. If the tax position is deemed "more-likely-than-not" to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50 percent likelihood of being realized upon ultimate settlement. If the tax position does not meet the "more-likely-than-not" threshold then it is not recognized in the financial statements. We accrue interest and penalties, if any, related to unrecognized tax benefits as a component of income tax expense. If the judgments and estimates made by us are not correct, the unrecognized tax benefits may have to be adjusted, and the adjustments could be material.

### Contingencies

From time to time, we receive notices of product failure claims, infringement of patent or other intellectual property rights of others or for other claims. In January 2011, we were named in a complaint for patent infringement filed by SynQor, Inc. (see Part I—Item 3—Legal Proceedings) that is ongoing. We assess each matter to determine if a contingent liability should be recorded. In making this assessment, we may consult, depending on the nature of the matter, with external legal counsel and technical experts. Based on the information we obtain, combined with our judgment regarding all the facts and circumstances of each matter, we determine whether it is probable that a contingent loss may be incurred and whether the amount of such loss can be reasonably estimated. Should a loss be probable and reasonably estimable, we record a loss. In determining the amount of the loss, we consider advice received from experts in the specific matter, current status of legal proceedings, if any, prior case history and other factors. Should the judgments and estimates made by us be incorrect, we may need to record additional contingent losses that could materially adversely impact our results of operations and financial position.

### New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") that are adopted by us as of the specified effective date. Unless otherwise discussed, we believe the impact of recently issued standards will not have a material impact on our future financial condition and results of operations. See Note 2—*Impact of recently issued accounting standards*, to the Consolidated Financial Statements for a description of recently issued and adopted accounting pronouncements, including the dates of adoption and expected impact on our financial position and results of operations.

### Year ended December 31, 2012 compared to Year ended December 31, 2011

Net revenues for 2012 were \$218,507,000, a decrease of \$34,461,000 or 13.6%, as compared to \$252,968,000 for 2011.

The components of revenue for the years ended December 31 were as follows (dollars in thousands):

			Increase (deo	rease)
	2012	2011	\$	%
BBU	\$179,919	\$194,830	\$(14,911)	(7.7)%
VI Chip	35,394	52,271	(16,877)	(32.3)%
Picor	3,194	5,867	(2,673)	(45.6)%
Total	\$218,507	\$252,968	\$(34,461)	(13.6)%

The decrease in BBU revenues is primarily attributed to decreases in Vicor Custom Power revenues of approximately \$5,956,000, BBU component revenues of approximately \$5,930,000, and Westcor revenues of approximately \$1,822,000. The decrease in Vicor Custom Power revenue was due to a decrease in defense electronics bookings and the completion of two major programs in the first quarter of 2011. The decrease in BBU component revenues was primarily due to lower sales to international customers, due to the continued recession in Europe. The decrease in VI Chip and Picor revenues is a result of lower bookings, delays in new product introductions, and reflects a dependence on a limited number of customers. VI Chip and Picor revenues from its main customer decreased significantly in 2012. Overall orders for fiscal year 2012 decreased by 14.2% compared to 2011. This decrease was attributed to decreases in BBU, VI Chip, and Picor orders of 4.4%, 51.1% and 35.1%, respectively.

Gross margin for fiscal 2012 decreased \$15,043,000, or 14.1%, to \$91,651,000 from \$106,694,000 in 2011, due to a decrease in net revenues. Gross margin as a percentage of net revenues decreased to 41.9% in fiscal 2012 from 42.2% in fiscal 2011. The primary reason for the decrease in gross margin percentage was an increase

of approximately \$1,400,000 to inventory reserves recorded in the fourth quarter of 2012 for potential excess and obsolete inventory charged against cost of revenues, partially offset by a shift in product mix to a higher proportion of higher-margin BBU products. Over 75% of the inventory reserve charge was for VI Chip raw material and component inventories associated with products for which we had earlier forecast reasonable revenue during 2012 and into 2013. However, due to extended delays in receipt of purchase orders and limited visibility into when these parts might actually be consumed, they were deemed excess based on our quantitative methodology and certain qualitative considerations.

Income (loss) from operations by segment for the years ended December 31 were as follows (dollars in thousands):

			Increase (de	ecrease)
	2012	2011	\$	%
BBU	\$ 28,114	\$ 31,938	\$ (3,824)	(12.0)%
VI Chip	(27,409)	(16,294)	(11,115)	(68.2)%
Picor	(2,786)	(1,239)	(1,547)	(124.9)%

The decrease in operating profit for all three segments in 2012 compared to 2011 was due to a decrease in revenues and a related decrease in gross margin for reasons discussed above, as well as increases in operating expenses. The cash needs for each segment are primarily for working capital and capital expenditures. Positive cash flow from BBU has historically funded and is expected to continue to fund VI Chip operations and the purchase of equipment for VI Chip for the foreseeable future.

Selling, general and administrative expenses were \$55,655,000 for 2012, an increase of \$1,614,000, or 3.0%, as compared to \$54,041,000 for the same period in 2011. As a percentage of net revenues, selling, general and administrative expenses increased to 25.5% in 2012 from 21.4% in 2011.

The components of the \$1,614,000 increase in selling, general, and administrative expenses were as follows (in thousands):

	Increase (de	ecrease)
Compensation	\$3,052	10.3%(1)
Travel expenses	637	28.6%(2)
Advertising expenses	208	9.3%(3)
Stockholder reporting	108	61.0%(4)
Audit and tax fees	71	5.3%
Computer expenses	(68)	(6.9)%
Facilities expenses	(126)	(9.1)%
Outside services	(188)	(8.8)%
Depreciation and amortization	(526)	(15.3)%(5)
Commissions expense	(631)	(10.8)%(6)
Legal fees	(880)	(33.0)%(7)
Other, net	(43)	(2.2)%
	\$1,614	3.0%

(1) Increase primarily attributable to increase in headcount, annual compensation adjustments in May 2012, and an increase in fringe benefit expenses due to increases in premiums for employee health benefits.

- (2) Increase primarily attributed to increased travel by the Company's sales and marketing personnel, in connection with the implementation of changes in the Company's sales and marketing organizations to a unified go-to-market strategy and expanded marketing communications.
- (3) Increase primarily due to increases in sales support expenses, direct mailings, and advertising in trade publications.

- (4) Increase primarily attributed to expenses incurred in 2012 in connection with the tender offer for shares of our Common Stock.
- (5) Decrease attributed to certain of our corporate fixed assets becoming fully depreciated during 2012.
- (6) Decrease primarily attributed to the decrease in net revenues subject to commissions.
- (7) Decrease attributed to a decrease in legal expenses associated with the patent infringement claim filed against us during the first quarter of 2011 by SynQor, Inc. See Note 14 to the Consolidated Financial Statements for discussion of this matter.

Research and development expenses decreased \$223,000, or 0.6%, to \$38,744,000 in 2012 from \$38,967,000 in 2011. As a percentage of net revenues, research and development increased to 17.7% in 2012 from 15.4% in 2011.

The components of the \$223,000 decrease in research and development expenses were as follows (in thousands):

	Increase (de	crease)
Compensation	\$ (680)	(2.5)%(1)
Outside services/subcontract labor	(136)	(10.3)%(2)
Employment recruiting	86	97.4%
Computer expenses	89	26.8%
Deferred costs	128	72.9%(3)
Project and pre-production materials	346	9.4%(4)
Other, net	(56)	(0.9)%
	<u>\$ (223</u> )	(0.6)%

(1) Decrease attributed to reductions in VI Chip and Westcor headcount and a decrease in VI Chip and Picor stock-based compensation expense.

- (2) Decrease primarily attributed to decreased use of outside services and subcontract labor due to decreased activity at Vicor Custom Power subsidiaries.
- (3) Increase primarily attributed to a decrease, as compared to the prior year, in deferred costs capitalized for certain non-recurring engineering projects for which the related revenues have been deferred.
- (4) Increase primarily attributed to an increase in materials used in the development of VI Chip products.

During the fourth quarter of 2012, we recorded an impairment to goodwill of \$2,012,000 based on our annual assessment of the carrying value of the goodwill related to VJCL. In addition, we recorded a gain from a litigation-related settlement of \$1,975,000 from the contemporaneous settlement agreement between us and certain insurance carriers.

The significant changes in the components of "Other income, net" for the years ended December 31 were as follows (in thousands):

	2012	2011	Increase (decrease)
Interest income	\$136	\$ 259	\$ (123)
Credit gains (losses) on available for sale securities	(9)	302	(311)
Foreign currency losses, net	(46)	(326)	280
Gain on disposal of equipment	33	21	11
Other	80	90	(9)
	\$194	\$ 346	\$ (152)

The decrease in credit gains on available-for-sale securities (i.e., the Failed Auction Securities) was due primarily to the redemption at par by issuers of \$3,000,000 and \$9,975,000 of auction rate securities during 2012 and 2011, respectively, for which credit losses had previously been recorded. Our exposure to market risk for fluctuations in foreign currency exchange rates relates primarily to the operations of VJCL. The functional currency of our subsidiaries in Europe and Hong Kong is the U.S. dollar. The decrease in interest income for the period was due to lower average balances on our long-term investments as well as a general decrease in interest rates.

Income (loss) before income taxes was \$(2,591,000) in 2012 compared to \$14,032,000 in 2011.

The provision for income taxes and the effective income tax rate for the years ended December 31 were as follows (dollars in thousands):

	2012	2011
Provision for income taxes	\$1,207	\$4,723
Effective income tax rate	46.6%	33.7%

Compared to 2011, the provision for income taxes decreased in 2012 due to the decrease in income (loss) before income taxes. Our effective tax rate was higher in 2012 compared to 2011 due to lower income (loss) before income taxes in 2012 and due to an increase in the income tax valuation allowance against certain deferred tax assets of \$1,489,000 in the fourth quarter of 2012. See Note 13 to the Consolidated Financial Statements for a discussion of the accounting for the tax benefit, deferred tax assets and deferred tax valuation allowances.

Net income of noncontrolling interest decreased by \$187,000 in 2012 to \$279,000 as compared to \$466,000 in 2011. This was due to lower net income of entities in which we hold a noncontrolling equity interest (i.e., three Vicor Custom Power subsidiaries and VJCL).

Income (loss) per share attributable to Vicor Corporation was \$(0.10) per basic share for the year ended December 31, 2012 as compared to \$0.21 per diluted share for the year ended December 31, 2011.

### Year ended December 31, 2011 compared to Year ended December 31, 2010

Net revenues for 2011 were \$252,968,000, an increase of \$2,235,000 or 0.9%, as compared to \$250,733,000 for 2010.

The components of revenue for the years ended were as follows (dollars in thousands):

		Increase (decrease)		
	2011	2010	\$	%
BBU	\$194,830	\$217,018	\$(22,188)	(10.2)%
VI Chip	52,271	28,972	23,299	80.4%
Picor	5,867	4,743	1,124	23.7%
Total	\$252,968	\$250,733	\$ 2,235	0.9%

The decrease in BBU revenues is attributed to a decrease in Vicor Custom Power revenue of approximately \$18,646,000, due to a decrease in defense electronics bookings and the completion of two major programs in the first half of 2011. In addition, BBU component revenues decreased by approximately \$4,039,000, which was offset partially by an increase in VJCL revenues of approximately \$2,334,000. The increases in VI Chip and Picor revenues were driven by strong bookings from their lead customer, particularly in the third quarter of 2010 and the first quarter of 2011. Overall, orders for 2011 decreased by 16.1% from prior year. This decrease was caused by decreases in BBU, VI Chip, and Picor orders during the year of 18.8%, 2.0%, and 25.9%, respectively.

Gross margin for 2011 decreased \$7,826,000, or 6.8%, to \$106,694,000 from \$114,520,000 in 2010. Gross margin as a percentage of net revenues decreased to 42.2% in 2011 from 45.7% in 2010. The primary component of the decrease in gross margin (dollars and percentage) was due primarily to a shift in product mix to a higher proportion of lower-margin VI Chip products, along with lower volumes of higher-margin BBU component products and Vicor Custom Power products.

Income (loss) from operations by segment for the years ended December 31 were as follows (dollars in thousands):

			Increase (de	crease)
	2011	2010	\$	%
BBU	\$ 31,938	\$ 55,619	\$(23,681)	(42.6)%
VI Chip	(16,294)	(24,565)	8,271	33.7%
Picor	(1,239)	(1,282)	43	3.4%

The decrease in BBU operating profit in 2011 compared to 2010 was due to a decrease in revenues and a related decrease in gross margin, as well as an increase in operating expenses. The decrease in VI Chip operating loss in 2011 compared to 2010 was due to the increase in revenues and related improvement in gross margins, partially offset by an increase in operating expenses. The cash needs for each segment are primarily for working capital and capital expenditures. Positive cash flow from BBU has historically funded and is expected to continue to fund VI Chip operations and the purchase of equipment for VI Chip for the foreseeable future.

Selling, general and administrative expenses were \$54,041,000 for 2011, an increase of \$4,624,000, or 9.4%, as compared to \$49,417,000 for the same period in 2010. As a percentage of net revenues, selling, general and administrative expenses increased to 21.4% in 2011 from 19.7% in 2010.

The components of the \$4,624,000 increase in selling, general, and administrative expenses were as follows (in thousands):

	Increase (d	ecrease)
Compensation	\$3,212	12.2%(1)
Legal fees	1,910	251.9%(2)
Outside services	608	39.8%(3)
Travel expenses	324	17.0%(4)
Depreciation and amortization	185	5.7%
Employment recruiting	144	48.8%
Commissions expense	(974)	(14.3)%(5)
Advertising expenses	(664)	(22.8)%(6)
Audit and tax fees	(161)	(10.8)%
Computer expenses	(159)	(13.8)%
Other, net	199	6.7%
	\$4,624	9.4%

(1) Increase primarily attributable to an increase in headcount, annual compensation adjustments in May 2011, an increase in fringe benefit expenses due to increases in premiums for employee health benefits, and additional stock-based compensation expense related to Picor stock options.

(2) Increase in legal fees due to a patent infringement claim filed against us during the first quarter of 2011 by SynQor, Inc. See Note 14 to the Consolidated Financial Statement for discussion of this matter.

(3) Increase primarily attributed to additional outsourcing of certain sales and marketing and information technology functions.

(4) Increase primarily attributed to increased travel by our sales and marketing personnel.

- (5) Decrease primarily attributed to the decrease in net revenues subject to commissions, in particular due to an increase in international revenues, which are generally not subject to commissions.
- (6) Decrease primarily due to decreases in sales support expenses, direct mailings and advertising in trade publications.

Research and development expenses increased \$2,986,000, or 8.3%, to \$38,967,000 in 2011 from \$35,981,000 in 2010. As a percentage of net revenues, research and development increased to 15.4% in 2011 from 14.4% in 2011.

The components of the \$2,986,000 increase in research and development expenses were as follows (in thousands):

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Compensation	\$2,604	10.4%(1)
Project and pre-production materials	365	11.1%(2)
Depreciation and amortization	256	16.4%(3)
Deferred costs	217	55.2%(4)
Computer expenses	119	56.2%
Outside services/subcontract labor	(447)	(25.4)%(5)
Supplies expenses	(154)	(17.7)%
Employment recruiting	(117)	(56.8)%
Other, net	143	4.0%
	\$2,986	8.3%

(1) Increase primarily attributed to an increase in research and development personnel for the BBU and VI Chip, annual compensation adjustments in May 2011, an increase in fringe expense due to increases in premiums for employee health benefits, and additional stock-based compensation expense related to Picor stock options.

(2) Increase primarily attributed to an increase in materials used in the development of VI Chip and Picor products.

(3) Increase primarily attributed to additions of engineering equipment over the past several quarters for the BBU and VI Chip.

(4) Increase primarily attributed to a decrease, as compared to the prior year, in deferred costs capitalized for certain non-recurring engineering projects for which the related revenues have been deferred.

(5) Decrease attributable to decreased use of outside services due to decreased activities at one of the Vicor Custom subsidiaries.

The major changes in the components of "Other income, net" for the years ended December 31 were as follows (in thousands):

	2011	2010	Increase (decrease)
Interest income	\$ 259	\$ 442	\$ (183)
Unrealized gain on trading securities		970	(970)
Unrealized loss on auction rate securities rights		(962)	962
Credit losses on available for sale securities	302	(146)	448
Foreign currency (losses) gains, net	(326)	(158)	(168)
Gain on disposal of equipment	21	249	(227)
Other	90	102	(13)
	\$ 346	\$ 497	\$ (151)

Pursuant to a settlement agreement reached with UBS AG in 2008, our then-remaining par value of \$8,600,000 of auction rate securities held by UBS were purchased by UBS at par value on June 30, 2010. The unrealized gain and (loss) on our auction rate securities and associated rights for the quarter ended June 30, 2010, resulted from this sale and the termination of the associated rights. Because we recorded, for the quarter ended March 31, 2010, an income statement gain of \$4,000, representing the net of the decrease in estimated value of the auction rate securities held by UBS and the increase in the estimated value of the associated rights, we recognized no net loss on the sale of the auction rate securities to UBS. The increase in credit gains on Failed Auction Securities was primarily due to the redemption at par by issuers of \$9,975,000 of auction rate securities during 2011, for which credit losses had previously been recorded. The decrease in interest income for the period was due to lower average balances on our long-term investments, lower balances on auction rate securities earning higher penalty rates, as well as a general decrease in interest rates. Our exposure to market risk for fluctuations in foreign currency exchange rates relates primarily to the operations of VJCL. The functional currency of our subsidiaries in Europe and Hong Kong is the U.S. dollar.

Income before income taxes was \$14,032,000 in 2011 as compared to \$29,619,000 for 2010.

The provision (benefit) for income taxes and the effective income tax rate for the years ended December 31 were as follows (dollars in thousands):

	2011	2010
Provision (benefit) for income taxes	\$4,723	\$(3,920)
Effective income tax rate	33.7%	(13.2%)

Compared to 2010, the provision (benefit) for income taxes and the effective tax rate increased in 2011 due to the complete utilization of remaining federal, foreign, and a significant portion of remaining state, net operating loss carryforwards through the end of 2010, which lowered the income tax provision and effective tax rate in 2010. During the third and fourth quarters of 2010, the Company recorded non-recurring, non-cash benefits of \$5,158,000 and \$1,159,000, respectively, due to releasing a portion of its deferred tax valuation allowance. See Note 13 to the Consolidated Financial Statements for a discussion of the accounting for the tax benefit, deferred tax assets and deferred tax valuation allowances.

Net income of noncontrolling interest increased by \$252,000 in 2011 to \$466,000 as compared to \$214,000 in 2010. This was due to higher net income of entities in which we hold a noncontrolling equity interest (i.e., three Vicor Custom Power subsidiaries and VJCL).

Basic and diluted income per share attributable to Vicor Corporation was \$0.21 for the year ended December 31, 2011 as compared to \$0.80 for the year ended December 31, 2010.

### LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2012, we had \$84,554,000 in unrestricted cash and cash equivalents. The ratio of current assets to current liabilities was 8.3:1 at December 31, 2012 as compared to 7.2:1 at December 31, 2011. Working capital increased \$4,112,000 to \$128,498,000 at December 31, 2012 from \$124,386,000 at December 31, 2011.

The primary working capital changes were due to the following (in thousands):

	Increase	e (decrease)
Cash and cash equivalents	\$	12,646
Accounts receivable		(4,245)
Inventories		(5,797)
Other current assets		(475)
Accounts payable		1,339
Accrued compensation and benefits		(63)
Accrued expenses		613
Income taxes payable		84
Deferred revenue		410
Other		(400)
	\$	4,112

The primary sources of cash for the year ended December 31, 2012 were \$17,238,000 from operating activities and \$3,630,000 in net sales of long-term investments. The primary use of cash for the year ended December 31, 2012 was \$7,396,000 for the purchase of equipment.

On November 19, 2012, the Company announced its intent to commence a tender offer for shares of its Common Stock representing up to \$20,000,000 in aggregate value and commenced this tender offer on November 26, 2012, with an ultimate expiration date of March 1, 2013. As of March 6, 2013, the most recent date for which information is available related to the preliminary total number of shares accepted for purchase in the tender offer, the Company will purchase no less than 2,031,995 shares of its Common Stock for aggregate consideration of approximately \$10,932,000. The tender offer was not contingent upon obtaining financing or any minimum number of shares being tendered. Shareholders whose shares will be purchased via this tender offer will be paid the determined purchase price per share net in cash, without interest, with existing cash.

As of December 31, 2012, we held \$6,100,000 of auction rate securities classified as long-term investments. See Note 4 to the Consolidated Financial Statements for a discussion of the securities and our accounting treatment thereof.

In November 2000, our Board of Directors authorized the repurchase of up to \$30,000,000 of Common Stock (the "November 2000 Plan"). The November 2000 Plan authorizes us to make such repurchases from time to time in the open market or through privately negotiated transactions. The timing of such repurchases and the number of shares purchased in each transaction are at the discretion of management based on its view of economic and financial market conditions. We did not repurchase shares of Common Stock during the year ended December 31, 2012. As of December 31, 2012, we had approximately \$8,541,000 remaining under the November 2000 Plan.

During the year ending December 31, 2012, three of our subsidiaries paid a total of \$1,600,000 in cash dividends, of which \$1,222,000 was paid to us and \$378,000 was paid to outside shareholders. Dividends paid to outside shareholders are accounted for as a reduction in noncontrolling interest.

The table below summarizes our contractual obligations as of December 31, 2012 (in thousands):

			Payments Due by Pe	eriod	
		Less than			More Than
Contractual Obligations	Total	1 Year	Years 2 & 3	Years 4 & 5	5 Years
Operating lease obligations	\$3,468	\$ 1,506	\$ 1,637	\$ 230	\$ 95
Purchase obligations	702	310	392		
	\$4,170	\$ 1,816	\$ 2,029	\$ 230	\$ 95

Included in purchase obligations, above, are amounts for a contract with a third-party to supply nitrogen for our manufacturing and research and development activities. Under the contract, we are obligated to pay a minimum of \$300,000 annually, subject to semi-annual price adjustments, through March 2015.

In addition to the amounts shown in the table above, approximately \$1,328,000 of unrecognized tax benefits have been recorded as liabilities, and we are uncertain as to if or when such amounts may be settled. Related to these unrecognized tax benefits, we have also recorded a liability for potential interest and penalties of approximately \$177,000 as of December 31, 2012.

Our primary liquidity needs are for making continuing investments in manufacturing equipment. We believe cash generated from operations and the total of its cash and cash equivalents will be sufficient to fund planned operations and capital equipment purchases for the foreseeable future. We have approximately \$1,077,000 of capital expenditure commitments, principally for manufacturing equipment, as of December 31, 2012.

In February 2013, we initiated a workforce reduction. As a result, we will record a pre-tax charge in the first quarter of 2013 of approximately \$1,300,000 for the cost of severance and other employee-related costs that will involve cash payments during 2013 and 2014 based on each employee's respective length of service.

Based on our ability to access cash and other short-term investments and our expected operating cash flows, we do not anticipate that the current lack of liquidity of our auction rate securities will affect our ability to execute our current operating plan.

We do not consider the impact of inflation and changing prices on our business activities or fluctuations in the exchange rates for foreign currency transactions to have been significant during the last three fiscal years.

# ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to a variety of market risks, including changes in interest rates affecting the return on our cash and cash equivalents and fluctuations in foreign currency exchange rates. As our cash and cash equivalents consist principally of money market securities, which are short-term in nature, we believe our exposure to market risk on interest rate fluctuations for these investments is not significant. Our long-term investments consist mainly of municipal and corporate debt securities, of which the Failed Auction Securities represent a significant portion. While the Failed Auction Securities are all highly rated investments, generally with AAA/Aaa/A3 ratings, continued failure to sell at their reset dates could negatively impact the carrying value of the investments, in turn leading to impairment charges in future periods. Changes in the fair value of the Failed Auction Securities attributable to credit loss are recorded through earnings, with the remainder of any change recorded in "Accumulated other comprehensive (loss) income", a component of Stockholders' Equity. Should a decline in the value of the Failed Auction Securities be other than temporary, the losses would be recorded in "Other income, net." We do not believe there was an "other-than-temporary" decline in value in these securities as of December 31, 2012. We estimate our annual interest income would change by approximately \$79,000 in 2012 for each 100 basis point increase or decrease in interest rates.

Our exposure to market risk for fluctuations in foreign currency exchange rates relates primarily to the operations of VJCL and changes in the dollar/yen exchange rate, as the functional currency of our subsidiaries in Europe and Hong Kong is the U.S. dollar. Therefore, we believe market risk is mitigated since these operations are not materially exposed to foreign exchange fluctuations. Relative to foreign currency exposure against the yen existing on December 31, 2012, we estimate that a 10% unfavorable movement in the dollar/yen exchange rate would increase foreign currency loss by approximately \$8,000.

# ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders Vicor Corporation

We have audited the accompanying consolidated balance sheets of Vicor Corporation (a Delaware corporation) and its subsidiaries (collectively, the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2012. Our audits of the basic consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15 (a)(2). These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Vicor Corporation and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control — Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 7, 2013 expressed an unqualified opinion.

/s/ GRANT THORNTON LLP

Boston, Massachusetts March 7, 2013

# CONSOLIDATED BALANCE SHEETS December 31, 2012 and 2011 (In thousands, except per share data)

ASSETS	2012	2011
ASSETS Current assets:		
Cash and cash equivalents	\$ 84,554	\$ 71,908
Accounts receivable, less allowance of \$292 in 2012 and \$266 in 2011	27,165	31,410
Inventories, net	29,955	35,752
Deferred tax assets	1.776	2,176
Other current assets	2,613	3,088
Total current assets	146,063	144,334
Long-term investments, net	6,736	9,585
Property, plant and equipment, net	44,092	47,241
Long-term deferred tax assets	3,523	2,542
Other assets	2,167	4,439
	\$ 202,581	\$ 208,141
	\$ 202,501	\$ 200,141
LIABILITIES AND EQUITY		
Current liabilities:	¢ C 010	¢ 0.151
Accounts payable	\$ 6,812	\$ 8,151
Accrued compensation and benefits Accrued expenses	7,400 2,233	7,337 2,846
•	336	420
Income taxes payable Deferred revenue	784	1,194
Total current liabilities	17,565	19,948
Long-term deferred revenue	1,549	2,124 1,359
Long-term income taxes payable	1,494	1,359
Commitments and contingencies (Note 14)		
Equity: Vicor Corporation stockholders' equity:		
Preferred Stock, \$.01 par value, 1,000,000 shares authorized; no shares issued		
Class B Common Stock: 10 votes per share, \$.01 par value, 14,000,000 shares authorized, 11,767,052 shares issued and		
outstanding	118	118
Common Stock: 1 vote per share, \$.01 par value, 62,000,000 shares authorized 38,442,175 shares issued and	110	110
30,043,777 shares outstanding (38,441,595 shares issued and 30,043,197 shares outstanding in 2011)	390	387
Additional paid-in capital	167,498	166,227
Retained earnings	132,285	136,362
Accumulated other comprehensive loss	(112)	(322)
Treasury stock at cost: 8,398,398 shares in 2012 and 2011	(121,827)	(121,827)
Total Vicor Corporation stockholders' equity	178,352	180,945
Noncontrolling interest	3,621	3,765
Total equity	181,973	184,710
Total cyarty	\$ 202,581	\$ 208,141
	\$ 202,301	φ 200,141

See accompanying notes.

# CONSOLIDATED STATEMENTS OF OPERATIONS Years Ended December 31, 2012, 2011 and 2010 (In thousands, except per share amounts)

	2012	2011	2010
Net revenues	\$218,507	\$252,968	\$250,733
Cost of revenues	126,856	146,274	136,213
Gross margin	91,651	106,694	114,520
Operating expenses:			
Selling, general and administrative	55,655	54,041	49,417
Research and development	38,744	38,967	35,981
Impairment of goodwill	2,012		
Gain from litigation-related settlement	(1,975)		
Total operating expenses	94,436	93,008	85,398
Income (loss) from operations	(2,785)	13,686	29,122
Other income, net:			
Total unrealized gains on available-for-sale securities, net of unrealized losses	511	1,206	(271)
Portion of (losses) gains recognized in other comprehensive income	(520)	(904)	125
Net credit (losses) gains recognized in earnings	(9)	302	(146)
Other income, net	203	44	643
Total other income, net	194	346	497
Income (loss) before income taxes	(2,591)	14,032	29,619
Provision (benefit) for income taxes	1,207	4,723	(3,920)
Consolidated net income (loss)	(3,798)	9,309	33,539
Less: Net income attributable to noncontrolling interest	279	466	214
Net income (loss) attributable to Vicor Corporation	\$ (4,077)	\$ 8,843	\$ 33,325
Net income (loss) per common share attributable to Vicor Corporation:			
Basic	\$ (0.10)	\$ 0.21	\$ 0.80
Diluted	\$ (0.10)	\$ 0.21	\$ 0.80
Shares used to compute net income (loss) per common share attributable to Vicor Corporation:			
Basic	41,811	41,797	41,700
Diluted	41,811	41,856	41,772
Cash dividends declared per share	\$ —	\$ 0.15	\$ 0.30

See accompanying notes.

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) Years Ended December 31, 2012, 2011 and 2010

(In thousands)

	2012	2011	2010
Consolidated net income (loss)	\$(3,798)	\$ 9,309	\$33,539
Foreign currency translation gains (losses)	(355)	151	402
Unrealized gains (losses), net of tax on available-for-sale securities	520	904	(125)
Consolidated comprehensive income (loss)	(3,633)	10,364	33,816
Less: Comprehensive income attributable to noncontrolling interest	234	474	252
Comprehensive income (loss) attributable to Vicor Corporation	\$(3,867)	\$ 9,890	\$33,564

See accompanying notes.

# CONSOLIDATED STATEMENTS OF CASH FLOWS Years Ended December 31, 2012, 2011 and 2010 (In thousands

Operating activities:	2012	2011	2010
Operating activities: Consolidated net income (loss)	\$ (3,798)	\$ 9,309	\$ 33,539
Adjustments to reconcile consolidated net income (loss) to net cash provided by operating activities:	\$ (3,790)	\$ 9,309	\$ 55,555
Depreciation and amortization	10,423	11,005	10,222
Impairment of goodwill	2,012	11,005	10,222
Deferred income taxes	(369)	148	(6,274)
Stock-based compensation expense	1,244	1,923	871
Increase (decrease) in long-term deferred revenue	(139)	350	(18)
Increase in long-term income taxes payable	135		(10)
Excess tax benefit of stock-based compensation	(105)	(133)	(213)
Gain on disposal of equipment	(33)	(133)	(249)
Credit (gain) loss on available for sale securities	9	(302)	146
Unrealized gain on trading securities		(562)	(970)
Unrealized loss on auction rate security rights			962
Change in current assets and liabilities, net	7,859	4,128	(21,122)
Net cash provided by operating activities	17,238	26,407	16,894
Investing activities:	17,200	20,407	10,034
Purchases of investments	(270)	(1,104)	(908)
Sales and maturities of investments	3,630	11,142	15,768
Additions to property, plant and equipment	(7,396)	(7,466)	(12,103)
Proceeds from sale of equipment	33	10	421
Change in restricted cash		10	415
(Increase) decrease in other assets	(81)	(55)	172
	(4,084)		
Net cash (used in) provided by investing activities Financing activities:	(4,064)	2,527	3,765
Proceeds from issuance of Common Stock	9	452	1,104
Common Stock dividends paid		(6,272)	(12,506)
Noncontrolling interest dividends paid	(378)	(690)	(12,500)
Excess tax benefit of stock-based compensation	105	133	213
•	(264)	(6,377)	(11,741)
Net cash used in financing activities	. ,	,	
Effect of foreign exchange rates on cash	(244)	72	137
Net increase in cash and cash equivalents	12,646	22,629	9,055
Cash and cash equivalents at beginning of period	71,908	49,279	40,224
Cash and cash equivalents at end of period	\$84,554	\$71,908	\$ 49,279
Change in assets and liabilities:			
Accounts receivable	\$ 4,052	\$ 7,546	\$(11,926)
Inventories, net	5,591	(162)	(13,928)
Other current assets	380	(224)	2,050
Accounts payable and accrued liabilities	(1,670)	(3,861)	3,881
Accrued severance charges	—		(259)
Income taxes payable	(84)	324	892
Deferred revenue	(410)	505	(1,832)
	\$ 7,859	\$ 4,128	\$(21,122)
Supplemental disclosures:			
Cash paid during the year for income taxes, net of refunds	\$ 975	\$ 4,178	\$ 1,113
Cash and cash equivalents at end of period Change in assets and liabilities: Accounts receivable Inventories, net Other current assets Accounts payable and accrued liabilities Accrued severance charges Income taxes payable Deferred revenue Supplemental disclosures:	\$84,554 \$4,052 5,591 380 (1,670)  (84) (410) \$7,859	\$71,908 \$7,546 (162) (224) (3,861)  324 505 \$4,128	\$ 49,279 \$ (11,926) (13,928) 2,050 3,881 (259) 892 (1,832) \$ (21,122)

See accompanying notes.

# CONSOLIDATED STATEMENTS OF EQUITY Years Ended December 31, 2012, 2011 and 2010 (In thousands)

	Class B Common Stock	Common Stock	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Treasury Stock	Total Vicor Corporation Stockholders' Equity	Noncontrolling Interest	Total Equity
Balance on December 31, 2009	\$ 118	\$ 384	\$ 161,746	\$112,972	\$ (1,608)	\$(121,827)	\$ 151,785	\$ 4,281	\$156,066
Sales of Common Stock		1	1,103				1,104		1,104
Common Stock dividends paid				(12,506)			(12,506)		(12,506)
Noncontrolling interest dividend paid								(552)	(552)
Excess tax benefit of stock-based compensation			213				213		213
Stock-based compensation expense			871				871		871
Components of comprehensive income, net of tax									
Net income				33,325			33,325	214	33,539
Other comprehensive income					239		239	38	277
Total comprehensive income							33,564	252	33,816
Balance on December 31, 2010	118	385	163,933	133,791	(1,369)	(121,827)	175,031	3,981	179,012
Sales of Common Stock		2	491				493		493
Common Stock dividends paid				(6,272)			(6,272)		(6,272)
Noncontrolling interest dividends paid								(690)	(690)
Excess tax benefit of stock-based compensation			133				133		133
Stock-based compensation expense			1,567				1,567		1,567
Liability stock option awards reclassified to equity			103				103		103
Components of comprehensive income, net of tax									
Net income				8,843			8,843	466	9,309
Other comprehensive income					1,047		1,047	8	1,055
Total comprehensive income							9,890	474	10,364
Balance on December 31, 2011	118	387	166,227	136,362	(322)	(121,827)	180,945	3,765	184,710
Sales of Common Stock		3	9				12		12
Noncontrolling interest dividends paid								(378)	(378)
Excess tax benefit of stock-based compensation			105				105		105
Stock-based compensation expense			1,244				1,244		1,244
Net settlement stock option exercises			(87)				(87)		(87)
Components of comprehensive income, net of tax									
Net income (loss)				(4,077)			(4,077)	279	(3,798)
Other comprehensive income (loss)					210		210	(45)	165
Total comprehensive income (loss)							(3,867)	234	(3,633)
Balance on December 31, 2012	\$ 118	\$ 390	\$ 167,498	\$132,285	\$ (112)	\$(121,827)	\$ 178,352	\$ 3,621	\$181,973

See accompanying notes.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. DESCRIPTION OF BUSINESS

Vicor Corporation (the "Company" or "Vicor") designs, develops, manufactures and markets modular power converters, power system components, and power systems. The Company also licenses certain rights to its technology in return for ongoing royalties. The principal markets for the Company's power converters and systems are large Original Equipment Manufacturers and their contract manufacturers, and smaller, lower volume users which are broadly distributed across several major market areas.

## 2. SIGNIFICANT ACCOUNTING POLICIES

#### Principles of consolidation

The Consolidated Financial Statements include the accounts of the Company and its subsidiaries. All intercompany transactions and balances have been eliminated upon consolidation. Certain of the Company's Vicor Custom Power entities are not majority owned by the Company. These entities are consolidated by the Company as management believes that the Company has the ability to exercise control over their activities and operations.

#### Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Such estimates relate to the useful lives of fixed assets and identified intangible assets, recoverability of long-lived assets, including goodwill, fair value of long-term investments, allowances for doubtful accounts, the net realizable value of inventory, potential reserves relating to litigation matters, accrued liabilities, accrued taxes, deferred tax valuation allowances, assumptions pertaining to share-based payments and other reserves. Actual results could differ from those estimates, and such differences may be material to the financial statements.

#### **Revenue recognition**

Product revenue is recognized in the period when persuasive evidence of an arrangement with a customer exists, the products are shipped and title has transferred to the customer, the price is fixed or determinable, and collection is considered probable. License fees are recognized as earned. The Company recognizes revenue on such arrangements only when the contract is signed, the license term has begun, all obligations have been delivered to the customer, and collection is probable. The Company evaluates revenue arrangements with potential multi-element deliverables to determine if there is more than one unit of accounting. A deliverable constitutes a separate unit of accounting when it has standalone value and there are no customer-negotiated refund or return rights for the undelivered elements. The selling price for each deliverable is based on vendor-specific objective evidence ("VSOE") if available, third-party evidence ("TPE") if VSOE is not available, or best estimate of selling price ("BESP") if neither VSOE or TPE is available. The Company defers revenue and the related cost of sales on shipments to certain distributors until the distributors resell the products to their customers.

The Company enters into arrangements containing multiple elements which may include a combination of non-recurring engineering services ("NRE"), prototype units and production units. The Company has determined that the NRE and prototype units represent one unit of accounting and the production units a separate unit of accounting, based on an assessment of the respective standalone value. When possible, revenue is allocated to the elements based on VSOE or TPE for each element. For arrangements where VSOE or TPE cannot be established, the Company uses BESP for the allocation of arrangement consideration. The objective of BESP is to determine the price at which the Company would typically transact a standalone sale of the product or service. BESP is

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

determined by considering a number of factors including the Company's pricing policies, internal costs and gross margin objectives, current market conditions, information gathered from experience in customer negotiations and the competitive landscape. The Company defers revenue recognition for the NRE and prototype units until completion of the final milestone under the NRE arrangement. Recognition generally takes place within six to twelve months of the initiation of the arrangement. Revenue for the production units is recognized upon shipment, as for product revenue summarized above. For certain multiple-element arrangements entered into prior to January 1, 2009 which contained a combination of technical support services, NRE, minimum license payments and future royalties, separate units of accounting could not be established. Therefore, revenue under these arrangements is deferred and recognized over the term of the arrangement. During 2012, 2011 and 2010, revenue recognized under multi-element arrangements accounted for less than 3% of net revenues.

The Company has established distribution partnerships with two leading electronic components distributors. The agreements with these distributors allow the distributors to receive price adjustment credits to return qualifying products for credit, as determined by the Company, in order to reduce the amounts of slowmoving, discontinued or obsolete product from their inventory. Distributors are also granted price adjustment credits in the event of a price decrease subsequent to the date the product was shipped and billed to the distributor. Given the uncertainties associated with the levels of price adjustment credits to be granted to distributors, the sales price to the distributor is not fixed or determinable until the distributor resells the products to their customers. Therefore, the Company defers revenue and the related cost of sales on shipments to distributors until the distributors resell the products to their customers and so the Company's revenue fully reflects end customer purchases and is not impacted by distributor inventory levels. These agreements limit such returns to a certain percentage of the value of the Company's shipments to that distributor during the prior quarter. In addition, distributors are allowed to return unsold products if the Company terminates the relationship with the distributor. Title to the inventory transfers to the distributor at the time of shipment or delivery to the distributors' sale of the products to their customers. Upon title transfer to distributors, inventory is reduced for the cost of goods shipped, the margin (sales less cost of sales) is recorded as "deferred income on shipments to distributors, net" and an account receivable is recorded. As of December 31, 2012, the Company had gross deferred revenue of approximately \$625,000 and gross deferred cost of revenues of approximately \$249,000 under these agreements. As of December 31, 2011, the Company had gross deferred revenue of approximately \$176,000 and gross deferred cost of revenues of approximately \$72,000

### Foreign currency translation

The financial statements of Vicor Japan Company, Ltd. ("VJCL"), a majority owned subsidiary, for which the functional currency is the Japanese yen, have been translated into U.S. dollars using the exchange rate in effect at the balance sheet date for balance sheet amounts and the average exchange rates in effect during the year for income statement amounts. The gains and losses resulting from the changes in exchange rates from year to year have been reported in other comprehensive income.

Transaction gains and losses and translation gains (losses) resulting from the remeasurement of foreign currency denominated assets and liabilities of the Company's foreign subsidiaries where the functional currency is the U.S. dollar are included in other income, net. Foreign currency gains (losses) included in other income, net, were approximately (\$46,000), (\$326,000), and (\$158,000) in 2012, 2011 and 2010, respectively.

#### Cash and cash equivalents

Cash and cash equivalents include funds held in checking and money market accounts, certificates of deposit and debt securities with maturities of less than three months at the time of purchase. Cash and cash equivalents are valued at cost which approximates market value. The Company's money market securities, which

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

are classified as cash equivalents on the balance sheet, are purchased and redeemed at par. The estimated fair value is equal to the cost of the securities and due to the nature of the securities there are no unrealized gains or losses at the balance sheet dates.

#### Long-term investments

The Company's principal sources of liquidity are its existing balances of cash and cash equivalents, as well as cash generated from operations. Consistent with the Company's investment policy guidelines, the Company can invest, and has historically invested, its cash balances in demand deposit accounts, money market funds, brokered certificates of deposit and auction rate securities meeting certain quality criteria. All of the Company's investments are subject to credit, liquidity, market, and interest rate risk.

The Company's long-term investments are classified as either available-for-sale or trading securities. Available-for-sale securities are recorded at fair value, with unrealized gains and losses, net of tax, attributable to credit loss recorded through the statement of operations and unrealized gains and losses, net of tax, attributable to other non-credit factors recorded in "Accumulated other comprehensive loss," a component of Total Equity. In determining the amount of credit loss, the Company compares the present value of cash flows expected to be collected to the amortized cost basis of the securities, considering, among other factors, credit default risk probabilities and changes in credit ratings as significant inputs. Trading securities are recorded at fair value, with unrealized gains and losses recorded through the Consolidated Statements of Operations each reporting period.

The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, the net amount of which, along with interest and realized gains and losses, is included in "Other income, net" in the Consolidated Statements of Operations. The Company periodically evaluates investments to determine if impairment is required, whether an impairment is other than temporary, and the measurement of an impairment loss. The Company considers a variety of impairment indicators such as, but not limited to, a significant deterioration in the earnings performance, credit rating, or asset quality of the investment.

#### Fair value measurements

The Company accounts for certain financial assets at fair value, defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. A three-level hierarchy is used to show the extent and level of judgment used to estimate fair value measurements:

Level 1	Inputs used to measure fair value are unadjusted quoted prices available in active markets for the identical assets or liabilities as of the reporting date.
Level 2	Inputs used to measure fair value, other than quoted prices included in Level 1, are either directly or indirectly observable as of the reporting date through correlation with market data, including quoted prices for similar assets and liabilities in active markets and quoted prices in inactive markets. Level 2 also includes assets and liabilities valued using models or other pricing methodologies that do not require significant judgment since the input assumptions used in the models, such as interest rates and volatility factors, are corroborated by readily observable data from actively quoted markets for substantially the full term of the financial instrument.
Level 3	Inputs used to measure fair value are unobservable inputs supported by little or no market activity and reflect the use of significant management judgment. These values are generally determined using pricing models for which the assumptions utilize management's estimates of market participant assumptions.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short maturity of these financial instruments.

The Company uses the fair value option for certain financial assets, which allows an entity the irrevocable option to elect fair value for the initial and subsequent measurement for specified financial assets and liabilities on a case-by-case basis.

### Allowance for doubtful accounts

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments, based on assessments of customers' credit-risk profiles and payment histories. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The Company does not require collateral from its customers.

#### Inventories

Inventories are valued at the lower of cost (determined using the first-in, first-out method) or net realizable value. Fixed production overhead is allocated to the inventory cost per unit based on the normal capacity of the production facilities. Abnormal production costs, including fixed cost variances from normal production capacity, if any, are charged to cost of revenues in the period incurred. All shipping and handling costs incurred in connection with the sale of products are included in cost of revenues.

The Company provides reserves for inventories estimated to be excess, obsolete or unmarketable. The Company's estimation process for assessing net realizable value is based upon its known backlog, projected future demand and expected market conditions. If the Company's estimated demand and/or market expectation were to change or if product sales were to decline, the Company's estimation process may cause larger inventory reserves to be recorded, resulting in larger charges to cost of revenues.

#### Concentrations of risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents, longterm investments and trade accounts receivable. The Company maintains cash and cash equivalents and certain other financial instruments with various large financial institutions. Generally, amounts invested with these financial institutions are in excess of FDIC insurance limits. The Company has not experienced any losses in such accounts and management believes the Company is not exposed to significant credit risk. The Company's long-term investments consist of highly rated (AAA/Aaa/A3) municipal and corporate debt securities in which a significant portion are invested in auction rate securities. As of December 31, 2012, the Company was holding a total of approximately \$6,100,000 in auction rate securities, all of which are collateralized by student loans. Through December 31, 2012, auctions held for all of the Company's auction rate securities have failed. The funds associated with auction rate securities that have failed auction may not be accessible until a successful auction occurs, a buyer is found outside of the auction process, the security is called, or the underlying securities have matured. If the credit rating of the issuer of any auction rate security held deteriorates, the Company may be required to adjust the carrying value of the investment for an other-than-temporary decline in value through an impairment charge. The Company's investment policy, approved by the Board of Directors, limits the amount the Company may invest in any issuer, thereby reducing credit risk concentrations.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company's 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. The applications in which these products are used are in the higher-performance, higher-power segments of the power systems market, including, in alphabetical order, aerospace and defense electronics, enterprise and high performance computing, industrial automation, telecommunications and networking infrastructure, test and measurement instrumentation, and vehicles and transportation. While, overall, the Company has a broad customer base and sells into a variety of industries, the Company's VI Chip subsidiary has derived a substantial portion of its revenue from one customer and the Company's Picor subsidiary has derived a substantial portion of its 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. Concentrations of credit risk with respect to trade accounts receivable are limited due to the number of entities comprising the Company's customer base. As of December 31, 2012, two customers accounted for approximately 12.7% and 10.6% of trade account receivables, respectively. For the year ended December 31, 2011, one customer accounted for approximately 15.4% of trade account receivables. Credit losses have consistently been within management's expectations.

Components and materials used in the Company's products are purchased from a variety of vendors. While most of the components are available from multiple sources, some key components for certain VI Chip and Picor products, in particular, are supplied by single vendors. In instances of single source items, the Company maintains levels of inventories management consider to be appropriate to enable meeting the delivery requirements of customers. If suppliers or subcontractors cannot provide their products or services on time or to the required specifications, the Company may not be able to meet the demand for its products and its delivery times may be negatively affected.

# Long-lived assets

The Company reviews property, plant and equipment and finite lived intangible assets for impairment whenever events or changes in circumstances indicate the carrying value of such assets may not be recoverable. Management determines whether the carrying value of an asset or asset group is recoverable based on comparison to the undiscounted expected future cash flows the assets are expected to generate over their remaining economic lives. If an asset is not recoverable, the impairment loss is equal to the amount by which the carrying value of the asset exceeds its fair value, which is determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. Evaluation of impairment of long-lived assets requires estimates of future operating results that are used in the preparation of the expected future undiscounted cash flows. Actual future operating results and the remaining economic lives of our long-lived assets could differ from the estimates used in assessing the recoverability of these assets. These differences could result in impairment charges, which could have a material adverse impact on the Company's results of operations.

#### Goodwill and other intangible assets

Goodwill is subject to an annual impairment test, at the reporting unit level, or more frequently if indicators of potential impairment exist. The Company performs the annual test in the fourth quarter. While a qualitative option is available, the performance of the quantitative test involves a two-step process. The first step of the impairment test involves comparing the fair values of the reporting unit with its carrying value, including goodwill. The Company generally determines the fair value of the reporting unit using the income approach methodology of valuation that includes the discounted cash flow method, as well as other generally accepted valuation methodologies, which requires significant judgment by management. If the carrying amount of the reporting unit exceeds the reporting unit's fair value, management performs the second step of the goodwill impairment test to determine the amount of the impairment loss. The second step of the goodwill impairment test involves comparing the implied fair value of the affected reporting unit's goodwill with the carrying value of that

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

goodwill. The amount by which the carrying value of the goodwill exceeds its implied fair value, if any, is recognized as an impairment loss. These impairment tests may result in impairment losses that could have a material adverse impact on the Company's results of operations.

Values assigned to patents are amortized using the straight-line method over periods ranging from three to twenty years.

Goodwill and other intangible assets are included in "Other assets" in the accompanying Consolidated Balance Sheets.

### Other investments

The Company accounts for its investment in Great Wall Semiconductor Corporation ("GWS") under the equity method of accounting.

#### Advertising expense

The cost of advertising is expensed as incurred. The Company incurred \$1,910,000, \$1,645,000 and \$2,378,000 in advertising costs during 2012, 2011 and 2010, respectively.

# Product warranties

The Company generally offers a two-year warranty for all of its products. The Company provides for the estimated cost of product warranties at the time product revenue is recognized. Factors that affect the Company's warranty reserves include the number of units sold, historical and anticipated rates of warranty returns and the cost per return. The Company periodically assesses the adequacy of the warranty reserves and adjusts the amounts as necessary. Warranty obligations are included in "Accrued expenses" in the accompanying Consolidated Balance Sheets.

### Net income (loss) per common share

The Company computes basic earnings per share using the weighted average number of common shares outstanding and diluted earnings per share using the weighted average number of common shares outstanding plus the effect of outstanding dilutive stock options, if any. The following table sets forth the computation of basic and diluted income (loss) per share for the years ended December 31 (in thousands, except per share amounts):

	2012	2011	2010
Numerator:			
Net income (loss) attributable to Vicor Corporation	\$ (4,077)	\$ 8,843	\$33,325
Denominator:			
Denominator for basic income (loss) per share-weighted average shares (1)	41,811	41,797	41,700
Effect of dilutive securities:			
Employee stock options (2)	—	59	72
Denominator for diluted income (loss) per share — adjusted weighted-average shares and			
assumed conversions (3)	41,811	41,856	41,772
Basic income (loss) per share	\$ (0.10)	\$ 0.21	\$ 0.80
Diluted income (loss) per share	\$ (0.10)	\$ 0.21	\$ 0.80

(1) Denominator represents weighted average number of Common Shares and Class B Common Shares outstanding.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (2) Options to purchase 545,345 shares of Common Stock in 2012 were not included in the calculation of net loss per share as the effect would have been antidilutive. Options to purchase 305,268 and 345,998 shares of Common Stock were outstanding in 2011 and 2010, respectively, but were not included in the computation of diluted income per share because the options' exercise prices were greater than the average market price of the Common Stock and, therefore, the effect would have been antidilutive.
- (3) Denominator represents weighted average number of Common Shares and Class B Common Shares outstanding for the year, adjusted to include the dilutive effect, if any, of outstanding options.

## Income taxes

Deferred tax assets and liabilities are determined based on the differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted income tax rates and laws that are expected to be in effect when the temporary differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax assets will not be realized. Additionally, deferred tax assets and liabilities are separated into current and noncurrent amounts based on the classification of the related assets and liabilities for financial reporting purposes or the expected reversal.

The Company follows a two-step process to determine the amount of tax benefit to recognize. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon examination by a tax authority. If the tax position is deemed "more-likely-than-not" to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50 percent likelihood of being realized upon ultimate settlement. If the tax position does not meet the "more-likely-than-not" threshold then it is not recognized in the financial statements. Additionally, the Company accrues interest and penalties, if any, related to unrecognized tax benefits as a component of income tax expense.

# Stock-based compensation

The Company uses the Black-Scholes option-pricing model to calculate the grant-date fair value of stock option awards. The resulting compensation expense, net of expected forfeitures, for non performance-based stock options is recognized on a straight-line basis over the service period of the award, which is generally five years for stock options. For stock options with performance-based vesting provisions, recognition of compensation expense, net of expected forfeitures, commences if and when the achievement of the performance criteria is deemed probable. The compensation expense, net of expected forfeitures, for performance-based stock options is recognized over the relevant performance period. The unrecognized tax benefits, including accrued interest and penalties, if any, are included in "Long-term income taxes payable" in the accompanying Consolidated Balance Sheets.

#### Comprehensive income (loss)

The components of comprehensive income (loss) include, in addition to net income (loss), unrealized gains and losses on investments, net of tax and foreign currency translation adjustments related to VJCL.

### Impact of recently issued accounting standards

The Company will be adopting new accounting guidance related to disclosures about offsetting assets and liabilities beginning January 1, 2013. The new accounting guidance amends ASC 210, *Balance Sheet*, to converge the presentation of offsetting assets and liabilities between U.S. Generally Accepted Accounting Principles ("U.S. GAAP") and International Financial Reporting Standards ("IFRS") and requires entities disclose both gross

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

information and new information about both instruments and transactions eligible for offset in the statement of financial position and instruments and transactions subject to an agreement similar to a master netting arrangement. The adoption of this new guidance will require additional disclosures related to offsetting assets and liabilities, if any, but will not materially impact the Company's financial position or results of operations.

Effective January 1, 2012, the Company adopted new accounting guidance related to the presentation of comprehensive income. Subsequently, additional guidance was issued for the reporting of amounts reclassified out of accumulated comprehensive income. This guidance requires an entity to report the effect of significant reclassifications out of accumulated other comprehensive income on the respective line items in net income if the amount being reclassified is required under U.S. GAAP to be reclassified in their entirety to net income. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income. For other amounts that are not required under U.S. GAAP to be reclassified in their entirety to net income in the same reporting period, an entity is required to cross-reference other disclosures required under U.S. GAAP that provide additional detail about those amounts. The new guidance is effective prospectively for reporting periods beginning after December 15, 2012. The adoption of this new guidance is not expected to materially impact the Company's financial position or results of operations.

## 3. STOCK-BASED COMPENSATION AND EMPLOYEE BENEFIT PLANS

Vicor currently grants stock options under the following equity compensation plans that are shareholder-approved:

Amended and Restated 2000 Stock Option and Incentive Plan (the "Vicor 2000 Plan") — Under the Vicor 2000 Plan, the Board of Directors or the Compensation Committee of the Board of Directors may grant stock incentive awards based on the Company's Common Stock, including stock options, stock appreciation rights, restricted stock, performance shares, unrestricted stock, deferred stock and dividend equivalent rights. Awards may be granted to employees and other key persons, including non-employee directors. Incentive stock options may be granted to employees at a price at least equal to the fair market value per share of the Common Stock on the date of grant, and non-qualified options may be granted to non-employee directors at a price at least equal to 85% of the fair market value of the Common Stock on the date of grant. A total of 4,000,000 shares of Common Stock have been reserved for issuance under the Vicor 2000 Plan. The period of time during which an option may be exercised and the vesting periods are determined by the Compensation Committee. The term of each option may not exceed ten years from the date of grant.

1998 Stock Option and Incentive Plan (the "Vicor 1998 Plan") — The Vicor 1998 Plan permitted the grant of share options to its employees and other key persons, including non-employee directors for the purchase of up to 2,000,000 shares of common stock. As a result of the approval of the Vicor 2000 Plan, no further grants were made under the Vicor 1998 Plan.

Picor Corporation ("Picor"), a privately held majority-owned subsidiary of Vicor, currently grants stock options under the following equity compensation plan that has been approved by its Board of Directors:

2001 Stock Option and Incentive Plan, as amended (the "2001 Picor Plan") — Under the 2001 Picor Plan, the Board of Directors of Picor may grant stock incentive awards based on the Picor Common Stock, including stock options, restricted stock or unrestricted stock. Awards may be granted to employees and other key persons, including non-employee directors and full or part-time officers. Incentive stock options may be granted to employees at a price at least equal to the fair market value per share of the Picor Common Stock, based on judgments made by the Company, on the date of grant. A total of 80,000,000 shares of Picor Common Stock have been reserved for issuance under the 2001 Picor Plan. The period of time during which an option may be exercised and the vesting periods are determined by the Picor Board of Directors. The term of each option may not exceed ten years from the date of grant.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

VI Chip Corporation ("VI Chip"), a privately held majority-owned subsidiary of Vicor, currently grants stock options under the following equity compensation plan that has been approved by its Board of Directors:

2007 Stock Option and Incentive Plan, as amended (the "2007 VI Chip Plan") — Under the 2007 VI Chip Plan, the Board of Directors of VI Chip may grant stock incentive awards based on the VI Chip Common Stock, including stock options, restricted stock or unrestricted stock. Awards may be granted to employees and other key persons, including non-employee directors and full or part-time officers. Incentive stock options may be granted to employees at a price at least equal to the fair market value per share of the VI Chip Common Stock, based on judgments made by the Company, on the date of grant. A total of 100,000,000 shares of VI Chip Common Stock have been reserved for issuance under the 2007 VI Chip Plan. The period of time during which an option may be exercised and the vesting periods are determined by the VI Chip Board of Directors. The term of each option may not exceed ten years from the date of grant.

All non performance-based option awards are granted at an exercise price equal to or greater than the market price for Vicor at the date of the grant, and are granted at a price equal to or greater than the estimated fair value for both Picor and VI Chip at the date of grant. Options generally vest over various periods of up to five years and may be exercised for up to 10 years from the date of grant, which is the maximum contractual term. The Company uses the graded attribution method to recognize expense for all stock-based awards.

During the third quarter of 2010, the Company granted 1,243,750 non-qualified stock options under the Vicor 2000 Plan, with performance-based vesting provisions tied to achievement of certain quarterly revenue targets by the Brick Business Unit. Under the accounting rules for performance-based awards, the Company is required to assess, on an ongoing basis, the probability of whether the performance criteria will be achieved. If and when achievement is deemed probable, the Company will begin to recognize the associated compensation expense for the stock options over the relevant performance period. As of December 31, 2012, the Company determined that it was not probable that the revenue targets could be achieved and, accordingly, has not recorded compensation expense relating to these options since the grant date. The unrecognized compensation expense of these performance-based options was approximately \$7,790,000 as of December 31, 2012. The fair value for the options was estimated at the date of grant using the Black-Scholes option pricing model.

On December 31, 2010, the Company granted 2,984,250 non-qualified stock options under the 2007 VI Chip Plan with performance-based vesting provisions tied to achievement of certain margin targets by the VI Chip Business Unit. As of December 31, 2010, the Company determined that it was probable that the margin targets could be achieved and, accordingly began recording compensation expense relating to these options beginning January 1, 2011. This determination remains the same as of December 31, 2012 and, accordingly, expense has been recorded through that date. The unrecognized compensation expense of these performance-based options was approximately \$882,000 as of December 31, 2012. The fair value for the options was estimated at the date of grant using the Black-Scholes option pricing model.

Stock-based compensation expense for the years ended December 31 was as follows (in thousands):

	2012	2011	2010
Cost of revenues	\$ 45	\$ 68	2010 \$ 19
Selling, general and administrative	864	1,188	618
Research and development	335	667	234
Total stock based compensation	\$1,244	\$1,923	\$871

The increase in stock compensation expense in 2011 compared to 2010 was primarily due to the recording of compensation expense for the VI Chip performance-based options beginning on January 1, 2011, and to a grant of Picor stock options to all Picor employees in the fourth quarter of 2010.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

During 2012 and 2011, the Picor Board of Directors (the "Picor Board") authorized different alternatives of net settlement to holders of Picor stock options in the tenth and final year of their respective terms. In addition, during the third quarter of 2011, the Picor Board approved an offer to repurchase up to 1,142,000 shares of Picor Common Stock from a limited number of holders who purchase these shares via exercise before October 31, 2011. As a result, the Company accrued \$368,000 in the third quarter of 2011, representing the maximum repurchase obligation to these holders assuming all holders sold their shares. This resulted in additional stock-based compensation expense of \$169,000 and \$132,000 in Selling, general and administrative and Research and development expense, respectively, along with a charge of \$67,000 against Additional paid-in-capital, in the third quarter of 2011. During the fourth quarter of 2011, the Company accounted for those options for which repurchase was ultimately not elected by the holder, reducing the accrual by \$106,000, with the offset to Picor's additional paid-in capital.

The fair value for the options was estimated at the date of grant using a Black-Scholes option pricing model under all methods with the following weightedaverage assumptions:

		Non Performance based Stock Options	-	Performance- based Stock Options (1)
Vicor:	2012	2011	2010	2010
Risk-free interest rate	0.7%	1.8%	2.3%	2.0-2.7%
Expected dividend yield	0.6%	1.6%	1.6%	2.5%
Expected volatility	52%	54%	54%	55%
Expected lives (years)	4.1	5.0	3.9	6.5-9.5
<u>VI Chip:</u>	2012	2011	2010	2010
Risk-free interest rate	1.2%	1.5%	2.7%	2.7%
Expected dividend yield	—	—	—	—
Expected volatility	50%	49%	49%	49%
Expected lives (years)	6.5	6.5	6.5	6.5
Picor:	2012	<u>2011</u>	2010	
Risk-free interest rate	1.2%	1.6%	2.0%	
Expected dividend yield	_			
Expected volatility	50%	52%	52%	
Expected lives (years)	6.5	6.5	6.5	

(1) There were no Vicor or VI Chip performance-based options granted in 2012, 2011 or prior to 2010.

### **Risk-free interest rate:**

*Vicor* — The Company uses the yield on zero-coupon U.S. Treasury "Strip" securities for a period that is commensurate with the expected term assumption for each vesting period.

*Picor and VI Chip* — Picor and VI Chip use the yield to maturity of a seven-year U.S. Treasury bond, as it most closely aligns to the expected exercise period.

### Expected dividend yield:

*Vicor* — The Company determines the expected dividend yield by annualizing the most recent prior cash dividends declared by the Company's Board of Directors and dividing that result by the closing stock price on the date of that dividend declaration. Dividends are not paid on options.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*Picor and VI Chip* — Picor and VI Chip have not and do not expect to declare and pay dividends in the foreseeable future. Therefore, the expected dividend yield is not applicable.

#### **Expected volatility:**

*Vicor* — Vicor uses historical volatility to estimate the grant-date fair value of the options, using the expected term for the period over which to calculate the volatility (see below). The Company does not expect its future volatility to differ from its historical volatility. The computation of the Company's volatility is based on a simple average calculation of monthly volatilities over the expected term.

*Picor* — As Picor is a nonpublic entity, historical volatility information is not available. An industry sector index of seven publicly traded fabless semiconductor firms was developed for calculating historical volatility for Picor. Historical prices for each of the companies in the index based on the market price of the shares on each day of trading over the expected term were used to determine the historical volatility.

*VI Chip* — As VI Chip is a nonpublic entity, historical volatility information is not available. An industry sector index of twelve publicly traded fabless semiconductor firms was developed for calculating historical volatility for VI Chip. Historical prices for each of the companies in the index based on the market price of the shares on each day of trading over the expected term were used to determine the historical volatility.

#### Expected term:

*Vicor* — The Company uses historical employee exercise and option expiration data to estimate the expected term assumption for the Black-Scholes grantdate valuation. The Company believes that this historical data is currently the best estimate of the expected term of options, and that generally all groups of the Company's employees exhibit similar exercise behavior.

*Picor and VI Chip*— Due to the lack of historical information, the "simplified" method as prescribed by the Security and Exchange Commission was used to determine the expected term on grant awards that meet the definition of "plain vanilla". For options that did not meet the criteria of "plain vanilla", the Company calculated the expected term based on its best estimate of what the expected term would be.

#### Forfeiture rate:

The amount of stock-based compensation recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. The forfeiture analysis is reevaluated quarterly and the forfeiture rate is adjusted as necessary. Ultimately, the actual expense recognized over the vesting period will only be for those shares that vest.

*Vicor* — The Company currently expects that for Vicor options, based on an analysis of its historical forfeitures, that approximately 76% of its options will actually vest, and therefore has applied an annual forfeiture rate of 9.0% to all unvested options as of December 31, 2012. For 2011, the Company expected 76% of its options would actually vest and applied an annual forfeiture rate of 9.00%.

*Picor* — The Company currently expects that for Picor options, based on an analysis of its historical forfeitures, that approximately 92% of its options will actually vest, and therefore has applied an annual forfeiture rate of 2.75% to all unvested options as of December 31, 2012. For 2011, the Company expected 92% of its options would actually vest and applied an annual forfeiture rate of 2.75%.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

*VI Chip* — The Company currently expects that for VI Chip options, based on an analysis of its historical forfeitures, that approximately 81% of its options will actually vest, and therefore has applied an annual forfeiture rate of 7.0% to all unvested options as of December 31, 2012. For 2011, the Company expected 81% of its options would actually vest and applied an annual forfeiture rate of 7.0%.

## Vicor Stock Options

A summary of the activity under Vicor's stock option plans as of December 31, 2012 and changes during the year then ended, is presented below (in thousands except for share and weighted-average data):

	Options Outstanding	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life in Years	Inti	regate rinsic alue
Outstanding on December 31, 2011	1,755,815	13.45			
Granted	143,142	6.35			
Forfeited and expired	(101,902)	11.56			
Exercised	(580)	6.18			
Outstanding on December 31, 2012	1,796,475	12.99	6.88	\$	1
Exercisable on December 31, 2012	255,694	12.79	3.78	\$	—
Vested or expected to vest as of December 31, 2012 (1)	1,146,572	12.71	6.50	\$	1

 In addition to the vested options, the Company expects a portion of the unvested options to vest at some point in the future. Options expected to vest is calculated by applying an estimated forfeiture rate to the unvested options.

As of December 31, 2011 and 2010, the Company had shares exercisable of 232,078 and 359,264 respectively, for which the weighted average exercise prices were \$12.00 and \$15.89, respectively.

During the years ended December 31, 2012, 2011, and 2010 under all plans, the total intrinsic value of Vicor options exercised (i.e. the difference between the market price at exercise and the price paid by the employee to exercise the options) was \$2,000, \$217,000, and \$723,000, respectively. The total amount of cash received by the Company from options exercised in 2012 was \$4,000. The total grant-date fair value of stock options that vested during the years ended December 31, 2012, 2011 and 2010 was approximately \$449,000, \$411,000, and \$422,000, respectively.

As of December 31, 2012, there was \$663,000 of total unrecognized compensation cost related to unvested non-performance based awards for Vicor. That cost is expected to be recognized over a weighted-average period of 1.69 years for those awards. The expense will be recognized as follows: \$361,000 in 2013, \$178,000 in 2014, \$89,000 in 2015, \$29,000 in 2016, and \$6,000 in 2017. In addition, as of December 31, 2012, there was \$7,790,000 of unrecognized compensation cost related to performance-based stock options, for which expensing has not commenced.

The weighted-average fair value of Vicor options granted was \$2.47, \$5.79, and \$4.78 in 2012, 2011 and 2010, respectively. The weighted-average contractual life for Vicor options outstanding as of December 31, 2012 is 6.9 years.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# Picor Stock Options

A summary of the activity under the 2001 Picor Plan as of December 31, 2012 and changes during the year then ended, is presented below (in thousands except for share and weighted-average data):

	Options Outstanding	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life in Years	Int	gregate rinsic Value
Outstanding on December 31, 2011	9,979,983	0.62			
Granted	1,015,344	0.64			
Forfeited and expired	(90,000)	0.57			
Exercised	(689,960)	0.25			
Outstanding on December 31, 2012	10,215,367	0.65	6.39	\$	497
Exercisable on December 31, 2012	5,329,950	0.69	4.72	\$	281
Vested or expected to vest as of December 31, 2012 (1)	9,993,801	0.65	6.35	\$	488

(1) In addition to the vested options, the Company expects a portion of the unvested options to vest at some point in the future. Options expected to vest is calculated by applying an estimated forfeiture rate to the unvested options.

As of December 31, 2011 and 2010, Picor had shares exercisable of 4,684,585 and 4,213,640, respectively, for which the weighted average exercise prices were \$0.64 and \$0.56, respectively.

During the years ended December 31, 2012 and 2011, the total intrinsic value of Picor options exercised was \$279,000 and \$262,000, respectively. The total amount of cash received by Picor from options exercised in 2012 and 2011 was \$172,000 and \$5,000, respectively. Picor did not have any options exercised in 2010. The total grant-date fair value of stock options that vested during the years ended December 31, 2012, 2011 and 2010 was approximately \$61,000, \$357,000, and \$68,000, respectively.

As of December 31, 2012, there was \$1,212,000 of total unrecognized compensation cost related to unvested share-based awards for Picor. That cost is expected to be recognized over a weighted-average period of 3.2 years for all Picor awards. The expense will be recognized as follows: \$417,000 in 2013, \$374,000 in 2014, \$306,000 in 2015, \$88,000 in 2016, and \$27,000 in 2017.

The weighted-average fair value of Picor options granted was \$0.32 in 2012 and 2011. The weighted-average contractual life for Picor options outstanding as of December 31, 2012 is 6.4 years.



# VI Chip Stock Options

A summary of the activity under the 2007 VI Chip Plan as of December 31, 2012 and changes during the year then ended, is presented below (in thousands except for share and weighted-average data):

	Options Outstanding	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Life in Years	Inti	regate insic lue
Outstanding on December 31, 2011	10,514,750	1.00			
Granted	202,500	1.01			
Forfeited and expired	(186,650)	1.01			
Exercised	(5,600)	1.00			
Outstanding on December 31, 2012 (2)	10,525,000	1.00	5.59	\$	
Exercisable on December 31, 2012	7,304,100	1.00	4.49	\$	—
Vested or expected to vest as of December 31, 2012 (1)	9,922,127	1.00	5.43	\$	

(1) In addition to the vested options, the Company expects a portion of the unvested options to vest at some point in the future. Options expected to vest is calculated by applying an estimated forfeiture rate to the unvested options.

(2) Of the total VI Chip options outstanding on December 31, 2012, 5,500,000 options have been granted to the Company's Chief Executive Officer.

As of December 31, 2011 and 2010, VI Chip had shares exercisable of 5,869,100 and 4,436,200, respectively, for which the weighted average exercise price was \$1.00.

During the year ended December 31, 2012, the total intrinsic value of VI Chip options exercised was negligible. The total amount of cash received by VI Chip from options exercised in 2012 was \$6,000. VI Chip did not have any options exercised in 2011 and 2010.

As of December 31, 2012, there was \$1,025,000 of total unrecognized compensation cost related to unvested share-based awards for VI Chip. That cost is expected to be recognized over a weighted-average period of 3.1 years for all VI Chip awards. The expense will be recognized as follows: \$272,000 in 2013, \$252,000 in 2014, \$252,000 in 2015, \$242,000 in 2016 and \$7,000 in 2017.

The weighted-average fair value of VI Chip options granted was \$0.46 and \$0.53 in 2012 and 2011, respectively. The weighted-average contractual life for VI Chip options outstanding as of December 31, 2012 is 5.6 years.

### <u>401(k) Plan</u>

The Company sponsors a savings plan available to all domestic employees, which qualifies under Section 401(k) of the Internal Revenue Code. Employees may contribute to the plan from 1% to 80% of their pre-tax annual compensation subject to statutory limitations. The Company matches employee contributions to the plan at a rate of 50% up to the first 3% of an employee's compensation. The Company's matching contributions currently vest at a rate of 20% per year based upon years of service. The Company's contribution to the plan was approximately \$813,000, \$810,000, and \$760,000 in 2012, 2011 and 2010, respectively.

#### Stock Bonus Plan

Under the Company's 1985 Stock Bonus Plan, as amended, shares of Common Stock may be awarded to employees from time to time as determined by the Board of Directors. On December 31, 2012, 109,964 shares were available for further award. All shares awarded to employees under this plan have vested. No further awards are contemplated under this plan at the present time.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# 4. LONG-TERM INVESTMENTS

As of December 31, 2012, the Company held par value of \$6,100,000 of auction rate securities. These auction rate securities consist of collateralized debt obligations, supported by pools of student loans, sponsored by state student loan agencies and corporate student loan servicing firms. The interest rates for these securities are reset at auction at regular intervals ranging from seven to 28 days. The auction rate securities held by the Company traded at par prior to February 2008 and are callable at par at the option of the issuer.

Until February 2008, the auction rate securities market was liquid, as the investment banks conducting the periodic "Dutch auctions" by which interest rates for the securities had been established had committed their capital to support such auctions in the event of insufficient third-party investor demand. Starting the week of February 11, 2008, a substantial number of auctions failed, as demand from third-party investors weakened and the investment banks conducting the auctions chose not to commit capital to support such auctions (i.e., investment banks chose not to purchase securities themselves in order to balance supply and demand, thereby facilitating a successful auction, as they had done in the past). The consequences of a failed auction are (a) an investor must hold the specific security until the next scheduled auction (unless that investor chooses to sell the security to a third party outside of the auction process) and (b) the interest rate on the security generally resets to an interest rate set forth in each security's indenture.

As of December 31, 2012, the Company held auction rate securities that had experienced failed auctions totaling \$6,100,000 at par value, all of which had been purchased through and are held by a broker-dealer affiliate of Bank of America, N.A. (the "Failed Auction Securities"). The Failed Auction Securities held by the Company are AAA/Aaa/A3 rated by the major credit rating agencies, all of which are collateralized by student loans, and are guaranteed by the U.S. Department of Education under the Federal Family Education Loan Program. Management is not aware of any reason to believe any of the issuers of the Failed Auction Securities held by the Company are presently at risk of default. Through December 31, 2012, the Company has continued to receive interest payments on the Failed Auction Securities in accordance with the terms of their respective indentures. Management believes the Company ultimately should be able to liquidate all of its Failed Auction Securities without significant loss primarily due to the overall quality of the issues held and the collateral securing the substantial majority of the underlying obligations. However, current conditions in the auction rate securities market have led management to conclude the recovery period for the Failed Auction Securities as long-term as of December 31, 2012.

The following is a summary of available-for-sale securities (in thousands):

December 31, 2012	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Failed Auction Securities	\$6,100	\$ —	\$ 1,121	\$ 4,979
Brokered certificates of deposit	1,280	12		1,292
Certificates of deposit	465			465
	\$7,845	\$ 12	\$ 1,121	\$ 6,736
December 31, 2011	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
December 31, 2011 Failed Auction Securities	<u>Cost</u> \$ 9,100	Unrealized	Unrealized	
		Unrealized	Unrealized Losses	Value
Failed Auction Securities	\$ 9,100	Unrealized Gains \$ —	Unrealized Losses \$ 1,628	Value \$ 7,472

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

All of the Failed Auction Securities as of December 31, 2012 and 2011, respectively have been in an unrealized loss position for greater than 12 months.

Ectimated

The amortized cost and estimated fair value of available-for-sale securities on December 31, 2012, by contractual maturities, are shown below (in thousands):

		Estimated
	Cost	Fair Value
Due in one year or less	\$ 925	\$ 928
Due in two to ten years	820	829
Due in ten to twenty years	_	
Due in twenty to forty years	6,100	4,979
	\$7,845	\$ 6,736

Based on the fair value measurements described in Note 5, the fair value of the Failed Auction Securities on December 31, 2012, with a par value of \$6,100,000, was estimated by the Company to be approximately \$4,979,000, an increase in fair value of \$507,000, net of \$3,000,000 of redemptions from December 31, 2011. The gross unrealized loss of \$1,121,000 on the Failed Auction Securities consists of two types of estimated loss: an aggregate credit loss of \$317,000 and an aggregate temporary impairment of \$804,000. For the year ended December 31, 2012, the aggregate credit loss on the Failed Auction Securities increased by a net amount of \$9,000, which was recorded in "Net credit (losses) gains recognized in earnings" in the Consolidated Statement of Operations. In determining the amount of credit loss, the Company compared the present value of cash flows expected to be collected to the amortized cost basis of the securities, considering credit default risk probabilities and changes in credit ratings as significant inputs, among other factors (See Note 5).

The following table represents a rollforward of the activity related to the credit loss recognized in earnings on available-for-sale auction rate securities held by the Company for the years ended December 31 (in thousands):

	2012	2011	2010
Balance at the beginning of the period	\$308	\$ 610	\$464
Reductions for securities sold during the period		(373)	(18)
Additions for the amount related to credit loss for which other-than-temporary impairment was not			
previously recognized	9	71	164
Balance at the end of the period	\$317	\$ 308	\$610

At this time, the Company has no intent to sell any of the impaired Failed Auction Securities and does not believe it is more likely than not the Company will be required to sell any of these securities. Management expects the securities to regain liquidity as the financial markets recover from the current economic downturn. If current market conditions deteriorate further, the Company may be required to record additional unrealized losses. If the credit rating of the security deteriorates, or the anticipated recovery in the market values does not occur, the Company may be required to adjust the carrying value of these investments through impairment charges recorded in the Consolidated Statement of Operations, and any such impairment adjustments may be material.

Based on the Company's ability to access cash and cash equivalents and its expected operating cash flows, management does not anticipate the current lack of liquidity associated with the Failed Auction Securities held will affect the Company's ability to execute its current operating plan.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

## 5. FAIR VALUE MEASUREMENTS

The Company accounts for certain financial assets at fair value, defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions market participants would use in pricing an asset or liability. A three-level hierarchy is used to show the extent and level of judgment used to estimate fair value measurements.

Assets measured at fair value on a recurring basis include the following as of December 31, 2012 (in thousands):

	Quoted Prices in Active Markets	Using Significant Other Observable Inputs	Significant Unobservable Inputs	Total Fair Value as of December 31,
Cash Equivalents:	(Level 1)	(Level 2)	(Level 3)	2012
Money market funds	\$ 12,413	\$ —	\$ —	\$ 12,413
Long-term investments:				
Failed Auction Securities	—	—	4,979	4,979
Brokered certificates of deposit	—	1,292		1,292
Certificates of deposit	465	—	_	465

The Company has brokered certificates of deposit classified as Level 2 because the fair value for these investments has been determined utilizing observable inputs from non-active markets. The fair values fluctuate with changes in market interest rates obtained from information available in publicly quoted markets. Management tested the reported fair values by comparing them to net present value calculations utilizing a discount rate based on U.S. Treasury "STRIPS" (i.e., Separate Trading of Registered Interest and Principal Securities) for similar maturities.

As of December 31, 2012, there was insufficient observable auction rate security market information available to determine the fair value of the Failed Auction Securities using Level 1 or Level 2 inputs. As such, the Company's investments in Failed Auction Securities were deemed to require valuation using Level 3 inputs. Management, after consulting with advisors, valued the Failed Auction Securities using analyses and pricing models similar to those used by market participants (i.e., buyers, sellers, and the broker-dealers responsible for execution of the Dutch auction pricing mechanism by which each issue's interest rate was set). Management utilized a probability weighted discounted cash flow ("DCF") model to determine the estimated fair value of these securities as of December 31, 2012. The major assumptions used in preparing the DCF model included: estimates for the amount and timing of future interest and principal payments based on default probability assumptions used to measure the credit loss of 5.2%; the rate of return required by investors to own these securities in the current environment, which we estimate to be 5.0% above the risk free rate of return; and an estimated timeframe of three to five years for successful auctions for these securities to occur. In making these assumptions, management considered relevant factors including: the formula applicable to each security defining the interest rate paid to investors in the event of a failed auction (the "Penalty Rate"); forward projections of the interest rate benchmarks specified in such formulas; the likely timing of principal repayments; the probability of full repayment considering the guarantees by the U.S. Department of Education of the underlying student loan asset-backed securities not subject to auctions. In developing its estimate of the rate of return required by investors to own these securities, management compared

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

the Penalty Rates of the Failed Auction Securities with yields of actively traded long-term bonds with similar characteristics and, reflecting the limited liquidity for auction rate securities and the discounts to par value seen in recent tender offers by issuers and arms' length market transactions between informed buyers and sellers, estimated the implied yield (i.e., the discount to par value) necessary to complete a sale of the Failed Auction Securities. Management has calculated an increase or decrease in the liquidity risk premium of 5.0% referenced above of 1.0% (i.e., 100 basis points) as used in the model, would decrease or increase, respectively, the fair value of the Failed Auction Securities by approximately \$300,000.

For purposes of the valuation process for the Failed Auction Securities, "management" consists of senior members of the Company's finance department. The fair value measurements for the Failed Auction Securities are reviewed and updated on a quarterly basis. The calculations are prepared by the Company's Corporate Controller, in conjunction with information provided by its valuation advisors, and include the development and substantiation of the unobservable inputs. The methodology, assumptions, and calculations are reviewed and approved by the Company's Chief Financial Officer and Chief Accounting Officer.

The significant unobservable inputs used in the fair value measurement of the Company's Failed Auction Securities are the cumulative probability of earning the maximum rate until maturity, the cumulative probability of principal return prior to maturity, the cumulative probability of default, the liquidity risk premium, and the recovery rate in default. Significant increases (decreases) in any of those inputs in isolation would result in changes in fair value measurement. Significant increases (decreases) in the cumulative probability of principal return prior to maturity, the cumulative probability of principal return prior to maturity, and the recovery rate in default would result in a higher (lower) fair value measurement, while increases (decreases) in the cumulative probability of default and the liquidity risk premium would result in a lower (higher) fair value measurement.

Generally, the interrelationships are such that a change in the assumption used for the cumulative probability of principal return prior to maturity is accompanied by a directionally similar change in the assumption used for the cumulative probability of earning the maximum rate until maturity and a directionally opposite change in the assumptions used for the cumulative probability of default and the liquidity risk premium. The recovery rate in default is somewhat independent and based upon the securities' specific underlying assets and published recovery rate indices.

Quantitative information about Level 3 fair value measurements as of December 31, 2012 are as follows (dollars in thousands):

	Fair Value	Valuation Technique	Unobservable Input	Range (Weighted Average)
Failed Auction Securities	\$ 4,979	Discounted	Cumulative probability of earning the maximum	0.01% - 0.11%
		cash flow	rate until maturity	(0.06%)
			Cumulative probability of principal return prior	83.74% - 94.61%
			to maturity	(89.09%)
			Cumulative probability of default	5.38% - 16.15%
				(10.85%)
			Liquidity risk premium	5.00% - 5.00%
				(5.00%)
			Recovery rate in default	40.00% - 40.00%
				(40.00%)

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the change in the fair values for those assets valued on a recurring basis utilizing Level 3 inputs for the year ended December 31, 2012 (in thousands):

\$ 7,472
(3,000)
(9)
516
\$ 4,979

# 6. INVENTORIES

Inventories as of December 31 were as follows (in thousands):

	2012	2011
Raw materials	\$28,362	\$32,213
Work-in-process	2,707	3,524
Finished goods	6,535	6,382
	37,604	42,119
Inventory reserves	(7,649)	(6,367)
Net balance	\$29,955	\$35,752

# 7. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost and are depreciated and amortized over a period of three to 39 years generally under the straight-line method for financial reporting purposes and accelerated methods for income tax purposes.

Property, plant and equipment as of December 31 were as follows (in thousands):

	2012	2011
Land	\$ 2,089	\$ 2,089
Buildings and improvements	42,647	42,540
Machinery and equipment	218,381	213,531
Furniture and fixtures	5,964	5,895
Construction in-progress and deposits	2,465	1,124
	271,546	265,179
Accumulated depreciation and amortization	(227,454)	(217,938)
Net balance	\$ 44,092	\$ 47,241

Depreciation expense for the years ended December 31, 2012, 2011 and 2010 was approximately \$10,546,000, \$11,083,000, and \$9,778,000 respectively. As of December 31, 2012, the Company had approximately \$1,077,000 of capital expenditure commitments.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# 8. OTHER INVESTMENTS

The Company's gross investment in non-voting convertible preferred stock of GWS totaled \$5,000,000 as of December 31, 2012, and December 31, 2011, giving the Company an approximately 27% ownership interest in GWS. GWS and its subsidiary design and sell semiconductors, conduct research and development activities, develop and license patents, and litigate against those who infringe upon its patented technologies. A director of the Company is the founder, Chairman of the Board, President and Chief Executive Officer ("CEO"), as well as the majority voting shareholder, of GWS. The Company and GWS are parties to an intellectual property cross-licensing agreement, a license agreement and two supply agreements under which the Company purchases certain components from GWS. Purchases from GWS totaled approximately \$2,087,000, \$5,577,000, and \$5,362,000 in 2012, 2011, and 2010, respectively. The Company owed GWS approximately \$281,000 and \$500,000 as of December 31, 2012 and 2011, respectively.

The Company accounts for its investment in GWS under the equity method of accounting. The Company has determined that, while GWS is a variable interest entity, the Company is not the primary beneficiary. The key factors in the Company's assessment were that the CEO of GWS has: (i) the power to direct the activities of GWS that most significantly impact its economic performance, and (ii) has an obligation to absorb losses or the right to receive benefits from GWS, respectively, that could potentially be significant to GWS.

There was no allocation of equity method income (loss) in 2012, 2011, and 2010 as GWS incurred a net loss in those years. The balance in the Company's net investment in GWS was zero as of December 31, 2012 and 2011.

# 9. GOODWILL AND OTHER INTANGIBLE ASSETS

The Company tests goodwill for impairment at least annually at the reporting unit level. The Company performs the annual test in the fourth quarter. The goodwill of approximately \$2,012,000 is related to the operations of VJCL. In 2010, the Company performed the first step of the quantitative goodwill impairment assessment and determined no impairment was indicated as the estimated fair value of VJCL exceeded its carrying value by approximately 15%. In 2011, the Company made a qualitative assessment of whether goodwill impairment existed and determined it was more likely than not the fair value of VJCL exceeded its carrying value. Therefore, the Company did not perform the quantitative two-step impairment test. In 2012, the Company performed the first step of the quantitative impairment assessment for VJCL and determined the carrying value of VJCL exceeded its fair value. The Company, therefore, performed the second step of its evaluation to calculate the impairment and, as a result, recorded a full impairment charge of \$2,012,000 during the fourth quarter of 2012.

For the 2012 and 2010 annual impairment assessments management performed quantitative impairment testing. Management, after consulting with advisors, estimated the fair value of VJCL using a combination of the income and market approach. The income approach utilizes estimates of discounted future cash flows. The market approach, based on a peer group of companies, utilizes market multiples for revenues, earnings before income taxes and depreciation, and price-to-earnings. The discounted cash flows were based on a discrete financial forecast developed by management for planning purposes. Cash flows beyond the discrete forecasted years were estimated using a terminal value calculation, which incorporated historical and forecasted financial trends and considered perpetual earnings growth rates. Future cash flows were discounted to present value by incorporating appropriate present value techniques. The primary factor contributing to the impairment charge in 2012 was the reduction of forecasted cash flows due to lower cumulative forecasted revenues, and related gross margins, which in turn was due to lower forecasted revenue growth rates primarily due to the continued lack of growth in the Japanese economy as a whole. In addition, management applied a higher discount rate and a lower long term growth rate compared to the 2010 assessment, based on current economic conditions.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Definite lived intangible assets, such as patent rights, are amortized and tested for impairment at least annually at the reporting unit level.

Patent costs, which are included in other assets in the accompanying balance sheets, as of December 31 were as follows (in thousands):

	2012	2011
Patent costs	\$ 3,316	\$ 3,353
Accumulated amortization	(1,984)	(1,877)
	\$ 1,332	\$ 1,476

Patent renewal fees were \$55,000 and \$47,000 in 2012 and 2011, respectively.

Amortization expense was approximately \$314,000, \$325,000 and \$318,000 in 2012, 2011 and 2010, respectively. The estimated future amortization expense from patent assets held as of December 31, 2012, is projected to be \$182,000, \$168,000, \$140,000, \$127,000 and \$121,000, in fiscal years 2013, 2014, 2015, 2016, and 2017, respectively.

Under a license agreement with GWS, the Company paid \$500,000 to obtain certain rights to several GWS semiconductor devices (See Note 8). The amount is being amortized on a straight-line basis over four years, and is included in "Other assets" in the accompanying Consolidated Balance Sheets. Balances as of December 31 were as follows (in thousands):

	2012	2011
GWS intangible assets	\$ 500	2011 \$ 500
Accumulated amortization	(437)	(312)
	\$ 63	\$ 188

The future amortization expense from GWS intangible assets held as of December 31, 2012, will be \$63,000 in fiscal year 2013.

# **10. PRODUCT WARRANTIES**

Product warranty activity for the years ended December 31 was as follows (in thousands):

Balance at the beginning of the period 2012   \$ 572	\$ 649	¢ 770
	Ψ 0+5	<u>2010</u> \$ 772
Accruals for warranties for products sold in the period 439	1,392	573
Fulfillment of warranty obligations (554)	(1,134)	(548)
Revisions of estimated obligations (93)	(335)	(148)
Balance at the end of the period\$ 364	\$ 572	\$ 649

# 11. STOCKHOLDERS' EQUITY

Each share of Common Stock entitles the holder thereof to one vote on all matters submitted to the stockholders.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Each share of Class B Common Stock entitles the holder thereof to ten votes on all such matters.

Shares of Class B Common Stock are not transferable by a stockholder except to or among the stockholder's spouse, certain of the stockholder's relatives, and certain other defined transferees. Class B Common Stock is not listed or traded on any exchange or in any market. Class B Common Stock is convertible at the option of the holder thereof at any time and without cost to the stockholder into shares of Common Stock on a one-for-one basis.

On November 19, 2012, the Company announced its intent to commence a tender offer for shares of its Common Stock representing up to \$20,000,000 in aggregate value and commenced this tender offer on November 26, 2012, with an ultimate expiration date of March 1, 2013. As of March 6, 2013, the most recent date for which information is available related to the preliminary total number of shares accepted for purchase in the tender offer, the Company will purchase no less than 2,031,995 shares of its Common Stock for aggregate consideration of approximately \$10,932,000.

In November 2000, the Board of Directors of the Company authorized the repurchase of up to \$30,000,000 of the Company's Common Stock (the "November 2000 Plan"). The plan authorizes the Company to make repurchases from time to time in the open market or through privately negotiated transactions. The timing of this program and the amount of the stock that may be repurchased is at the discretion of management based on its view of economic and financial market conditions. There were no repurchases under the November 2000 Plan in 2011, 2010 or 2009. On December 31, 2012 and 2011, the Company had approximately \$8,541,000 available for use under the November 2000 Plan.

Dividends are declared at the discretion of the Company's Board of Directors and depend on actual cash from operations, the Company's financial condition and capital requirements and any other factors the Company's Board of Directors may consider relevant.

On June 28, 2010, the Company's Board of Directors approved a cash dividend of \$0.30 per share of the Company's stock. The total dividend of approximately \$12,506,000 was paid on July 30, 2010 to shareholders of record at the close of business on July 16, 2010.

On July 22, 2011, the Company's Board of Directors approved a cash dividend of \$0.15 per share of the Company's stock. The total dividend of approximately \$6,272,000 was paid on August 31, 2011 to shareholders of record at the close of business on August 9, 2011.

During the year ended December 31, 2010, three subsidiaries paid a total of \$5,457,000 in cash dividends, of which \$4,905,000 was paid to the Company and \$552,000 was paid to outside shareholders. During the year ended December 31, 2011, two subsidiaries paid a total of \$2,000,000 in cash dividends, of which \$1,310,000 was paid to the Company and \$690,000 was paid to outside shareholders. During the year ended December 31, 2012, three subsidiaries paid a total of \$1,600,000 in cash dividends, of which \$1,222,000 was paid to the Company and \$378,000 was paid to outside shareholders. Dividends paid to outside shareholders are accounted for as a reduction in noncontrolling interest.

During 2012, a total of 580 shares of Common Stock were issued upon the exercise of stock options. There were no shares of Class B Common Stock converted into Common Stock during 2012.

On December 31, 2012, there were 14,858,194 shares of Vicor Common Stock reserved for issuance under Vicor stock options and upon conversion of Class B Common Stock.

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# 12. OTHER INCOME, NET

The major changes in the components of the other income, net for the years ended December 31 were as follows (in thousands):

	2012	2011	2010
Interest income	<u>2012</u> \$136	\$ 259	2010 \$ 442
Foreign currency (losses) gains, net	(46)	(326)	(158)
Gain on disposal of equipment	33	21	249
Credit gains (losses) on available for sale securities	(9)	302	(146)
Unrealized gain on trading securities			970
Unrealized loss on auction rate securities rights			(962)
Other	80	90	102
	\$194	\$ 346	\$ 497

# **13. INCOME TAXES**

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31 were as follows (in thousands):

	2012	2011
Deferred tax assets:		
Research and development tax credit carryforwards	\$ 9,032	\$ 8,707
Inventory reserves	2,651	2,255
Stock-based compensation	2,218	1,830
Vacation accrual	1,569	1,543
Investment tax credit carryforwards	1,335	1,381
Net operating loss carryforwards	1,088	1,201
Capital loss carryforward	680	700
Alternative minimum tax credit carryforward	556	556
Deferred revenue	555	635
Unrealized loss on investments	380	568
Bad debt reserves	99	92
Warranty reserves	90	144
Other	694	855
Total deferred tax assets	20,947	20,467
Less: Valuation allowance for deferred tax assets	(11,480)	(9,736)
Net deferred tax assets	9,467	10,731
Deferred tax liabilities:		
Depreciation	(2,261)	(3,251)
Prepaid expenses	(733)	(660)
Patent amortization	(477)	(544)
Unremitted Vicor Custom earnings	(342)	(337)
Goodwill	—	(628)
Other	(355)	(593)
Total deferred tax liabilities	(4,168)	(6,013)
Net deferred tax assets	\$ 5,299	\$ 4,718

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The tax provision is based on the annual effective tax rate for the year, which includes estimated federal, state and foreign income taxes on the Company's pre-tax income and estimated federal and state income taxes for certain noncontrolling interest subsidiaries that are not part of the Company's consolidated income tax returns, offset in 2010 by the expected utilization of federal and foreign net operating loss carryforwards. The tax provisions also include discrete items, principally related to tax credits and expense for net increases in state taxes and accrued interest for potential liabilities.

As of December 31, 2012, the Company has a valuation allowance of approximately \$11,480,000 primarily against certain state deferred tax assets, for which realization cannot be considered more likely than not at this time. Such deferred tax assets principally relate to tax net operating loss and credit carryforwards in certain state tax jurisdictions for which sufficient taxable income for utilization cannot be projected at this time, which may result in the net operating losses or credits or both potentially expiring without being utilized due to shorter carryforward periods. Management assesses the need for the valuation allowance on a quarterly basis. In assessing the need for a valuation allowance, the Company considers all positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies, and past financial performance. Management believes it is more likely than not the Company's net federal deferred tax assets of approximately \$5,299,000 as of December 31, 2012 will be realized, based upon its assessment of all available evidence, both positive and negative. The Company believes the weight of positive evidence, including recent cumulative income and income in the carryback period for federal tax purposes, as well as a potential tax-planning strategy and projected income in the future, overcomes the negative evidence of the operating loss in the fourth quarter of 2012 and an expected operating loss for the first quarter of 2013. During the fourth quarter of 2012, though, the Company recorded an increase to the valuation allowance of approximately \$1,489,000 for all remaining state deferred tax assets not previously covered by a valuation allowance due to the following factors: (1) the Company cannot forecast sufficient future taxable income, of the appropriate nature, based on our quarterly assessment; (2) the Company does not have the ability to carryback state net operating losses or credits to utilize against state taxable income; and (3) state tax net operating losses and credits have a shorter carryforward period to be utilized than do the federal tax attributes. If and when management determines the valuation allowance should be released, the adjustment would result in a tax benefit in the Consolidated Statements of Operations and may include a portion to be accounted for through "Additional paid-in capital", a component of Stockholders' Equity. The amount of the tax benefit to be recorded in a particular quarter could be material.

Prior to September 30, 2010, the Company maintained a valuation allowance against a significant portion of its deferred tax assets, consisting of net operating loss carryforwards, tax credit carryforwards and deductible temporary differences. Based on the Company's pre-tax income for the nine months ended September 30, 2010 being sufficient to fully utilize its net operating loss carryforwards, a history of cumulative earnings before taxes for financial reporting purposes over a 12-quarter period, and expected future taxable income, management determined it was more likely than not a significant portion of the deferred tax assets would be realized. As a result, at September 30, 2010, the Company determined that it was appropriate to reverse a portion of its valuation allowance by \$5,158,000 as a discrete benefit for income taxes for certain deductible temporary differences expected to be realized in future periods. An additional benefit of \$1,159,000 was recorded in the fourth quarter of 2010. Management could not make such a determination in the prior quarters of fiscal 2010 due to a lack of confidence in being able to accurately forecast the expected ordinary income (loss) for the year largely due to global economic conditions and the possible impact continued economic and business uncertainty would have on the Company's business at those times.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

For financial reporting purposes, income (loss) before income taxes for the years ended December 31 include the following components (in thousands):

	2012	2011	2010
Domestic	\$(3,109)	\$13,406	\$28,973
Foreign	518	626	646
	\$(2,591)	\$14,032	\$29,619

Significant components of the provision (benefit) for income taxes for the years ended December 31 are as follows (in thousands):

	2012	2011	2010
Current:			
Federal	\$ 920	\$3,624	\$ 1,187
State	425	496	958
Foreign	231	455 4,575	209 2,354
	1,576	4,575	2,354
Deferred:			
Federal	(369)	148	(6,274)
	\$1,207	\$4,723	\$(3,920)

The Company intends to continue to reinvest certain of its foreign earnings indefinitely. Accordingly, no U.S. income taxes have been provided for approximately \$2,670,000 of unremitted earnings of international subsidiaries. As of December 31, 2012, the amount of unrecognized deferred tax liability on these earnings was \$212,000.

The reconciliation of the federal statutory rate to the effective income tax rate for the years ended December 31 is as follows:

	2012	2011	2010
Statutory federal tax rate	(34.0%)	35.0%	34.0%
State income taxes, net of federal income tax benefit	(9.4)	3.4	2.7
Book income attributable to noncontrolling interest	6.8	(1.4)	(0.3)
U.S. manufacturing deduction	(3.8)	(2.0)	(0.9)
Permanent items	2.2	0.5	0.2
Tax credits	0.6	(4.0)	
Increase in tax reserves	0.3	0.6	2.3
Foreign rate differential and deferred items	0.1	0.6	(1.0)
Increase (decrease) in valuation allowance	84.5	—	(49.7)
Other	(0.7)	1.0	(0.5)
	46.6%	33.7%	(13.2%)

On January 2, 2013 the American Taxpayer Relief Act ("ATRA") of 2012 was signed into law. Under prior law, a taxpayer was entitled to a research tax credit for qualifying amounts paid or incurred on or before December 31, 2011. The ATRA extends the research credit for two years to December 31, 2013. The extension of the research tax credit is retroactive and includes amounts paid or incurred after December 31, 2011. The tax rate above reflects the tax law that was in place as of December 31, 2012. Had the ATRA been enacted prior to

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

January 1, 2013, the Company's overall tax benefit would have been approximately \$549,000 higher and would have resulted in an overall effective rate of 25.4%. This \$549,000 benefit will be recognized in the period of enactment, the first quarter of 2013, as a discrete event.

As a result of the difference in treatment of excess stock option deductions available for income tax return and financial statement reporting purposes, the Company has approximately \$1,012,000 of federal research and development tax credit and \$396,000 of federal alternative minimum tax credit carryforwards that may be offset against future taxable income, which are included in the components of deferred tax assets disclosed above. It is anticipated that when these tax attributes are realized on an income tax return in the future, the related benefit will be recorded against "Additional paid-in capital". The research and development tax credit carryforwards expire beginning in 2013 for state purposes and in 2027 for federal purposes. The Company has net operating loss carryforwards in certain states, which expire beginning in 2010 and through 2021.

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

Balance on January 1, 2012	\$1,405
Additions based on tax provisions related to the current year	134
Reductions for tax positions of prior years	(33)
Balance on December 31, 2012	\$1,506

The Company has reviewed the tax positions taken, or to be taken, in its tax returns for all tax years currently open to examination by a taxing authority. The total amount of unrecognized tax benefits, that is the aggregate tax effect of differences between tax return positions and the benefits recognized in the Company's financial statements, on December 31, 2012 of \$1,506,000 including accrued interest, if recognized, may decrease the Company's income tax provision and effective tax rate. None of the unrecognized tax benefits as of December 31, 2012 are expected to significantly change during the next twelve months. The Company recognizes accrued interest and penalties, if any, related to unrecognized tax benefits as a component of income tax expense. As of December 31, 2012, the Company has accrued approximately \$177,000 for the potential payment of interest and recorded approximately \$32,000 of income tax expense for interest, net of related tax benefits, for the year ended December 31, 2012.

The Company files income tax returns in the United States and various foreign tax jurisdictions. These tax returns are generally open to examination by the relevant tax authorities from three to seven years from the date they are filed. The tax filings relating to the Company's federal and state taxes are currently open to examination for tax years 2009 through 2011 and 2005 through 2011, respectively. In addition, the 2003, 2004 and 2007 tax years resulted in losses. These years may also be subject to examination since the losses were carried forward and utilized in future years. In January 2012, the Company received a notice from the State of New York that its New York corporate tax returns for the tax years 2008 through 2010 had been selected for audit. The state of New York audit was completed and settled in April 2012 for approximately \$49,000. There are no other income tax audits currently in process.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

#### 14. COMMITMENTS AND CONTINGENCIES

The Company leases certain of its office, warehousing and manufacturing space. The future minimum rental commitments under non-cancelable operating leases with remaining terms in excess of one year are as follows (in thousands):

<u>Year</u>	
<u>Year</u> 2013	\$1,506
2014	1,106
2015	531
2016	126
2017 and thereafter	199

The future minimum rental commitments increased compared to last year as three of the Company's subsidiaries renewed their lease arrangements during 2012 and the Company's new entities in Shanghai, China and Bangalore, India entered into new lease arrangements during the fourth quarter of 2012. Rent expense was approximately \$1,677,000, \$1,592,000 and \$1,492,000 in 2012, 2011 and 2010, respectively. The Company also pays executory costs such as taxes, maintenance and insurance.

The Company also has a contract with a third-party to supply nitrogen for its manufacturing and research and development activities. Under the contract, the Company is obligated to pay a minimum of \$300,000 annually, subject to semi-annual price adjustments, through March 2015.

In addition, approximately \$1,328,000 of unrecognized tax benefits has been recorded as liabilities as the settlement amounts are uncertain. The Company has recorded a liability related to these unrecognized tax benefits for potential interest and penalties of approximately \$177,000 as of December 31, 2012.

As disclosed in prior filings, on January 28, 2011, SynQor, Inc. ("SynQor") filed a complaint for patent infringement against Ericsson, Inc. ("Ericsson"), Cisco Systems, Inc. ("Cisco") and the Company in U.S. District Court for the Eastern District of Texas ("the Texas Action"). This immediately followed a complaint filed by the Company on January 26, 2011, in U.S. District Court for the District of Massachusetts, in which the Company sought a declaratory judgment that its bus converter products do not infringe any valid claim of certain of SynQor's U.S. patents, and that the claims of those patents are invalid. With respect to the Company, SynQor's complaint alleges the Company's products, including, but not limited to, unregulated bus converters used in intermediate bus architecture power supply systems, infringe certain SynQor patents. SynQor seeks, among other items, an injunction against further infringement and an award of unspecified compensatory and enhanced damages, interest, costs and attorney fees. On February 8, 2011, SynQor filed a motion for preliminary injunction seeking an order enjoining the Company from manufacturing, using, selling, and offering for sale in the United States and/or importing into the United States certain identified unregulated bus converters, as well as any other bus converters not significantly different from those products. On February 17, 2011, the Company withdrew its Massachusetts action without prejudice to allow the litigation to proceed in Texas. On May 16, 2011, SynQor announced it was withdrawing its motion for preliminary injunction against the Company. On September 16 2011, the U.S. District Court for the Eastern District of Texas issued an order setting a trial date of July 7, 2014. On September 20, 2011, SynQor filed an Amended Complaint in the Texas Action. The Amended Complaint repeated the allegations of patent infringement against the Company contained in SynQor's original complaint, and included additional patent infringement allegations with respect to U.S. Patent No. 8,023,290 (" '290 patent"), which was issued on that day. As with SynQor's original complaint, the amended complaint alleged that the Company's products, including but not limited to the Company's unregulated bus converters used in intermediate bus architecture power supply systems, infringed the asserted patents. On October 4, 2011, the Company filed an answer and counterclaims to SynOor's amended complaint, in which the Company alleges the

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

'290 patent is unenforceable because it was procured through inequitable conduct before the U.S. Patent and Trademark Office and seeks damages against SynQor for SynQor's unfair and deceptive trade practices and tortious interference with prospective economic advantage in connection with SynQor's allegations of patent infringement against the Company. The Company does not believe that any of its products, including its unregulated bus converters, infringe any valid claim of the asserted SynQor patents, either alone or when used in an intermediate bus architecture implementation. The Company believes SynQor's claims lack merit and, therefore, continues to vigorously defend itself against SynQor's patent infringement allegations.

On February 22, 2007, the Company announced it had reached an agreement in principle with Ericsson, Inc., the U.S. affiliate of LM Ericsson, to settle a lawsuit brought by Ericsson against the Company in California state court. Under the terms of the settlement agreement entered into on March 29, 2007, after a court ordered mediation, the Company paid \$50,000,000 to Ericsson, of which \$12,800,000 was reimbursed by the Company's insurance carriers. Accordingly, the Company recorded a net loss of \$37,200,000 from the litigation-related settlements in the fourth quarter of 2006. The Company has been seeking further reimbursement from its insurance carriers. On November 14, 2008, a jury in the United States District Court for the District of Massachusetts found in favor of the Company in a lawsuit against certain of its insurance carriers with respect to the Ericsson settlement. The jury awarded \$17,300,000 in damages to the Company, although the verdict was subject to challenge in the trial court and on appeal. Both parties filed certain motions subsequent to the ruling and, on March 2, 2009, the judge in the case rendered his decision on the subsequent motions, reducing the jury award by \$4,000,000. On March 26, 2009, the U.S. District Court, District of Massachusetts ("the Court") issued its judgment in the matter, affirming the award of \$13,300,000, plus prejudgment interest from the date of breach on March 29, 2007, through March 26, 2009, the date of judgment in the amount of approximately \$3,179,000. The insurance carriers filed their appeal to this total judgment in the amount of approximately \$16,479,000 and an oral argument was held in early February 2010 on the insurer's appeal. On March 16, 2012, the U.S. Court of Appeals for the First Circuit vacated the judgment in favor of the Company and remanded the case for proceedings consistent with the Court's opinions. On October 3, 2012, a stipulation of dismissal with prejudice was filed with the Court, reflecting the contemporaneous settlement agreement between the Company and the insurance carriers in which the company received a cash payment of \$1,975,000 in exchange for its release of the insurance carriers from future claims. The settlement amount of \$1,975,000 was recorded as a gain from litigation-related settlement in the fourth quarter of 2012.

In addition, the Company is involved in certain other litigation and claims incidental to the conduct of its business. While the outcome of lawsuits and claims against the Company cannot be predicted with certainty, management does not expect any current litigation or claims to have a material adverse impact on the Company's financial position or results of operations.

#### **15. SEGMENT INFORMATION**

The Company has organized its business segments according to its key product lines. The Brick Business Unit segment ("BBU") designs, develops, manufactures and markets the Company's modular power converters and configurable products, and also includes the operations of the Company's Westcor division, the six entities comprising Vicor Custom Power, and the BBU operations of VJCL. The VI Chip segment includes VI Chip Corporation, which designs, develops, manufactures and markets the Company's factorized power architecture ("FPA") products. The VI Chip segment also includes the VI Chip business conducted through VJCL. The Picor segment includes Picor Corporation, which designs, develops, manufactures and markets integrated circuits and related products for use in a variety of power management and power system applications. Picor develops these products to be sold as part of Vicor's products or to third parties for separate applications.

The Company's chief operating decision maker evaluates performance and allocates resources based on segment revenues and segment operating income (loss). The operating income (loss) for each segment includes

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

selling, general and administrative and research and development expenses directly attributable to the segment. Certain of the Company's indirect overhead costs, which include corporate selling, general and administrative expenses, are allocated among the segments based upon an estimate of costs associated with each segment. Assets allocated to each segment are based upon specific identification of such assets, which include accounts receivable, inventories, fixed assets and certain other assets. The Corporate segment consists of those operations and assets shared by all segments. The costs of certain centralized executive and administrative functions are recorded in this segment, as are certain shared assets, most notably cash and cash equivalents, deferred tax assets, long-term investments, the Company's facilities in Massachusetts, real estate and other assets. The Company's accounting policies and method of presentation for segments are consistent with that used throughout the Consolidated Financial Statements.

The following table provides significant segment financial data as of and for the years ended December 31 (in thousands):

<u>BBU</u> (1)	VI Chip (1)	Picor	Corporate	Eliminations (1)(2)	Total
\$179,919	\$ 38,083	\$ 9,724	\$ —	\$ (9,219)	\$218,507
28,114	(27,409)	(2,786)	(704)	—	(2,785)
97,507	21,105	5,365	119,007	(40,403)	202,581
4,958	3,568	414	1,483		10,423
\$194,830	\$ 55,154	\$13,183	\$ —	\$ (10,199)	\$252,968
31,938	(16,294)	(1,239)	(719)		13,686
82,096	30,701	7,098	119,231	(30,985)	208,141
5,503	3,570	458	1,474	_	11,005
\$217,018	\$ 33,842	\$11,061	\$ —	\$ (11,188)	\$250,733
55,619	(24,565)	(1,282)	(640)	(10)	29,122
78,014	31,278	7,463	103,486	(15,329)	204,912
4,788	3,500	470	1,464		10,222
	(1) \$179,919 28,114 97,507 4,958 \$194,830 31,938 82,096 5,503 \$217,018 55,619 78,014	(1)       (1)         \$179,919       \$38,083         28,114       (27,409)         97,507       21,105         4,958       3,568         \$194,830       \$55,154         31,938       (16,294)         82,096       30,701         5,503       3,570         \$217,018       \$33,842         55,619       (24,565)         78,014       31,278	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

(1) During the fourth quarter of 2010, the Company completed a recapitalization of VI Chip. The impact of the recapitalization on VI Chip was to eliminate its intercompany payable to BBU of approximately \$172,100,000 and institute capital accounts totaling \$50,000,000 as of December 31, 2010. The impact on segment reporting was to reduce Total assets for BBU and increase Eliminations by \$172,100,000 as of December 31, 2010. There was no impact on the consolidated financial statements as a result of this recapitalization.

(2) The elimination for net revenues is principally related to inter-segment revenues of Picor to BBU and VI Chip and for inter-segment revenues of VI Chip to BBU. The elimination for total assets is principally related to inter-segment receivables due to BBU for the funding of VI Chip operations and for the purchase of equipment for both VI Chip and Picor.

During 2012, one customer accounted for approximately 10.1% of net revenues. During 2011, one customer accounted for approximately 14.9% of net revenues. During 2010, two customers accounted for approximately 12.3% and 11.5% of net revenues, respectively. International sales, as a percentage of total net revenues, were approximately 51.1% in 2012 and 56.9% in 2011 and 49.2% in 2010, respectively. During 2012, net revenues from customers in Hong Kong, China and Taiwan accounted for approximately 12.5% and 9.0%, respectively, of total net revenues (11.8% and 15.3%, respectively, in 2011, and 11.4% and 11.8%, respectively, in 2010).

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

# **16. SUBSEQUENT EVENT**

In February 2013, the Company initiated a workforce reduction. The Company will record a pre-tax charge in the first quarter of 2013 of approximately \$1,300,000 for the cost of severance and other employee-related costs, based on each employee's respective length of service.

# 17. QUARTERLY RESULTS OF OPERATIONS (Unaudited)

The following table sets forth certain unaudited quarterly financial data for the years ended December 31 (in thousands, except per share amounts):

	First	Second	Third	Fourth	Total
2012:					
Net revenues	\$59,668	\$55,467	\$52,948	\$50,424	\$218,507
Gross margin	24,467	24,106	22,953	20,125	91,651
Consolidated net income (loss)	341	244	280	(4,663)	(3,798)
Net income attributable to noncontrolling interest	15	24	89	151	279
Net income (loss) attributable to					
Vicor Corporation	326	220	191	(4,814)	(4,077)
Net income (loss) per share attributable to Vicor Corporation:					
Basic and diluted	0.01	0.01		(0.12)	(0.10)
2044	First	Second	Third	Fourth	Total
2011:					
Net revenues	\$70,455	\$65,402	\$58,560	\$58,551	\$252,968
Gross margin	30,454	27,309	24,440	24,491	106,694
Consolidated net income	4,169	3,204	1,175	761	9,309
Net income attributable to noncontrolling interest	151	138	93	84	466
Net income attributable to Vicor Corporation	4,018	3,066	1,082	677	8,843
Net income per share attributable to Vicor Corporation:					
Basic and diluted	0.10	0.07	0.03	0.02	0.21

In the fourth quarter of 2012, the Company recorded the following adjustments:

• An impairment of goodwill of \$2,012,000 based on the Company's annual assessment of the carrying value related to VJCL (See Note 9).

• A gain from litigation-related settlement of \$1,975,000 resulting from the contemporaneous settlement agreement between the Company and its insurance carriers (See Note 14).

• An increase of \$1,489,000 to the income tax valuation allowance against certain deferred tax assets (See Note 13).

An increase of approximately \$1,400,000 to inventory reserves for potential excess and obsolete inventory charged against cost of revenues.

#### ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

#### ITEM 9A. CONTROLS AND PROCEDURES

Attached as exhibits to this Form 10-K are certifications of our CEO and Chief Financial Officer ("CFO"), which are required in accordance with Rule 13a-14 of the Exchange Act of 1934, as amended (the "Exchange Act"). This "Controls and Procedures" section includes information concerning the controls and controls evaluation referred to in the certifications.

#### (a) Evaluation of disclosure controls and procedures

As required by Rule 13a-15 under the Exchange Act, management, with the participation of our CEO and CFO, conducted an evaluation regarding the effectiveness of our disclosure controls and procedures, as of the end of the last fiscal year. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. We recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and we necessarily apply our judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of the Company's disclosure controls and procedures as of December 31, 2012, the Chief Executive Officer and Chief Financial Officer concluded that, as of such date, the Company's disclosure controls and procedures were effective at the reasonable assurance level.

#### (b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Internal control over financial reporting includes those policies and procedures that (a) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets; (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and Board of Directors; and (c) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on our financial statements.

Management assessed our internal control over financial reporting as of December 31, 2012, the end of our fiscal year. Management based its assessment on criteria established in "Internal Control — Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Management's assessment included evaluation of such elements as the design and operating effectiveness of key financial reporting controls, process documentation, accounting policies, and our overall control environment.

Based on our assessment, management has concluded that our internal control over financial reporting was effective as of December 31, 2012.

The effectiveness of our internal control over financial reporting as of December 31, 2012 has been audited by Grant Thornton LLP, our independent registered public accounting firm, as stated in their report which is included immediately below.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders Vicor Corporation

We have audited the internal control over financial reporting of Vicor Corporation (a Delaware corporation) and its subsidiaries (collectively, the "Company") as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

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

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

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

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company as of and for the year ended December 31, 2012, and our report dated March 7, 2013 expressed an unqualified opinion on those financial statements.

/s/ GRANT THORNTON LLP

Boston, Massachusetts March 7, 2013

#### (c) Inherent Limitations on Effectiveness of Controls

The Company's management, including the CEO and CFO, does not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

#### (d) Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fiscal quarter ended December 31, 2012, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

None.

### PART III

# ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Incorporated by reference from the Company's Definitive Proxy Statement for its 2013 annual meeting of stockholders.

## ITEM 11. EXECUTIVE COMPENSATION

Incorporated by reference from the Company's Definitive Proxy Statement for its 2013 annual meeting of stockholders.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Incorporated by reference from the Company's Definitive Proxy Statement for its 2013 annual meeting of stockholders.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Incorporated by reference from the Company's Definitive Proxy Statement for its 2013 annual meeting of stockholders.

## ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Incorporated by reference from the Company's Definitive Proxy Statement for its 2013 annual meeting of stockholders.

## PART IV

### ITEM 15. EXHIBITS AND FINANCIAL STATEMENTS

(a) (1) Financial Statements

See index in Item 8.

(a) (2) Schedules

Schedule II Valuation and Qualifying Accounts

All other schedules for which provision is made in the applicable accounting regulation of the Securities and Exchange Commission are not required under the related instructions or are inapplicable, and therefore have been omitted.

(b) Exhibits

Exhibits		Description of Document
3.1	•	Restated Certificate of Incorporation, dated February 28, 1990 (1)
3.2	•	Certificate of Ownership and Merger Merging Westcor Corporation, a Delaware Corporation, into Vicor Corporation, a Delaware
		Corporation, dated December 3, 1990 (1)
3.3	•	Certificate of Amendment of Restated Certificate of Incorporation, dated May 10, 1991 (1)
3.4	•	Certificate of Amendment of Restated Certificate of Incorporation, dated June 23, 1992 (1)
3.5	•	Bylaws, as amended (9)
4.1	•	Specimen Common Stock Certificate (2)
10.1	•	1984 Stock Option Plan of the Company, as amended (2)
10.2	•	1993 Stock Option Plan (3)
10.3	•	1998 Stock Option and Incentive Plan (4)
10.4	•	Amended and Restated 2000 Stock Option and Incentive Plan (5)
10.5	•	Form of Non-Qualified Stock Option under the Vicor Corporation Amended and Restated 2000 Stock Option and Incentive Plan
		(6)
10.6	•	Sales Incentive Plan (7)
10.7	•	Picor Corporation 2001 Stock Option and Incentive Plan (8)
10.8	•	Form of Non-Qualified Stock Option under the Picor Corporation 2001 Stock Option and Incentive Plan (8)
10.9	•	VI Chip Corporation Amended 2007 Stock Option and Incentive Plan (11)
10.10	•	Form of Non-Qualified Stock Option Agreement under the VI Chip Corporation Amended 2007 Stock Option and Incentive Plan
		(10)
10.11	•	Form of Incentive Stock Option Agreement under the VI Chip Corporation Amended 2007 Stock Option and Incentive Plan (11)
10.12	•	Form of Stock Restriction Agreement under the VI Chip Corporation Amended 2007 Stock Option and Incentive Plan (11)
21.1	•	Subsidiaries of the Company (12)
23.1	•	Consent of Grant Thornton LLP (12)
31.1	•	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (12)
31.2	•	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (12)
32.1	•	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-
		Oxley Act of 2002 (12)
32.2	•	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-
		Oxley Act of 2002 (12)
101	•	The following material from the Company's Annual Report on Form 10-K, for the year ended December 31, 2012, formatted in
		XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of
		Operations; (iii) the Consolidated Statements of Comprehensive Income (Loss); (iv) the Consolidated Statements of Cash Flows;
		(v) the Consolidate Statements of Equity; and (vi) the Notes to Consolidated Financial Statements.
(1)	Filed as an exhibit to	the Company's Annual Report on Form 10-K filed on March 29, 2001 and incorporated herein by reference.
(2)		the Company's Registration Statement on Form 10, as amended, under the Securities Exchange Act of 1934 (File No. 0-18277), and

(2) Filed as an exhibit to the Company's Registration Statement on Form 10, as amended, under the Securities Exchange Act of 1934 (File No. 0-18277), and incorporated herein by reference.

(3) Filed as an exhibit to the Company's Registration Statement on Form S-8, as amended, under the Securities Act of 1933 (No. 33-65154), and incorporated herein by reference.

(4) Filed as an exhibit to the Company's Registration Statement on Form S-8, as amended, under the Securities Act of 1933 (No. 333-61177), and incorporated herein by reference.

- (5) Filed as an exhibit to the Company's Proxy Statement for use in connection with its 2002 Annual Meeting of Stockholders, which was filed on April 29, 2002, and incorporated herein by reference.
- (6) Filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on November 4, 2004 and incorporated herein by reference.
- (7) Filed as an exhibit to the Company's Annual Report on Form 10-K filed on March 16, 2005 and incorporated herein by reference.
- (8) Filed as an exhibit to the Company's Annual Report on Form 10-K filed on March 14, 2006 and incorporated herein by reference.
- (9) Filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on November 8, 2006 and incorporated herein by reference.
- (10) Filed as an exhibit to the Company's Current Report on Form 8-K, dated June 6, 2007 and incorporated herein by reference.
- (11) Filed as an exhibit to the Company's Current Report and Form 8-K, dated March 6, 2008 incorporated herein by reference.

(12) Filed herewith.

# SCHEDULE II VALUATION AND QUALIFYING ACCOUNTS Years ended December 31, 2012, 2011 and 2010

Description Allowance for doubtful accounts:	Balance at Beginning of Period	(Credit) Charge to Costs and Expenses	Other Charges, Deductions (1)	Balance at End of Period
Year ended:				
December 31, 2012	\$ 266,000	\$ 37,000	\$ (11,000)	\$ 292,000
December 31, 2011	309,000	18,000	(61,000)	266,000
December 31, 2010	260,000	57,000	(8,000)	309,000

(1) Reflects uncollectible accounts written off, net of recoveries.

Description Inventory Reserves:	Balance at nning of Period	(Credit) Charge to Costs and Expenses	Other Charges, Deductions (2)	Balance at End of Period
Year ended:				
December 31, 2012	\$ 6,367,000	\$ 2,621,000	\$ (1,339,000)	\$7,649,000
December 31, 2011	5,444,000	1,650,000	(727,000)	6,367,000
December 31, 2010	5,943,000	1,721,000	(2,220,000)	5,444,000

(2) Reflects amounts associated with inventory that have been discarded or sold.

# SIGNATURES

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

Vicor Corporation

By: /s/ James A. Simms

James A. Simms Vice President, Chief Financial Officer

Date: March 7, 2013

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

Signature	Title	Date
/s/ Patrizio Vinciarelli Patrizio Vinciarelli	President, Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	March 7, 2013
/s/ James A. Simms James A. Simms	Chief Financial Officer Vice President (Principal Financial Officer and Principal Accounting Officer)	March 7, 2013
/s/ Estia J. Eichten Estia J. Eichten	Director	March 7, 2013
/s/ David T. Riddiford David T. Riddiford	Director	March 7, 2013
/s/ Barry Kelleher Barry Kelleher	Director	March 7, 2013
/s/ Samuel J. Anderson Samuel J. Anderson	Director	March 7, 2013
/s/ Claudio Tuozzolo Claudio Tuozzolo	Director	March 7, 2013
/s/ Jason L. Carlson Jason L. Carlson	Director	March 7, 2013
/s/ Liam K. Griffin Liam K. Griffin	Director	March 7, 2013

# SUBSIDIARIES OF THE COMPANY

Name Picor Corporation VI Chip Corporation VLT, Inc. Vicor GmbH VICR Securities Corporation Vicor France SARL Vicor Italy SRL Vicor Hong Kong Ltd. Vicor U.K. Ltd. Vicor B.V. Vicor Japan Company, Ltd. Vicor Trading (Shanghai) Limited Vicor Development Corporation Aegis Power Systems, Inc. Mission Power Solutions, Inc. Northwest Power, Inc. Converpower Corporation Freedom Power Systems, Inc.

State or Jurisdiction of Incorporation Delaware, USA Delaware, USA California, USA Germany Massachusetts, USA France Italy Hong Kong United Kingdom Netherlands Japan China Delaware, USA Delaware, USA Delaware, USA Delaware, USA Delaware, USA Delaware, USA

# EXHIBIT 23.1

# CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated March 7, 2013 with respect to the consolidated financial statements, schedule and internal control over financial reporting included in the Annual Report of Vicor Corporation, Inc. and subsidiaries on Form 10-K for the year ended December 31, 2012. We hereby consent to the incorporation by reference of said reports in the Registration Statements of Vicor Corporation and subsidiaries on Forms S-8 (Nos. 33-37491, effective October 29,1990, 33-46656, effective March 25, 1992, 33-65154, effective June 29, 1993, 333-61177, effective August 11, 1998, 333-44790, effective August 30, 2000 and 333-99423, effective September 11, 2002).

/s/ GRANT THORNTON LLP

Boston, Massachusetts March 7, 2013

# Exhibit 31.1

# CHIEF EXECUTIVE OFFICER CERTIFICATION

I, <u>Patrizio Vinciarelli</u>, certify that:

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

Dated: March 7, 2013

/s/ Patrizio Vinciarelli

Patrizio Vinciarelli Chief Executive Officer

# Exhibit 31.2

# CHIEF FINANCIAL OFFICER CERTIFICATION

- I, James A. Simms, certify that:
  - 1. I have reviewed this report on Form 10-K of Vicor Corporation;
  - 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
  - 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
  - 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
  - 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Dated: March 7, 2013

/s/ James A. Simms

James A. Simms Vice President, Chief Financial Officer

## CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Vicor Corporation (the "Company") on Form 10-K for the period ending December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Patrizio Vinciarelli, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Patrizio Vinciarelli

Patrizio Vinciarelli President, Chairman of the Board and Chief Executive Officer

March 7, 2013

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

## CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Vicor Corporation (the "Company") on Form 10-K for the period ending December 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, James A. Simms, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ James A. Simms

James A. Simms Vice President, Chief Financial Officer

March 7, 2013

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.