

# 2004 Annual Report

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VOLTEERRA Semiconductor Corp

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Volterra designs, develops and markets proprietary high-performance analog and mixed-signal power management semiconductors for the storage, networking and consumer markets.

### Volterra Product Families

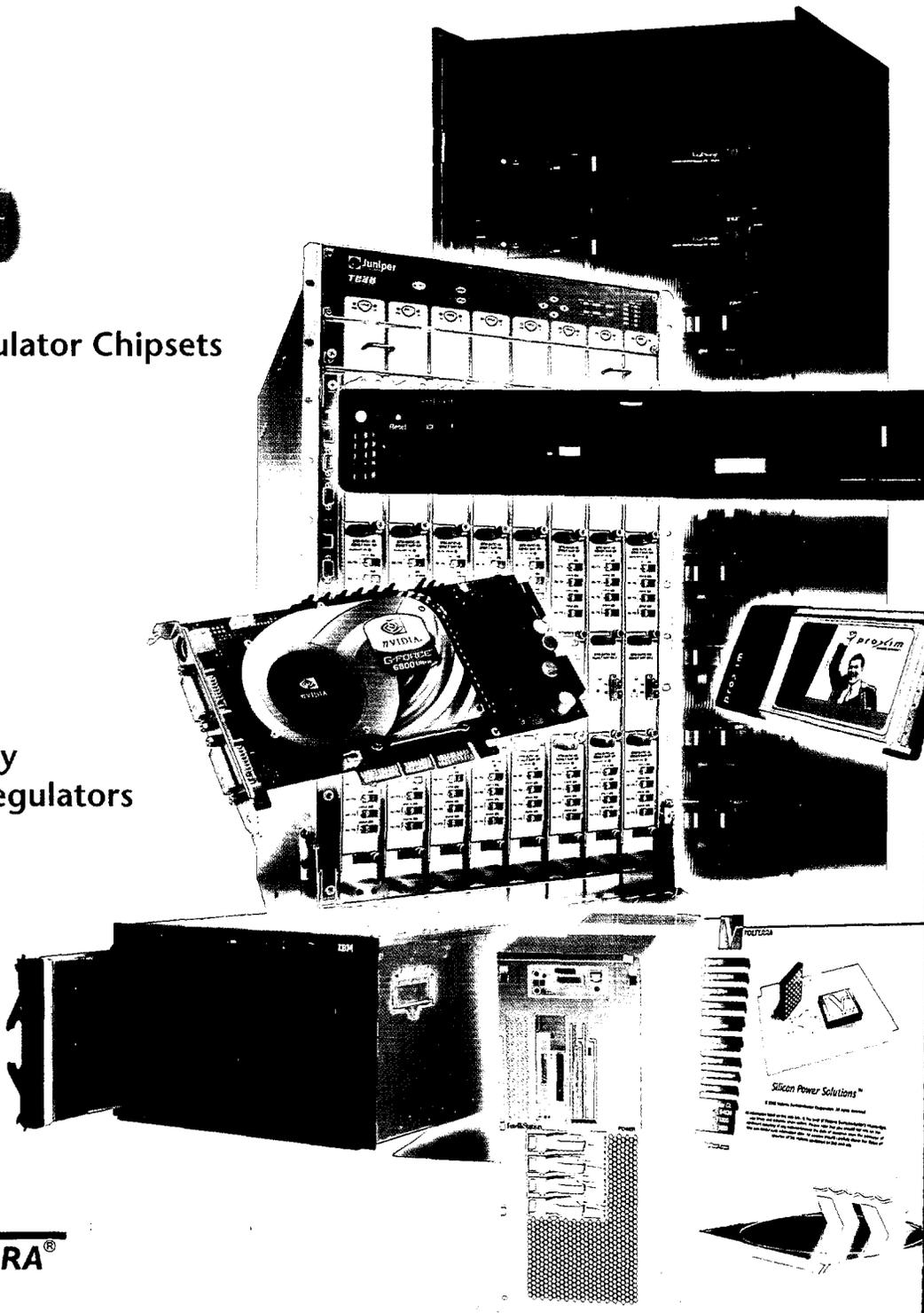
### Representative Applications



**VT1000 Family**  
Scalable Voltage Regulator Chipsets



**VT100 & VT200 Family**  
Integrated Voltage Regulators



*Silicon Power Solutions™*

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## **To Our Shareholders:**

2004 was a tremendously exciting year for Volterra, highlighted by our initial public offering and the commencement of trading on the Nasdaq Stock Market on July 29th and culminating with record fourth quarter results. Our proprietary, high performance power management semiconductors generated annual revenues of \$43.9 million, an increase of more than 75% over our revenues in 2003. Gross margins increased each quarter in 2004, exiting the fourth quarter at over 57%, and our bottom line improved to \$5.1 million in net income for the year compared to a net loss of \$4.0 million in 2003. We also saw strong design-in momentum that is indicative of the ongoing acceptance of our technology.

As this is our first shareholder letter as a public company, I thought it might be helpful to review our products and briefly explain the markets we serve. In doing so, I believe our stakeholders will have a greater understanding of why we experienced such tremendous growth in 2004 as well as an appreciation of how Volterra is well-positioned to capitalize on the growth in our markets as adoption of our technology expands.

## **Our Products**

Our core products are integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets that convert and deliver power from a source, such as a battery or electrical outlet, to sophisticated digital semiconductors found in advanced electronic systems in the computing, storage, networking and consumer markets. As digital semiconductors such as microprocessors, graphic processors and digital signal processors have become increasingly complex, so have the power requirements to operate them. Conventional power management solutions are increasingly unable to deliver the size, reliability, and performance required for today's applications.

The market for power management semiconductors is highly fragmented. For many investors, it is a confusing arena where semiconductor companies and merchant power supply vendors use similar terminology to describe their products and technologies making it difficult to distinguish between companies. Volterra's power management solution is different – one that, to date, no other company is able to duplicate. Why? Many competitive offerings, what we call "conventional solutions," are built around analog controllers. By contrast, we have assembled an outstanding group of engineers who, with their unique design expertise and knowledge, have replaced these conventional, analog controllers with sophisticated, mixed-signal control techniques. Mixed-signal design is typically considered one of the most challenging problems in the semiconductor industry and, in our view, an enormous barrier to entry. We do it very well and our success in 2004 demonstrates demand for our high-performance products.

The difference with Volterra solutions doesn't stop at the controller. Many conventional power management solutions are designed using a discreet approach with only 20% integrated circuit content. We offer a complete system-level solution with 80% of the system integrated by our CMOS products. While several companies are beginning to tout their "digital power" product offerings, we do not believe that any competitor has been able to offer the combination of high performance, mixed-signal control and high levels of integration found in Volterra's products.

## **Our Markets**

We design, develop and market proprietary, high-performance analog and mixed-signal power management semiconductors for the computing, storage, networking and consumer markets. With advances in manufacturing process technology, more advanced digital semiconductors can be offered at lower prices and, therefore, are being used in a wider variety of higher-volume applications. We often say that, "the technology used in last year's server will be found in this year's PC and next year's consumer device." This progression increases demand for high-performance power solutions. In addition, with each new generation of our products we are striving to drive down the system cost of Volterra-based solutions. In this way, we make our product offers more competitive in higher volume applications as well.

As an example, this year we were able to ride two impressive waves; one deepened our penetration into the server market while the other launched us into the graphics arena. Intel introduced its Nocona microprocessor for servers that spawned a cycle of new product introductions by our lead customers in the computing market and resulted in meaningful revenue contribution for Volterra. Additionally, nVidia selected Volterra to power their newly introduced graphics processor for their 6800 series boards. With these wins, our revenue in the fourth quarter grew 125% over the fourth quarter of 2003. In addition to the server and graphics market, the storage, networking and communications, and high-performance consumer markets contributed significantly to our revenue in 2004.

## Looking Ahead

As more electronic devices begin to use higher performance digital semiconductors, the power demands of those devices become more complex, creating market opportunities for Volterra's power management expertise. Our mantra internally is "execute, execute, execute". We must continue to do this on all fronts. While we have 29 issued patents, our R&D efforts must remain relentless so that we can maintain our position in power management technology. We will continue to introduce new generations of product that should allow us, in the near-term, to more deeply penetrate our existing markets and, longer term, create entry points for new markets, particularly in the consumer area.

Volterra has an enviable customer base with solid relationships with blue-chip companies including IBM, Hewlett Packard, nVidia, Cisco, Hitachi, Cray, EMC, Ericsson, Fujitsu, Intel, Juniper, NEC and Sony. Our sales team and engineers must further penetrate this customer base to win new sockets and design-ins. Further, we must continue to broaden our customer base and diversify our revenue contribution. In 2005, we also plan to expand our presence in Asia, where the majority of high-end, mass market design and engineering takes place.

Financially we are very solid. We believe that our decision to raise capital and go public during a challenging market environment was absolutely the right one. Many of our customers and suppliers had commented that the visibility and added financial strength we gained as a result of being publicly traded has added to their confidence in Volterra as a long-term player.

In summary, 2004 was a tremendous year for Volterra. This success would not have been possible without the dedication of our employees who are our most valuable asset. We have a pumped up and optimistic workforce that is eager to grow our business.

Sincerely,



Jeffrey Staszak  
**President & CEO**



*Jeff Staszak, President & CEO, with all of the original founders of Volterra. From left, Greg Hildebrand (VP Finance & CFO), Jeff Staszak, Anthony Stratakos (VP Advanced Research and Development & CTO), David Lidsky (VP Design Engineering), Craig Teuscher (VP Sales & Applications Engineering) and Marco Zuniga (VP IC Technology and Process Development).*

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**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

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

For the fiscal year ended December 31, 2004 or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 000-50857

**Volterra Semiconductor Corporation**

*(Exact name of registrant as specified in its charter)*

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**94-3251865**  
(I.R.S. Employer  
Identification No.)

**3839 Spinnaker Court  
Fremont, CA 94538**

*(Address of principal executive offices, including zip code)*

**(510) 743-1200**

*(Registrant's telephone number, including area code)*

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

**None**

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

**Common Stock, \$0.001 par value per share**

*(Title of class)*

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by 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 an accelerated filer (as defined in Rule 12b-2 of the Act). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the registrant based upon the closing price of the common stock listed on the Nasdaq National Market on January 31, 2005 was approximately \$248,387,825, based on a closing price of \$17.86 per share, excluding 9,430,384 shares of the registrant's common stock held by current executive officers, directors and stockholders whose ownership exceeds 5% of the common stock outstanding at January 31, 2005. Exclusion of such shares should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the registrant or that such person is controlled by or under common control with the registrant. The registrant has elected to use January 31, 2005 as the calculation date, as on June 30, 2004 (the last business day of the registrant's second fiscal quarter) the registrant was a privately held concern.

As of January 31, 2005, there were 23,337,877 shares of the registrant's common stock outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive Proxy Statement for the 2005 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Form 10-K, are incorporated by reference in Part III, Items 10-14 of this Form 10-K.

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**ANNUAL REPORT ON FORM 10-K  
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2004**

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## Cautionary Note Regarding Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements that involve many risks and uncertainties. These statements relate to future events and our future performance and are based on current expectations, estimates, forecasts and projections about the industries in which we operate and the beliefs and assumptions of our management. In some cases, you can identify forward-looking statements by terms such as “would,” “could,” “may,” “will,” “should,” “expect,” “intend,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “targets,” “seek,” or “continue,” the negative of these terms or other variations of such terms. In addition, any statements that refer to projections of our future financial performance, our anticipated growth and trends in our business and other characterizations of future events or circumstances, are forward-looking statements. These statements are only predictions based upon assumptions made that are believed to be reasonable at the time, and are subject to risk and uncertainties. Therefore, actual events or results may differ materially and adversely from those expressed in any forward-looking statement. In evaluating these statements, you should specifically consider the risks described under the caption “Factors that May Affect Future Operating Results” and elsewhere in this Form 10-K. These factors may cause our actual results to differ materially from any forward-looking statements. Except as required by law, we undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

## PART I

### Item 1. *Business*

We design, develop and market proprietary, high-performance analog and mixed-signal power management semiconductors for the computing, storage, networking and consumer markets. Our core products are integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets that transform, regulate, deliver and monitor the power consumed by digital semiconductors. Through our proprietary power system architecture and mixed-signal design techniques, we have integrated power, analog and digital circuits onto a single complementary metal oxide silicon, or CMOS, semiconductor, eliminating the need for a large number of discrete components required by conventional power management solutions. We sell our products primarily to original equipment manufacturers, or OEMs, original design manufacturers, or ODMs, contract equipment manufacturers, or CEMs, and power supply manufacturers, directly through our internal sales force or indirectly through distributors and outsourced suppliers.

### **Analog and Mixed-Signal Semiconductor Market**

Semiconductor components are the building blocks of electronic systems. Semiconductors are generally classified as either “digital” or “analog.” Digital semiconductors, such as microprocessors, graphics processors, digital signal processors and memory, are used to process and store data in a binary format, using electrical signals to represent the binary digits, “1” and “0.” Analog semiconductors, such as voltage regulators and temperature sensors, monitor, regulate or transform physical properties, including voltage, current, temperature, pressure, weight, light, sound or speed, using electrical signals that have a continuous range of values. Electronic systems rely on analog semiconductors to provide the interface between digital semiconductors and the physical world. Mixed-signal semiconductors combine elements of both analog and digital semiconductors, but are generally classified as analog semiconductors because of their analog content.

The market for analog and mixed-signal semiconductors differs from the digital semiconductor market in several significant respects. Digital semiconductors provide processing functions in electronic systems and are therefore often optimized for a particular application or market. Analog and mixed-signal semiconductors are often used in a wider variety of applications and markets where different users have unique requirements regarding performance specifications such as size, speed, accuracy and efficiency. As a result, the analog and mixed-signal semiconductor market is highly fragmented, providing smaller companies an opportunity to compete successfully against larger suppliers in certain market segments. Analog and mixed-signal semiconductors also generally have longer product life cycles than digital semiconductors. The market for digital semiconductors is usually characterized by rapid design cycles and fast production lead times. In addition, while digital semiconductors typically gain the performance benefit of leading-edge manufacturing process technologies, analog and

mixed-signal semiconductor companies typically benefit from lower capital requirements through the use of more mature manufacturing process technologies. Analog and mixed-signal semiconductor design has traditionally been more dependent on individual design engineers who have the training and experience to design complex analog and mixed-signal semiconductors.

Moore's Law, which refers to the observation that the number of transistors per semiconductor doubles every 18 months, is facilitating the development of faster and more complex digital semiconductors at prices which allow their proliferation in a broad variety of electronic systems. As digital semiconductors become more advanced, the analog and mixed-signal semiconductors that interface with them must also operate with greater speed, accuracy and efficiency. These factors, coupled with growth in the electronic equipment markets, are driving growth in the analog and mixed-signal semiconductor market.

### **Power Management Semiconductor Market**

Every digital semiconductor requires power to operate. This power is delivered by one or more analog semiconductors known as power management semiconductors. These power management semiconductors transform, regulate and monitor power throughout electronic systems. Advances in digital semiconductors require power management solutions with higher performance, measured by greater speed, accuracy and efficiency. In addition, the demand for smaller electronic devices is driving the need for power management solutions that deliver increased performance but are smaller in size. At the same time, the increased complexity of electronic systems is causing electronic system designers to adopt a new system architecture, known as a distributed power architecture. This architecture requires a larger number of power management semiconductors to meet the varied power requirements throughout the system. We believe these trends exist across multiple electronic equipment markets and are driving demand for greater quantities of more sophisticated power management solutions.

As Moore's Law suggests, the size of each transistor is decreasing as the number of transistors per semiconductor continues to increase. Smaller transistors require lower operating voltages that must be delivered with greater accuracy. At the same time, semiconductors are operating at faster speeds to achieve higher performance levels. More transistors and higher speeds require higher current and a more dynamic power supply. This means new power management solutions must be capable of supporting lower voltages with improved accuracy, higher currents and faster dynamic response.

Today, high-performance computing, storage and networking systems use advanced digital semiconductors with greater processing power and therefore require more sophisticated power management solutions. However, with advances in manufacturing process technology, more advanced digital semiconductors can be offered at lower prices and, therefore, are being used in a wider variety of higher-volume applications, such as consumer electronic devices that incorporate audio, image, video and data processing, and wireless communication capabilities. As a result, a broader variety of electronic equipment will require new power management solutions.

### **Our Solution**

We design, develop and market proprietary, high-performance analog and mixed-signal power management semiconductors. Our core products are integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets that are used to transform, regulate, deliver and monitor the power consumed by digital semiconductors, such as microprocessors, graphics processors, digital signal processors and memory. Through our proprietary power system architecture and mixed-signal design techniques, we have integrated power, analog and digital circuits onto a single CMOS semiconductor, thereby eliminating the need for a large number of discrete components included in conventional power management solutions. We target the high-performance computing, storage, networking and consumer markets where power management requirements are particularly challenging.

The benefits of our solution to our customers include:

- ***Small Form Factor.*** Our proprietary system architecture integrates the functions of controllers, power transistors and drivers found in conventional solutions, and significantly reduces the quantity and size of the remaining external components, such as inductors and capacitors.

- **High Performance.** Our power management solutions are designed to meet or exceed the demanding power requirements of advanced digital semiconductors.
- **Complete System-Level Solutions.** Our highly-integrated products, extensive reference designs and system-level applications expertise enable our customers to incorporate our solutions into electronic systems quickly and easily.
- **Scalability.** Our solutions are scalable and reduce the complexity, time and cost of system design for our customers.
- **System Management.** Our solutions provide system-level monitoring and control capabilities.

While we believe that we compete favorably in the markets we serve, we face a variety of challenges. In particular, many of our competitors have longer operating histories, greater name recognition, more diversified product offerings and greater resources than we do. In order to continue to grow our business, we must continue to provide superior customer support, expand our product offerings and attract and retain qualified engineers.

### **Our Strategy**

We intend to become the leading provider of high-performance, highly-integrated analog and mixed-signal power management solutions in the computing, storage, networking and consumer markets by continuing to pursue the following strategies:

- **Extend Our Technology.** We intend to continue to develop leading-edge power management technology by enhancing our proprietary power system architecture and advancing our analog and mixed-signal and system-level design capabilities.
- **Expand Our Presence in Our Existing Markets and Enter into New Markets.** We intend to continue providing power management solutions in our current markets and in new markets where power management is critical.
- **Focus on Strategic Customers.** We focus on developing relationships with strategic customers that are leaders in their respective markets.
- **Build Relationships with Leading Developers of Advanced Digital Semiconductors.** We intend to continue building relationships with leading developers of advanced digital semiconductors that are driving demand for new power management solutions.
- **Expand Our Engineering Team.** We intend to continue to attract and retain qualified engineers with experience in the design of analog and mixed-signal semiconductors and expertise in power system and applications engineering.

### **Our Products and Markets**

We design, develop and market proprietary, high-performance analog and mixed-signal power management semiconductors for the computing, storage, networking and consumer markets. Applications in these markets include data networking equipment, desktop and notebook computers, digital cameras, enterprise storage equipment, graphics cards, hard disk drives, mobile phones, optical drives, printers, servers, telecommunications equipment, wireless local area network, or LAN, cards, wireless personal digital assistants, or PDAs, and workstations.

Our core products are integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets that are used to transform, regulate, deliver and monitor the power consumed by digital semiconductors, such as microprocessors, graphics processors, digital signal processors and memory. Our products integrate multiple power, analog and digital functions that are generally performed by numerous discrete components in conventional solutions to maximize performance and minimize size. The demand for our products depends on many factors, including downturns in the semiconductor industry, our ability to introduce new products in a timely manner, the introduction of competing products, our pricing strategies and the pricing strategies of our competitors or a decline in demand for the electronic systems into which our products are incorporated.

We have two families of integrated voltage regulator semiconductors, VT100 and VT200, and one family of scalable voltage regulator semiconductor chipsets, VT1000. We classify our product families by specifications such as input voltage and output voltage, both measured in Volts, and maximum current, measured in Amperes, or Amps. We continually develop new products and new generations and versions of our existing products to improve product performance and features while reducing system cost and size.

### **Customers, Sales and Marketing**

The electronics manufacturing industry is complex and disaggregated, with many electronic system designers relying upon distributors and outsourced suppliers to provide procurement, manufacturing, design and other supply chain related services within the industry. We sell our products primarily to original equipment manufacturers, or OEMs, original design manufacturers, or ODMs, contract equipment manufacturers, or CEMs, and power supply manufacturers through our internal sales force and indirectly through distributors. In 2004, Lite-On Technologies, Metatech, nVidia, and IBM each accounted for over 10% of our net revenue, and collectively accounted for 67% of our net revenue. In 2003, IBM, Sabre, Solectron and Weikeng each accounted for over 10% of our net revenue, and collectively accounted for 78% of our net revenue. In 2002, Internix, Solectron and Weikeng each accounted for more than 10% of our net revenue, and collectively accounted for 84% of our net revenue.

We typically sell directly through our internal sales force to customers in North America, and indirectly through distributors and outsourced suppliers in other locations, though we do sell directly to some of our largest customers in Asia and Europe. In 2004, 2003 and 2002, international sales comprised 92%, 87% and 90%, respectively, of our net revenue.

Our products are generally incorporated into a customer's product early in the design phase. Once our products have been designed to perform a specific power management function in our customer's system, we are the sole source supplier for that function. Our applications engineers provide technical support and assistance to customers in designing, testing and qualifying systems that incorporate our products. While our competitors typically sell individual power management components, we engage in close customer interaction to enable a system level sales process.

We devote significant time and resources in working with system designers to get our products designed into their systems. If system designers do not design our products into their electronic systems, our business would be materially and adversely affected. In addition, we often incur significant expenditures in the development of a new product without any assurance that system designers will select our product for use in their electronic systems. If we incur such expenditures and fail to be selected, our operating results will be adversely affected.

### **Manufacturing, Assembly and Test**

We design and develop our proprietary products and utilize third-party foundries and assembly and test subcontractors to manufacture, assemble and test these products. By outsourcing our manufacturing, we believe that we are able to reduce our capital requirements, lower our fixed costs, and focus our resources on the design, development and marketing of our products. In addition, we benefit from our suppliers' manufacturing expertise and from the flexibility to select those vendors that we believe offer the best capability and value.

Our mixed-signal power management semiconductors are manufactured on processes based on widely-available, mature, standard CMOS technologies. This enables us to produce cost-effective products and allows us to source our semiconductors from multiple foundries. In 2004, our principal foundries were Taiwan Semiconductor Manufacturing Corporation in Taiwan, Chartered Semiconductor Manufacturing Corporation in Singapore and Samsung Electronics in South Korea.

Following fabrication, our production silicon wafers are shipped to our subcontractors where they are assembled into packages and electronically tested. We have multiple sources for assembly and test of our products. In 2004, we used Amkor Technology in South Korea and the Philippines, Advanced Semiconductor Engineering in Taiwan and STATSCHIPac in Singapore.

We have designed and implemented a structured product development process, which is consistent with ISO 9001 specifications, and a quality management system to provide the framework for quality, reliability and

manufacturability of our products. To ensure consistent product quality, reliability and yield, we closely monitor the production cycle by reviewing electrical, parametric and manufacturing process data from our foundries and assembly and test subcontractors.

We believe we have the resources in place and sufficient manufacturing capacity at our subcontractors through our multiple sources of silicon wafer fabrication, assembly and test to support our anticipated production requirements. However, none of these third-party vendors are obligated to perform services or supply products to us for any specific period, or in any specific quantities, except as may be provided in a particular purchase order. If we do not successfully manage these relationships, the quality of products shipped to our customers may decline, which would damage our relationships with customers, decrease our net revenue and negatively impact our growth.

## **Research and Development**

Our research and development efforts are focused on maintaining our technical position by continually enhancing our proprietary power system architecture and expanding our mixed-signal and system-level design capabilities. We also intend to further advance our CMOS wafer fabrication process expertise and enhance our packaging technologies. Through these efforts, we seek to introduce new products to address new market opportunities, to further reduce our design and manufacturing cost and to continue to improve the cost effectiveness, size and performance of our solutions. If we are unable to identify and develop new products or new generations and versions of our existing products that achieve market acceptance on a timely and cost-effective basis, and to respond to changing requirements, our business, operating results and financial condition would be negatively affected.

We have assembled a team of highly skilled engineers who have expertise in analog and mixed-signal design, power system design, process engineering and package engineering to collaborate on research and development efforts. We have also established a separate, dedicated group within our research and development organization that maintains forward-looking focus on new product architectures and future technologies. They work closely with our customers, partners and suppliers to align technology roadmaps and conduct extensive research to enhance our future products.

In 2004, 2003 and 2002, we spent \$13.1 million, \$10.5 million and \$9.2 million, respectively, on research and development efforts. We intend to invest a significant amount of resources into research and development activities in the future, and expect to fund the cost of these activities from current cash balances and funds generated from operations.

## **Intellectual Property**

We rely primarily on our patents, trade secret laws, contractual provisions, licenses, copyrights, trademarks and other proprietary rights to protect our intellectual property. As of December 31, 2004, we had 29 issued patents and 14 applications pending in the United States. These patents have expiration dates ranging from December 2017 to June 2023. In addition, we are currently pursuing additional patent applications. We cannot guarantee that our pending patent applications will be approved, that any issued patents will protect our intellectual property or will not be challenged by third parties, or that the patents of others will not have an adverse effect on our ability to do business.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or obtain and use information that we regard as proprietary. Competitors may also recruit our employees who have access to our proprietary technologies. We cannot assure you that the measures we have implemented to prevent misappropriation or infringement of our intellectual property will be successful.

In the future, we may receive communications from third parties alleging infringement of patents, trade secrets or other intellectual property rights. Any lawsuits resulting from such allegations could subject us to significant liability for damages and invalidate our proprietary rights. From time to time, we may be subject to legal proceedings and claims relating to our intellectual property. As of the date of this report, we are not involved in any proceedings regarding third party claims of intellectual property infringement.

## Competition

The markets for semiconductors generally, and power management semiconductors in particular, are intensely competitive. Increased competition may result in price pressure, reduced profitability and loss of market share, any of which could seriously harm our business, revenue and operating results. Our ability to compete effectively and to expand our business will depend on a number of factors, including:

- our ability to continue to recruit and retain engineering talent;
- our ability to introduce new products in a timely manner;
- the pricing of components used in competing solutions;
- the pace at which our customers incorporate our products into their systems;
- availability of foundry, assembly and test capacity;
- protection of our products by effective utilization of intellectual property laws; and
- general economic conditions.

We consider our primary competitors to include Analog Devices, International Rectifier, Intersil, Linear Technology, Maxim Integrated Products, Semtech and Texas Instruments. In addition, we compete with a number of other companies, some of which may become significant competitors. We may also face competition from new and emerging companies that may enter our existing or future markets. Many of our competitors and potential competitors have longer operating histories, greater name recognition, complementary product offerings, a larger customer base, longer relationships with customers and distributors, and significantly greater financial, sales, marketing, manufacturing, distribution, technical and other resources than we do. We believe we compete favorably on the basis of performance, integration and form factor.

## Employees

As of December 31, 2004, we had 115 full-time employees. There were 72 employees in research and development, 20 in sales, marketing and field services, 14 in general, administrative and finance, and nine in operations support. We believe we have good relations with our employees.

## About Volterra

We were incorporated in Delaware in August 1996. We changed our corporate name from Berkeley Integrated Technologies, Inc. to Volterra Semiconductor Corporation in October 1997. Our principal executive offices are located at 3839 Spinnaker Court, Fremont, California 94538, and our telephone number is (510) 743-1200. Our web site address is [www.volterra.com](http://www.volterra.com). The information on, or that can be accessed through, our web site is not part of this report.

## Executive Officers of the Registrant

Our executive officers, their ages and their positions as of January 31, 2005, are as follows:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Jeffrey Staszak .....	51	President, Chief Executive Officer and Director
Greg Hildebrand .....	34	Vice President of Finance and Chief Financial Officer, Treasurer and Secretary
William Numann .....	48	Vice President of Marketing
Anthony Stratakos .....	34	Vice President of Advanced Research and Development, Chief Technology Officer and Director
Craig Teuscher .....	37	Vice President of Sales and Applications Engineering and Director
Daniel Wark .....	48	Vice President of Operations

**Jeffrey Staszak** joined Volterra as our President and Chief Operating Officer in March 1999, and has been our Chief Executive Officer since August 2000 and a member of our board of directors since April 2000. Prior to joining Volterra, Mr. Staszak was Senior Vice President in the Storage Products Group of Texas Instruments Inc., a semiconductor company, from July 1996 to March 1999. From May 1993 to July 1996, Mr. Staszak served as Senior Vice President and General Manager of the Storage Products Division of Silicon Systems, Inc., a semiconductor company then affiliated with TDK Corporation. Mr. Staszak holds a B.S. in Industrial Technology from the University of Wisconsin — Stout and an M.B.A. from Pepperdine University.

**Greg Hildebrand** co-founded Volterra and has been our Treasurer since August 1996, our corporate Secretary since December 1998, and our Vice President of Finance and Chief Financial Officer since April 2004. From August 1996 to April 2004, Mr. Hildebrand held various positions at Volterra, most recently as our Director of Finance. Mr. Hildebrand holds a B.A. in Philosophy and Economics and an M.B.A. from the University of California at Berkeley.

**William Numann** joined Volterra as our Vice President of Marketing in November 2000. Prior to joining Volterra, Mr. Numann was Vice President of Standard Products of Supertex, Inc., a semiconductor company, from October 1997 to October 2000. From June 1985 to September 1997, Mr. Numann served as Product Marketing and Applications Director at Siliconix, Inc., a semiconductor company. Mr. Numann holds a B.S.E.E. and an M.B.A. from Rensselaer Polytechnic Institute.

**Anthony Stratakos** co-founded Volterra and has been our Vice President of Advanced Research and Development and Chief Technology Officer since October 1997 and a member of our board of directors since September 1996. From August 1996 to October 1997, Dr. Stratakos led our product development efforts. Dr. Stratakos holds a B.S.E.E. and an M.S.E.E. from Johns Hopkins University and a Ph.D. in electrical engineering from the University of California at Berkeley.

**Craig Teuscher** co-founded Volterra and has been our Vice President of Sales and Applications Engineering since January 2003 and a member of our board of directors since September 1996. From July 1998 to January 2003, Dr. Teuscher served as our Director of Applications Engineering. Dr. Teuscher holds a B.S.E.E. from Princeton University and an M.S.E.E. and Ph.D. in electrical engineering from the University of California at Berkeley.

**Daniel Wark** joined Volterra as our Vice President of Operations in September 2000. Prior to joining Volterra, Mr. Wark was Vice President, Operations of Pericom Semiconductor Corporation, a semiconductor company, from April 1996 to September 2000. From May 1983 to December 1995, Mr. Wark held various positions at Linear Technology Corporation, a semiconductor company, most recently as Director of Corporate Services. Other positions that Mr. Wark held at Linear included Managing Director of its Singapore subsidiary, Linear Technology Pte. Ltd., and Production Control Manager. Mr. Wark holds a B.S. in Business Administration from San Jose State University.

## **Item 2. Properties**

Our principal offices and primary research and development, operations management and Western U.S. sales office occupy approximately 20,000 square feet in Fremont, California, under a lease that expires in 2007. Our regional headquarters in Asia, research and development, operations management and sales office, occupy approximately 5,000 square feet in Singapore under a lease that expires in 2006. We also lease properties in New Hampshire, New Jersey, North Carolina and Taiwan for use as sales and applications support offices. We may change the size and location of our facilities from time to time based on business requirements. We do not own any manufacturing facilities and we contract to third parties the production and distribution of our products. We believe our space is adequate for our current needs and that additional or substitute space will be available to accommodate foreseeable expansion of our operations.

## **Item 3. Legal Proceedings**

We are not currently involved in any legal proceedings. However, from time to time we may be subject to legal proceedings and claims in the ordinary course of business.

## **Item 4. Submission of Matters to a Vote of Security Holders**

No matters were submitted to a vote of our security holders during the quarter ended December 31, 2004.

## PART II

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

#### Market Information and Stockholders

Our common stock commenced trading on the Nasdaq National Market on July 29, 2004 under the symbol "VLTR." The following table sets forth the high and low sales prices of our common stock as reported on the Nasdaq National Market for the periods indicated.

<u>Fiscal Year Ended December 31, 2004</u>	<u>High</u>	<u>Low</u>
Third quarter ended September 30, 2004 (from July 29, 2004) .....	\$15.90	\$ 7.00
Fourth quarter ended December 31, 2004.....	\$26.34	\$12.42

The closing price for our common stock as reported by the Nasdaq National Market on January 31, 2005 was \$17.86 per share. As of January 31, 2005, there were approximately 1,661 stockholders of record of our common stock.

#### Dividends

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings to fund the development and expansion of our business, and therefore we do not anticipate paying cash dividends on our common stock in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors. None of our outstanding capital stock is entitled to any dividends. Additionally, our current credit facility prohibits the payment of dividends without the lender's consent.

#### Use of Proceeds from the Sale of Registered Securities

On July 28, 2004, our registration statement on Form S-1 (Registration No. 333-115614) was declared effective for our initial public offering. As of January 31, 2005, we had invested the \$31.9 million in net proceeds from the offering in government agency securities and money market funds. We intend to use these proceeds for general corporate purposes, including working capital, research and development, general and administrative expenses and capital expenditures. We may also use a portion of the net proceeds to fund possible investments in, or acquisitions of, complementary businesses, products or technologies or in establishing joint ventures.

#### Recent Sales of Unregistered Securities

During the year ended December 31, 2004, we sold and issued the following securities which were not registered under the Securities Act of 1933:

- (1) From January 16 to August 5, 2004, we sold an aggregate of 259,260 shares of our common stock (after giving effect to the one-for-two reverse split of our common and preferred stock that took place on July 8, 2004) to employees, directors and consultants for cash consideration in the aggregate amount of \$795,512 upon the exercise of stock options granted under our 1996 Stock Option Plan, none of which have been repurchased. The 1996 Stock Option Plan was amended and restated as our 2004 Equity Incentive Plan in connection with our initial public offering.
- (2) From January 26 to July 28, 2004, we granted stock options to employees, directors and consultants under our 1996 Stock Option Plan covering an aggregate of 1,126,130 shares of common stock at exercise prices ranging from \$3.50 to \$9.32 per share (after giving effect to the one-for-two reverse split of our common and preferred stock that took place on July 8, 2004). One half of the shares subject to one such option to purchase 20,000 shares at an exercise price of \$5.00 per share were fully vested upon the date of grant and the remaining shares vest quarterly thereafter over four years. One quarter of the shares subject to all other options vest one year after the date of grant and the remaining shares vest quarterly thereafter over three years.

The issuances described in paragraphs (1) and (2) above were deemed exempt from registration under the Securities Act of 1933 in reliance on Rule 701 promulgated under the Securities Act of 1933 as offers and sales of securities pursuant to certain compensatory benefit plans and contracts relating to compensation in compliance with Rule 701.

#### Item 6. Selected Financial Data

You should read the following selected consolidated financial and operating information for Volterra together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K.

The consolidated statements of operations data for the years ended December 31, 2004, 2003 and 2002, and the consolidated balance sheet data as of December 31, 2004 and 2003 are derived from the audited consolidated financial statements included elsewhere in this report. The consolidated statements of operations data for the years ended December 31, 2001 and 2000, and the consolidated balance sheet data as of December 31, 2002, 2001 and 2000 are derived from audited consolidated financial statements not included in this report. Historical results for any prior or interim period are not necessarily indicative of the results to be expected for a full fiscal year or for any future period.

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(in thousands, except per share data)				
<b>Consolidated Statements of Operations Data:</b>					
Net revenue .....	\$43,935	\$25,118	\$15,674	\$ 4,366	\$ —
Cost of revenue .....	19,635	14,543	11,514	5,134	—
Gross margin .....	<u>24,300</u>	<u>10,575</u>	<u>4,160</u>	<u>(768)</u>	<u>—</u>
Operating expenses:					
Research and development .....	13,062	10,460	9,241	9,388	11,414
Selling, general and administrative .....	5,584	4,148	4,443	3,406	2,007
Stock-based compensation (1) .....	682	—	16	2	—
Restructuring charge (2) .....	—	142	—	—	—
Total operating expenses .....	<u>19,328</u>	<u>14,750</u>	<u>13,700</u>	<u>12,796</u>	<u>13,421</u>
Income (loss) from operations .....	4,972	(4,175)	(9,540)	(13,564)	(13,421)
Interest and other income .....	385	162	320	510	1,684
Interest and other expense .....	(14)	(14)	(14)	(287)	(375)
Income (loss) before income taxes .....	5,343	(4,027)	(9,234)	(13,341)	(12,112)
Income tax expense .....	234	—	—	—	—
Net income (loss) .....	<u>\$ 5,109</u>	<u>\$ (4,027)</u>	<u>\$ (9,234)</u>	<u>\$ (13,341)</u>	<u>\$ (12,112)</u>
Basic net income (loss) per share .....	<u>\$ 0.40</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>	<u>\$ (2.53)</u>	<u>\$ (2.36)</u>
Diluted net income (loss) per share .....	<u>\$ 0.22</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>	<u>\$ (2.53)</u>	<u>\$ (2.36)</u>
Shares used in computing basic net income (loss) per share .....	<u>12,891</u>	<u>5,473</u>	<u>5,359</u>	<u>5,266</u>	<u>5,134</u>
Shares used in computing diluted net income (loss) per share .....	<u>23,100</u>	<u>5,473</u>	<u>5,359</u>	<u>5,266</u>	<u>5,134</u>
 (1) Stock-based compensation consists of:					
Cost of revenue .....	\$ 28	—	—	—	—
Research and development .....	402	—	\$ 16	—	—
Selling, general and administrative .....	252	—	—	\$ 2	—
Total .....	<u>\$ 682</u>	<u>—</u>	<u>\$ 16</u>	<u>\$ 2</u>	<u>—</u>

(2) See Note 10 of our Notes to consolidated financial statements for a description of the restructuring charge.

	December 31,				
	2004	2003	2002	2001	2000
	(in thousands)				
<b>Consolidated Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments .....	\$ 44,733	\$ 10,129	\$ 10,148	\$ 16,574	\$ 16,604
Working capital .....	\$ 48,817	\$ 10,363	\$ 13,523	\$ 16,084	\$ 15,208
Total assets.....	\$ 54,138	\$ 16,116	\$ 18,163	\$ 20,978	\$ 21,501
Total line of credit, long-term debt and lease obligations.....	\$ —	\$ 1,800	\$ —	\$ 960	\$ 2,343
Convertible preferred stock .....	\$ —	\$ 60,818	\$ 60,325	\$ 54,132	\$ 39,543
Total stockholders' equity (deficit) .....	\$ 50,265	\$(49,232)	\$(45,471)	\$(36,254)	\$(23,006)

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

The following discussion and analysis of our financial condition and results of our operations should be read in conjunction with the consolidated financial statements and the notes to those statements included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those contained in these forward-looking statements due to a number of factors, including those discussed in "Factors that May Affect Future Operating Results" and elsewhere in this report.

#### Overview

We design, develop and market proprietary, high-performance analog and mixed-signal power management semiconductors. We sell integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets in the computing, storage, networking and consumer markets. In 2004, most of our revenue was derived from sales into the computing and storage markets.

We commenced operations in 1996. From 1996 to 2000, we were primarily involved in developing our technology, recruiting personnel and raising capital. We made our first commercial shipments of products in 2000 and began to recognize revenue in the first quarter of 2001. As of December 31, 2004, we had an accumulated deficit of \$43.7 million. Our annual net revenue was \$15.7 million, \$25.1 million and \$43.9 million in 2002, 2003 and 2004, respectively. In 2004, we generated net income of \$5.1 million, compared to a \$4.0 million net loss for 2003.

In reviewing our performance, we focus on the following key non-financial factors: customers and market penetration, product introductions and performance. We evaluate our performance as to these non-financial factors against our operating plans and internally developed goals. We also focus on the following key financial factors: net revenue, and gross margin and income from operations as a percentage of net revenue. The following table summarizes those key financial factors over the last five quarters:

	Three Months Ended				
	Dec. 31, 2004	Sept. 30, 2004	June 30, 2004	Mar. 31, 2004	Dec. 31, 2003
Net revenue (in thousands).....	\$14,614	\$12,562	\$9,144	\$7,615	\$6,504
As a percent of net revenue:					
Gross margin .....	58%	56%	54%	52%	47%
Income (loss) from operations .....	18%	12%	6%	4%	(8%)

While our business will be influenced by factors affecting the semiconductor industry generally and by conditions in each of the markets we serve, because of our small scale relative to our markets, we believe our business will be influenced principally by company-specific factors such as our execution in design engineering, sales and operations. We expect any future changes in net revenue to be driven principally by our penetration of new customers and markets and the expansion or contraction of our market share within existing customers and markets.

Our lengthy sales cycles make forecasting the volume and timing of orders difficult. The design phase of our sales cycle can take up to 12 months or longer to complete. The commercial introduction of systems that use our products can take an additional six to 12 months or longer to occur, if they are introduced at all. Forecasting the timing, size and speed of commercial introductions of systems that use our products is inherently difficult to estimate.

The sales of our products are generally made pursuant to standard purchase orders rather than long-term agreements. Purchase orders are frequently revised prior to shipment to reflect changes in the customer's requirements. Product deliveries are scheduled upon our receipt of purchase orders. Generally, these orders allow customers to reschedule delivery dates and cancel orders on relatively short notice. In addition, in circumstances where we have achieved our financial objectives in a period or when we have limited or insufficient inventory available, we may delay shipment of orders.

We have experienced an increasing percentage of our net revenue coming from orders received and shipped within the same quarter, or our turns business, which is inherently difficult to estimate. We estimate turns business as a percent of net revenue as the ratio of net revenue less beginning backlog to net revenue making adjustment for the effect of sales return reserves or other adjustments to net revenue not included in backlog. We believe that the expansion in turns business over the last few quarters has been a result of changes in both our sales channels and our customer base. In 2004, we began direct sales to a number of our Asian customers and as a result, the percentage of our revenue from international distributors has fallen. In general, we have received less order lead time from our new direct customers than we previously received from international distributors resulting in higher levels of turns business. Further, we have generally received less order coverage from our customers in higher volume segments of the computing market, specifically in the graphics space, as compared to customers in the server and communication space. As the graphics space has become a larger proportion of our net revenue, our turns business has increased. While historically, we had typically experienced turns business below 30%, our turns business grew to between 30% and 40% of net revenue in 2004. We expect this trend of increasing turns business to continue and fluctuate in the future. As our turns business increases, forecasting revenue becomes more difficult.

While our limited operating history and recent rapid growth make it difficult for us to assess the impact of seasonal factors on our business, we expect our business to be subject to varying order patterns. We tend to experience a seasonally strong fourth quarter due to year-end purchasing of electronic equipment. In addition, we have recently begun to focus on higher-volume applications. In these applications, we expect a disproportionate amount of our net revenue to be generated during the second half of the year as a result of the December holiday season. A strong fourth quarter in turn tends to cause seasonal adjustments in the first quarter. This effect is compounded due to the lunar new year holidays in Asia during the first quarter, during which time many of our customers, manufacturers and subcontractors cease or significantly reduce their operations.

Our gross margins have historically varied significantly, and are expected to continue to vary, based on a variety of factors, including changes in the relative mix of the products we sell, the markets and geographies in which we sell, the size and nature of our customers in these markets, new product ramps, manufacturing volumes and yields, and inventory and overhead costs. In addition, consistent with the overall market for power management solutions, we expect to face price pressure over time. In order to maintain or improve our gross margins, we need to introduce new, lower cost products, increase volumes, reduce unit costs or achieve a combination of these objectives.

While in any period there may be fluctuations in our operating results, we expect total operating expenses generally to grow in absolute dollars but decline as a percentage of net revenue. Our research and development expenses can fluctuate as a result of long design cycles with periods of relatively low expenses punctuated with increased expenditures for prototypes and product development toward the end of the design cycle. Our sales, general and administrative expenses are expected to grow in absolute dollars reflecting among other factors the higher costs of a publicly-traded company, including Sarbanes-Oxley compliance.

Our sales are concentrated with a small group of customers. In 2004, IBM, Lite-On Technologies, Metatech and nVidia each accounted for 10% or more of our net revenue, and collectively accounted for 67% of our net revenue. In 2003, IBM, Sabre, Solectron and Weikeng each accounted for over 10% of our net revenue, and collectively accounted for 78% of our net revenue. In 2002, Internix, Solectron and Weikeng each accounted for more than 10% of our net revenue, and collectively accounted for 84% of our net revenue.

We typically sell directly through our internal sales force to customers in North America, and indirectly through distributors and outsourced suppliers in other locations, though we do sell directly to some of our customers in Asia and Europe. We expect to change the sales channels we use and the mix of business between distribution and direct sales to fluctuate over time as product offerings and customers evolve. Our sales through distributors typically result in lower gross margins, but also result in lower selling and collections expenses than are associated with direct sales. As most of the systems that use our products are manufactured outside of the United States, the percentage of our net revenue generated outside the United States was 92% and 87% in 2004 and 2003, respectively. We report our net revenue by geographic areas according to the destination to which we shipped our product. To date, substantially all of our net revenue has been denominated in U.S. dollars and we expect to continue this practice.

Because we use third-party subcontractors to manufacture, assemble and test our products, our business has relatively low capital requirements. We purchase our inventory pursuant to standard purchase orders. As lead-times at our manufacturing partners can be up to three months or more, we typically build inventory based on our sales forecasts rather than customers' orders, subjecting us to potential inventory risk.

**Net Revenue.** Net revenue consists primarily of sales of our power management semiconductor products. We have made no sales to U.S. distributors. Our sales to international distributors are made under agreements that do not provide for price adjustments after purchase and provide limited return rights in the event of product failure. We recognize revenue on our sales upon shipment with a provision for estimated sales returns and allowances.

**Cost of Revenue.** Our cost of revenue consists primarily of purchases of silicon wafers and related costs of assembly, test and shipment of our products, and compensation and related costs of personnel and equipment associated with production management and quality assurance.

**Research and Development.** Research and development expenses consist primarily of compensation and related costs for employees involved in the design and development of our products, prototyping and other development expense, and the depreciation costs related to equipment being used for research and development. All research and development costs are expensed as incurred.

**Selling, General and Administrative.** Selling, general and administrative expenses consist primarily of compensation and related costs for employees involved in general management, sales and marketing, finance and information technology, as well as travel and entertainment expenses, professional services expenses and insurance expenses.

**Stock-Based Compensation.** In connection with grants of stock options we recorded \$0.9 million and \$0 of deferred stock-based compensation in 2004 and 2003, respectively. As of December 31, 2004, we had an aggregate of \$0.5 million of deferred stock-based compensation remaining to be amortized. We report employee stock-based compensation separately, rather than including it in each expense classification, as we believe this allows for more meaningful comparison of operating expenses between periods and more consistent comparison of our financial results with other companies.

**Income Taxes.** Our effective tax rate is based on our annual effective tax rate in accordance with SFAS No. 109 *Accounting for Income Taxes*. Our annual effective tax rate is based on the mix of income between domestic and international operations, as well as the utilization of available net operating loss carry-forwards to offset taxable income in the U.S.

### **Critical Accounting Policies**

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to sales returns and allowances, inventory valuation, stock-based compensation and income taxes. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances and 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 the estimates under different conditions.

We believe the following critical accounting policies involve more significant judgments used in the preparation of our financial statements.

**Revenue Recognition.** We recognize revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, *Revenue Recognition in Financial Statements*. SAB 104 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or service has been rendered; (3) the fee is fixed or determinable; and (4) collectibility is reasonably assured. Determination of criterion (1) is based on a purchase order received from the customer. Determination of criterion (2) is based on shipment when title transfers to the customer. Determinations of criteria (3) and (4) are based on the fixed price charged for products delivered adjusted for any applicable discounts and management's judgment regarding the collectibility of the amounts billed. Should changes in conditions cause management to determine these criteria are not met for certain transactions, revenue recognized for any reporting period could be adversely impacted.

Revenue from product sales is recognized upon shipment when title passes and a provision is made for estimated returns and allowances. We have made no sales to U.S. distributors. U.S. distributors typically receive sales price rebates and have inventory return privileges. Our sales to international distributors are made under agreements that do not provide for price adjustments after purchase and provide for limited return rights in the event of a product failure. Revenue on these sales is recognized upon shipment at which time title passes.

We track historical rates of return by identifying the period in which the returned products were originally shipped. We then compute a historical sales return rate for prior quarterly periods, typically looking back three years. To determine the estimated return rate for any period, this historical sales return rate is adjusted for unusual past returns experience related to specific quality issues or other unusual circumstances that are not expected to recur and consideration of any current information about known product failure rates or business developments. Sales returns from all customers must be authorized by us and are generally limited to instances of potential product failure under our standard warranty that provides that products will be free from defects for a period of one year from shipment. While we believe our methodology enables us to make reasonable estimates of sales returns related to our standard warranty provision, because of the inherent nature of estimates and our limited historical experience, there is a risk that there could be significant differences between actual amounts and our estimates. A significant difference between actual amounts and our estimates could significantly impact our reported operating results.

**Inventory Valuation.** Inventory is valued at the lower of standard cost (which approximates actual cost on a first-in-first-out basis) or market. We record provisions for inventories for excess or obsolete work-in-process and finished goods. Newly developed products are generally not valued until they have been qualified for manufacturing and success in the marketplace has been demonstrated through sales and backlog, among other factors. In addition to provisions based on newly introduced parts, statistical and judgmental assessments are made for the remaining inventory based on assumptions about future demand. We identify excess and obsolete inventory by analyzing inventory aging, recent sales, order backlog, and demand forecasts. Based on these and other factors, we estimate on an individual product basis the net realizable value of our inventory. Net realizable value is determined as the forecast sales of the product less the estimated cost of disposal. We reduce the carrying value to estimated net realizable value if it is less than standard cost. Once a provision is recorded to reduce inventories to their net realizable value, it is not reversed until the related inventory is disposed of or sold. While our estimates require us to make significant judgments and assumptions about future events, we believe our relationships with our customers, combined with our understanding of the markets we serve, provide us with the ability to make reliable estimates. If actual market conditions and resulting product sales were to be less favorable than our projections, additional inventory provisions may be required that could adversely affect our operating results.

**Stock-Based Compensation.** We apply the intrinsic-value-based method of accounting for employee stock-based compensation as prescribed by Accounting Principles Board (APB) opinion No. 25, *Accounting for Stock Issues to Employees*, and related interpretations including Financial Accounting Standards Board (FASB) Interpretation (FIN) No. 44, *Accounting for Certain Transactions Involving Stock Compensation, an Interpretation of APB Opinion No. 25*, to account for our fixed-plan stock options. Under this method, compensation expense is recorded only if the deemed fair value of the underlying stock exceeded the exercise price on the date of grant. Statement of Financial Accounting Standard (SFAS) No. 123, *Accounting for Stock-Based Compensation*, and SFAS

No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure, an Amendment of FASB Statement No. 123*, established accounting and disclosure requirements using the fair-value-based method of accounting for stock-based employee compensation plans. As permitted by existing accounting standards, we elected to continue to apply the intrinsic-value-based method of accounting described above, and have adopted only the disclosure requirements of SFAS No. 123, as amended.

From July 1, 2004 through December 31, 2004, the exercise price of all options granted was equal to the fair value of the underlying shares. During the twelve-month period ended June 30, 2004, we granted stock options with exercise prices as follows:

<u>Options Granted During Three Months Ended:</u>	<u>Number of Shares</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Fair Value per Share</u>	<u>Weighted Average Intrinsic Value per Share</u>
September 30, 2003 .....	276,100	\$3.50	\$3.50	—
December 31, 2003 .....	49,050	\$3.50	\$5.02	\$1.52
March 31, 2004 .....	557,250	\$4.95	\$6.20	\$1.25
June 30, 2004 .....	166,812	\$7.87	\$8.82	\$0.95

The exercise price of these option grants was set at the fair value of common stock as determined by the board of directors contemporaneously with the grants. A valuation analysis was performed by a member of the management team and reviewed by the board. We did not obtain a contemporaneous valuation analysis by an unrelated party because we believed the valuation methodology employed provided a reasonable basis for estimating the fair value of the common stock.

In the absence of a public trading market for our common stock, we considered numerous objective and subjective factors in determining the fair value of common stock for the granting of stock options. These factors included: our financial and operating performance; our progress in achieving our business plan and performance targets; purchases and offers to purchase the our preferred stock; enterprise value to sales ratios of a peer group of publicly traded analog semiconductor companies; the liquidity of the common stock. Giving due consideration to these and other factors, we estimated the enterprise value of the company. The enterprise value of the company was estimated using actual and forecast revenue of the company, an estimated enterprise value to revenue ratio and an estimated liquidity discount. We applied the Current-Value Method to allocate the estimated enterprise value to different classes of equity. The Current-Value Method allocates enterprise value based on the liquidation preferences, participation rights and other economic rights of the preferred stockholders and common stockholders, and assumes the election by the preferred stockholders of the conversion rights that result in maximum returns.

In 2004, using the same methodology described above and in consideration of the improved results and future prospects for our business, we re-evaluated the fair value of our common stock for financial reporting purposes. As a result of this analysis, we revised our estimate of the fair value of our common stock. From October 2003 through June 2004, we granted options for which the new deemed fair value of the common stock exceeded the exercise price of these options and we recorded deferred stock-based compensation of \$0.9 million in 2004 related to these options.

We amortize deferred stock-based compensation on the graded vesting method over the vesting periods of the stock options, which is generally four years. The graded vesting method provides for vesting of portions of the overall awards at interim dates and results in accelerated vesting as compared to the straight-line method. Our stock-based compensation expense for stock options for which the new deemed fair value of the common stock exceeded the exercise price was \$0.5 million in 2004 and will be \$0.2 million in 2005, \$0.1 million in 2006 and \$0.1 million in 2007.

Pro forma information regarding net income (loss) and net income (loss) per share is required in order to show our net income (loss) as if we had accounted for employee stock options under the fair-value method of SFAS No. 123. This information is contained in Note 2(k) to our consolidated financial statements. The fair value of options issued pursuant to our option plan at the grant date were estimated using the Black-Scholes option-pricing model.

**Accounting for Income Taxes.** We account for income taxes under the provisions of SFAS No. 109, *Accounting for Income Taxes*. Under this method, we determine deferred tax assets and liabilities based upon the difference between the amounts of assets and liabilities reported in the financial statements and the tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income.

The tax consequences of most events recognized in the current year's financial statements are included in determining income taxes currently payable. However, because tax laws and financial accounting standards differ in their recognition and measurement of assets, liabilities, equity, revenue, expenses, gains and losses, differences arise between the amount of taxable income and pretax financial income for a year and between the tax basis of assets or liabilities and their reported amounts in the financial statements. Because it is assumed that the reported amounts of assets and liabilities will be recovered and settled, respectively, a difference between the tax basis of an asset or a liability and its reported amount in the balance sheet will result in a taxable or a deductible amount in some future years when the related liabilities are settled or the reported amounts of the assets are recovered, hence giving rise to deferred tax assets and liabilities. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income or tax strategies and to the extent we believe it is more likely than not that our deferred tax assets will not be recovered, we must establish a valuation allowance. We established a full valuation allowance against our deferred tax assets for all periods since inception. If we continue to record profitable operations, a reduction to our recorded valuation allowance may occur in future periods.

### **Results of Operations**

The following table sets forth our results of operations as a percentage of net revenue for the periods indicated:

	<b>Year Ended December 31,</b>		
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Net revenue .....	100%	100%	100%
Cost of revenue .....	<u>45</u>	<u>58</u>	<u>73</u>
Gross margin .....	55	42	27
Operating expenses:			
Research and development .....	30	42	59
Selling, general and administrative .....	13	16	28
Stock-based compensation .....	1	—	—
Restructuring charge .....	<u>—</u>	<u>1</u>	<u>—</u>
Total operating expenses .....	<u>44</u>	<u>59</u>	<u>87</u>
Income (loss) from operations .....	11	(17)	(61)
Interest and other income, net .....	<u>1</u>	<u>1</u>	<u>2</u>
Income (loss) before income taxes .....	12	(16)	(59)
Income tax expense .....	<u>—</u>	<u>—</u>	<u>—</u>
Net income (loss) .....	<u>12%</u>	<u>(16)%</u>	<u>(59)%</u>

### **Comparison of Year Ended December 31, 2004 to Year Ended December 31, 2003**

**Net Revenue.** Net revenue was \$43.9 million for 2004 and \$25.1 million for 2003, an increase of 75%. Volume of shipments increased 76% for 2004 as compared to 2003, primarily due to higher sales in the computing and storage markets.

In 2004, we had no revenue from Weikeng, an international distributor, compared to 28% of net revenue in 2003. Our operations were not impacted as the affected customers either established direct relationships with us or began purchasing from our other distributors. As a result, our sales to one of these distributors increased such that it represented more than 10% of our net revenue in 2004.

**Cost of Revenue and Gross Margin.** Cost of revenue was \$19.6 million in 2004 and \$14.5 million in 2003. Cost of revenue increased primarily due to the increased volume of shipments, partially offset by declining costs per unit. Gross margin was \$24.3 million in 2004 as compared to \$10.6 million in 2003, an increase of 129%. Gross

margin as a percent of net revenue increased to 55% in 2004 as compared to 42% in 2003. The increase in gross margin was due primarily to changing sales mix resulting from a lower proportion of our first generation products, which had lower gross margins than our newer products.

**Research and Development.** Research and development expenses were \$13.1 million in 2004 as compared to \$10.5 million in 2003, an increase of 25%. The increase was largely associated with increased prototype expense, which increased by \$1.8 million.

**Selling, General and Administrative.** Selling, general and administrative expenses were \$5.6 million in 2004 as compared to \$4.1 million in 2003, an increase of 37%. The increase was due primarily to increased wages and contractor fees of \$0.6 million and additional costs associated with being a publicly traded company including directors and officers insurance, which increased by \$0.2 million and professional services, which increased by \$0.3 million.

**Stock-based Compensation.** Stock-based compensation expense was \$0.7 million in 2004 and \$0 in 2003. The increase was primarily due to options granted that were considered compensatory because the fair market value of our stock determined for financial reporting purposes was greater than the fair value determined by the board of directors on the date of grant of the options.

**Income Tax Expense.** Income tax expense was \$0.2 million for 2004 and \$0 for 2003. Income tax expense in 2004 is based on our effective tax rate of 4%, an increase from 0% in 2003. The increase in our effective tax rate was due to the commencement of profitable operations. Our effective tax rate in 2004 was significantly less than statutory rates because we utilized net operating loss carryforwards, from which no previous benefit had been recognized to offset taxable income in the U.S. We recorded no income tax expense or benefit in 2003 because of pre-tax losses and a full valuation allowance recorded against net operating losses. Our effective tax rate in future periods will fluctuate over time and increase if we continue to sustain profitable operations.

#### **Comparison of Year Ended December 31, 2003 to Year Ended December 31, 2002**

**Net Revenue.** Net revenue was \$25.1 million for 2003 and \$15.7 million for 2002, an increase of 60%. Volume shipments increased 68% in 2003 as compared to 2002, primarily due to higher sales in the computing market.

Revenue from Weikeng was 28% of 2003 net revenue, down when compared to 62% of 2002 net revenue. We began to reduce our activity with Weikeng in mid-2003 and transitioned some of the affected customers to direct accounts while others began purchasing from other distributors.

**Cost of Revenue and Gross Margin.** Cost of revenue was \$14.5 million in 2003 as compared to \$11.5 million in 2002. This increase was due primarily to increased unit sales, partially offset by declining costs per unit. Gross margin was \$10.6 million in 2003 as compared to \$4.2 million in 2002, an increase of 152%. Gross margin as a percent of net revenue increased to 42% in 2003 as compared to 27% in 2002. The increase in gross margin was due primarily to changing sales mix resulting from a lower proportion of our first generation products, which had lower gross margins than our newer products.

In 2002, additional costs were incurred in connection with a manufacturing defect at one of our foundries that caused lower manufacturing yields and increased customer returns. We worked together with the foundry to identify the root cause of the defect. It was determined that the defect was due to a manufacturing process and design interaction. In 2003, the foundry refined the process to resolve the issue and we do not expect any further impact related to this defect. We estimate that this defect increased cost of revenue by \$0.2 million in 2002 and by an immaterial amount in 2003. We are not aware of any current claims, lawsuits or other contingencies relating to this defect.

**Research and Development.** Research and development expenses were \$10.5 million in 2003 as compared to \$9.2 million in 2002, an increase of 14%. The increase was due primarily to personnel costs associated with increased headcount of \$0.6 million and increased product development expenses of \$0.2 million.

**Selling, General and Administrative.** Selling, general and administrative expenses were \$4.1 million in 2003 as compared to \$4.4 million in 2002, a decrease of 7%. The decrease was due primarily to reduced operating expenses following our restructuring in June 2003.

**Restructuring Charge.** We had a restructuring charge of \$0.1 million in 2003, comprised primarily of severance payments to employees. The restructuring charge was the result of a reduction in work force and represented 1% of operating expenses in 2003.

### Liquidity and Capital Resources

As of December 31, 2004, we had working capital of \$48.8 million, including cash and cash equivalents of \$24.9 million, compared to working capital of \$10.4 million, including cash and cash equivalents of \$10.1 million, as of December 31, 2003. Since our inception, we have financed our operations primarily through private sales of equity securities totaling \$60.8 million. In August 2004, we received total proceeds of \$31.9 million, net of related issuance fees and offering costs, from our initial public offering. We currently have no debt and believe that our current cash, cash equivalents and investments as well as cash flows from operations will be sufficient to continue to fund our operations and meet our capital needs for the foreseeable future.

Net cash of \$4.2 million was provided by operating activities in 2004, compared to net cash used by operating activities of \$2.3 million and \$11.5 million in 2003 and 2002, respectively. The change is primarily due to an increase of \$5.1 million in net income in 2004, compared to a loss of \$4.0 million in 2003, offset in part by increases in inventory of \$3.1 million related to increasing sales volumes. In 2003, net cash used in operations resulted from our losses and decreases in accounts payable, partially offset by reduction in accounts receivable and inventory. In 2002, net cash used in operations resulted from our losses and increases in accounts receivable and inventory, partially offset by an increase in accounts payable as a result of increased sales.

Our investing activities used net cash in the amounts of \$20.6 million, \$0.4 million, and \$0.3 million in 2004, 2003 and 2002, respectively. In 2004, we purchased \$19.8 million of short-term investments using the proceeds of our initial public offering. Other cash used in investing activities during these periods was primarily for the acquisition of property and equipment. In 2005, we expect to increase our capital expenditures as we upgrade our information systems. We expect to fund these increases from operating cash flows.

Our financing activities provided \$31.1 million, \$2.6 million, and \$5.3 million in 2004, 2003 and 2002 respectively. In 2004, we received net proceeds of \$31.9 million from our initial public offering. In addition, proceeds of \$1.1 million were received from the issuance of common stock in connection with employee exercises of stock options, partially offset by net payments on our line of credit of \$1.8 million. In 2003, the net cash provided by financing activities was primarily due to net borrowings of \$1.8 million under our line of credit and \$0.5 million from the issuance of preferred stock. In 2002, net cash provided by financing activities was primarily due to issuances of preferred stock.

In 2004, we used our bank line of credit to generate an additional \$3.4 million of debt financing that was repaid in full within the same period. Our bank line of credit allows us to borrow based on eligible accounts receivable up to a maximum of \$5.0 million. As of December 31, 2004, we had no outstanding amounts under the bank line of credit, and \$2.2 million remained available based on eligible accounts receivable. Interest on borrowings under this line of credit accrues at the prime rate plus 0.5%. This line of credit expires on June 24, 2005.

### Contractual Obligations

We depend entirely upon third party foundries to manufacture our silicon wafers. Due to lengthy foundry lead times, we must order these materials well in advance of required delivery dates, and we are obligated to pay for the materials in accordance with their payment terms, which typically require payment within three months of shipment.

The following table sets forth our contractual obligations as of December 31, 2004 and the years in which such obligations are expected to be settled (in thousands):

	2005	2006	2007	2008 and thereafter	Total
Future minimum lease commitments .....	\$ 458	\$448	\$270	\$—	\$1,176
Inventory purchase commitments .....	<u>1,725</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1,725</u>
	<u>\$2,183</u>	<u>\$448</u>	<u>\$270</u>	<u>\$—</u>	<u>\$2,901</u>

Inventory purchase commitments are comprised of the estimated obligation for in-process silicon wafers.

## Recently Issued Accounting Pronouncements

In December 2004, the FASB issued SFAS 123R, *Share-Based Payment*, which requires the measurement of all share-based payments to employees, including grants of employee stock options, using a fair-value-based method and the recording of such expense in our consolidated statement of operations. The accounting provisions of SFAS 123R are effective for reporting periods beginning after June 15, 2005. We are required to adopt SFAS 123R in the third quarter of 2005. The pro forma disclosures previously permitted under SFAS 123 no longer will be an alternative to financial statement recognition. Note 2(k) to our consolidated financial statements reports the pro forma net income (loss) and net income (loss) per share amounts, for 2002 through 2004, as if we had used a fair-value-based method similar to the methods required under SFAS 123R to measure compensation expense for employee stock based compensation. Although we have not yet determined whether the adoption of SFAS 123R will result in amounts that are similar to the current pro forma disclosures under SFAS 123, we are evaluating the requirements under SFAS 123R and expect the adoption to have a significant adverse impact on our consolidated operating results.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-1 (FAS 109-1), *Application of FASB Statement No. 109, Accounting for Income Taxes, to the Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004*. The AJCA introduces a special 9% tax deduction on qualified production activities. FAS 109-1 clarifies that this tax deduction should be accounted for as a special tax deduction in accordance with Statement 109. We do not expect the adoption of these new tax provisions to have a material impact on our consolidated financial position, results of operations or cash flows.

In December 2004, the FASB issued FASB Staff Position No. FAS 109-2 (FAS 109-2), *Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004*. The AJCA introduces a limited time 85% dividends received deduction on the repatriation of certain foreign earnings to a U.S. taxpayer (repatriation provision), provided certain criteria are met. FAS 109-2 provides accounting and disclosure guidance for the repatriation provision. Although FAS 109-2 is effective immediately, we do not have material amounts of unremitted foreign earnings and do not expect the adoption of these new tax provisions to have a material impact on our consolidated financial position, results of operations or cash flows.

In December 2003, the SEC issued Staff Accounting Bulletin No. 104 (SAB 104), *Revenue Recognition*, which superseded Staff Accounting Bulletin No. 101 (SAB 101), *Revenue Recognition in Financial Statements*. The primary purpose of SAB 104 was to rescind accounting guidance contained in SAB 101 related to multiple element revenue arrangements, which was superseded as a result of the issuance of Emerging Issues Task Force 00-21 (EITF 00-21), *Accounting for Revenue Arrangements with Multiple Deliverables*. SAB 104 also incorporated certain sections of the SEC's *Revenue Recognition in Financial Statements — Frequently Asked Questions and Answers* document. While the wording of SAB 104 has changed to reflect the issuance of EITF 00-21, the revenue recognition principles of SAB 101, as they apply to us, remain largely unchanged by the issuance of SAB 104. The adoption of SAB 104 did not have a material impact on our consolidated financial position, results of operations or cash flows.

## Factors that May Affect Future Operating Results

You should carefully consider the risks described below and elsewhere in this report, which could materially and adversely affect our business, results of operations or financial condition. In those cases, the trading price of our common stock could decline and you may lose all or part of your investment.

## **We are an early stage semiconductor company with a limited operating history, which makes it difficult to evaluate our current business and future prospects and may increase the risk of your investment.**

We have a limited operating history. While our commercial operations began in August 1996, our first products were not shipped until the first quarter of 2000 and most of our current products have been sold in significant quantities for only a short time. You should consider our business and prospects in light of the risks and difficulties we encounter as an early stage company. These risks and difficulties include the following:

- we have limited historical financial data from which to predict our future revenue and operating results;
- we are subject to the highly cyclical nature of, and downturns in, the semiconductor industry;

- we depend on a small number of customers for substantially all of our net revenue;
- we have a limited number of products; and
- we may face difficulties in managing growth in personnel and operations.

We may not be able to successfully address any of these risks or others, including the other risks related to our business and industry described below. Failure to adequately do so could seriously harm our business and cause our operating results to suffer.

**Our operating results have fluctuated in the past, and we expect a number of factors to cause our operating results to fluctuate in the future, making it difficult for us to accurately forecast our operating results.**

In the past, our net revenue and operating results have fluctuated from quarter to quarter and year to year, and we expect them to continue to do so in the future. As a result, it is difficult to predict our future revenue and operating results. A number of factors, many of which are beyond our control, are likely to cause our net revenue and operating results to fluctuate. These factors include:

- changes in orders received and shipped during the quarter, or our turns business, which is difficult to estimate and represents an increasing percentage of our net revenue;
- changes in the level of our expenses, including the cost of materials used to manufacture our products;
- the cyclical nature of the semiconductor industry;
- the loss of one or more key customers, or a significant reduction in sales to one or more key customers;
- the loss of one or more key distributors, or a significant reduction in orders from one or more key distributors;
- demand for our products or the electronic systems into which our products are incorporated;
- our ability to develop new products or new generations and versions of our existing products that achieve market acceptance in a timely manner;
- the timing of introductions of competing products or technologies;
- our ability to adequately support our future growth;
- disputes regarding intellectual property rights;
- litigation involving us or our products;
- our ability to obtain sufficient capacity from foundries and other third-party subcontractors to manufacture, assemble and test our products on a timely and cost-effective basis;
- the ability of our manufacturing subcontractors to obtain an adequate supply of the raw materials used in the manufacture of our products on a timely and cost-effective basis;
- changes in the prices of our products or the electronic systems into which our products are incorporated;
- our ability to fulfill orders for our products in a timely manner, or at all;
- customers' failure to pay us on a timely basis;
- varying order patterns in the markets in which we sell our products;
- changes in foreign currency rates; and
- changes in accounting principles or policies, including an election by us, or a requirement, to treat stock option grants as an operating expense.

Due to these and other factors discussed in this report, you should not rely upon the results of any prior quarter or year as an indication of our future operating performance.

**We have a history of losses, have only recently experienced revenue growth and become profitable and may not maintain profitability on a quarterly or annual basis.**

We experienced profitability for the first time in 2004. We incurred net losses of approximately \$9.2 million and \$4.0 million in 2002 and 2003, respectively, and as of December 31, 2004, we had an accumulated deficit of \$43.7 million. We have recently experienced revenue growth. Specifically, our annual net revenue increased 60% from \$15.7 million in 2002 to \$25.1 million in 2003. Revenue increased 75% from \$25.1 million in 2003 to \$43.9 million in 2004. However, we do not expect to maintain similar revenue growth rates in future periods. We may also incur losses in future periods. Accordingly, you should not rely on the results of any prior quarterly or annual periods as an indication of our future revenue growth or financial results. Our ability to maintain profitability on a quarterly or annual basis depends in part on the rate of growth of our target markets, the continued acceptance of our and our customers' products, the competitive position of our products, our ability to develop new products, our ability to secure adequate manufacturing capacity and our ability to manage expenses. We may not maintain profitability on a quarterly or annual basis.

**We are subject to the highly cyclical nature of the semiconductor industry and any future downturns could significantly harm our business.**

Our business is heavily influenced by the cyclical nature of the semiconductor industry. The semiconductor industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product cycles of both semiconductor companies and their customers and declines in general economic conditions. These downturns have been characterized by production overcapacity, high inventory levels and accelerated erosion of average selling prices. Any future downturns could significantly harm our business or reduce our revenue from one period to the next or for a prolonged period of time. From time to time, the semiconductor industry also has experienced periods of increased demand and production capacity constraints. We may experience substantial changes in future operating results due to factors that affect the semiconductor industry generally.

**We depend on a small number of customers for substantially all of our net revenue and the loss of, or a significant reduction in orders from, any of them would significantly reduce our net revenue and adversely affect our operating results.**

We sell our products primarily to original equipment manufacturers, or OEMs, original design manufacturers, or ODMs, contract equipment manufacturers, or CEMs, and power supply manufacturers, either directly through our internal sales force or indirectly through distributors and outsourced suppliers. In 2004, four customers each accounted for more than 10% of our net revenue and collectively accounted for 67% of our net revenue. We expect sales to a small number of customers to continue to account for a substantial portion of our net revenue for the foreseeable future. Consolidation among our customers may increase our customer concentration. The loss of any of our major customers would have a substantial negative impact on our business. In addition, our operating results will be adversely affected if the electronic systems into which our relatively few customers incorporate our products are not commercially successful.

**We rely primarily on a small number of distributors to market and distribute our products, and if we fail to maintain or expand these relationships, our net revenue would likely decline.**

While we sell some of our products directly to certain of our customers, many purchases of our products are made through a concentrated group of distributors. Sales to these distributors account for a significant portion of our net revenue. Our sales to distributors accounted for 56% of our net revenue for 2003 and 34% of our net revenue for 2004.

None of our distributors are required to purchase a specified minimum level of products from us. Our sales to distributors are made pursuant to standard purchase orders rather than long-term contracts and their orders may be cancelled or changed more readily than if we had long-term purchase commitments. In the event of a cancellation, reduction or delay of an order, we may not have enough time to reduce operating expenses to minimize the effect of the lost revenue on our business. We also rely on our distributors to accurately and timely report to us their sales of our products. Our inability to obtain accurate and timely reports from our distributors would limit our visibility

into demand for our products. We also rely on our distributors to provide certain engineering support and other customer service to our customers. If they fail to provide appropriate levels of support and service to our customers on a timely basis, our relationships with our customers will suffer.

We need to maintain and expand our relationships with distributors, develop additional channels for the distribution and sale of our products and effectively manage these relationships. If we fail to do so, our distributors may decide not to include our products among those that they sell or they may not make marketing and selling our products a priority. In addition, our distributors may sell product lines that are competitive with ours. If we fail to successfully manage our relationships with distributors, our business would be harmed.

**We depend on a limited number of markets, and in these markets we have experienced varying order patterns, and if demand for our products in these markets declines, or if we are unable to adjust to the varying order patterns in these markets or expand into new markets, our business would be harmed.**

In 2004, most of our net revenue was derived from the sale of our products in the high-performance computing and storage markets. If the demand for our products in these markets declines, we would need to attempt to diversify our markets and our inability to do so in a timely and cost-effective manner would harm our business.

In addition, we expect our business in these markets to be subject to varying order patterns. In particular, our operating results have been negatively impacted during the first quarter of each year due to the lunar New Year holidays in Asia during late January or early February, during which time many of our customers, manufacturers and subcontractors cease or significantly reduce their operations. In the future, we may address higher-volume applications across multiple markets such as desktop and notebook computers, digital cameras, graphics cards, hard disk drives, mobile phones, optical drives, printers, wireless local area network cards and wireless personal digital assistants. In these higher-volume markets, we expect a disproportionate amount of our net revenue to be generated during the second half of the year as a result of the December holiday season. If we are unable to adjust production of our products to address changes in demand, our operating results would be harmed.

**We sell a limited number of products and a reduction in demand for these products would harm our business and operating results.**

We derive substantially all of our net revenue from the sale of integrated voltage regulator semiconductors and scalable voltage regulator semiconductor chipsets, and we expect to continue to derive substantially all of our net revenue from these products for the foreseeable future. If demand for these products declines or does not grow, we may be forced to diversify our product offerings. Factors that could cause the demand for our products to decline include downturns in the semiconductor industry, the introduction of competing products, our pricing strategies and the pricing strategies of our competitors, or a decline in demand for the electronic systems into which our products are incorporated. Our inability to diversify our products in a timely and cost-effective manner would harm our business and operating results.

**If we are unable to timely develop new products or new generations and versions of our existing products that achieve market acceptance, our operating results and competitive position could be harmed.**

Our industry is characterized by intense competition, rapidly evolving technology and continually changing requirements. These factors could render our existing products obsolete. Accordingly, our ability to compete in the future will depend in large part on our ability to identify and develop new products or new generations and versions of our existing products that achieve market acceptance on a timely and cost-effective basis, and to respond to changing requirements. If we are unable to do so, our business, operating results and financial condition could be negatively affected.

The successful development and market acceptance of our products depend on a number of factors, including:

- our accurate prediction of changing customer requirements;
- timely development of new designs;
- timely qualification and certification of our products for use in electronic systems;

- commercial acceptance and production of the electronic systems into which our products are incorporated;
- availability, quality, price, performance and size of our products relative to competing products and technologies;
- our customer service and support capabilities and responsiveness;
- successful development of relationships with existing and potential new customers;
- successful development of relationships with key developers of advanced digital semiconductors; and
- changes in technology, industry standards or consumer preferences.

Products we have recently developed and which we are currently developing may not achieve market acceptance. If these products fail to achieve market acceptance, or if we fail to timely develop new products that achieve market acceptance, our business, operating results and competitive position could be adversely affected.

**We have experienced, and may in the future experience, delays in the development and introduction of our products, which may harm our business and operating results.**

The development of our products is highly complex, costly and inherently risky. We have experienced, and may in the future experience, delays in the development and introduction of new products or new generations and versions of our existing products. While we have implemented procedures designed to minimize these delays, we cannot assure you that these procedures will be effective or that delays may not occur in the future. Any delay in the introduction of new products or new generations or versions of our existing products could harm our business and operating results.

**The nature of the design process requires us to incur expenses prior to earning revenue associated with those expenses, and we will have difficulty selling our products and generating profits if system designers do not design our products into their electronic systems.**

We devote significant time and resources in working with system designers to get our products designed into their systems. If the system designer chooses a competitor's product for its electronic system, it becomes significantly more difficult for us to sell our products for use in that electronic system because changing suppliers involves significant cost, time, effort and risk for system designers. If system designers do not design our products into their electronic systems, our business would be materially and adversely affected.

We often incur significant expenditures in the development of a new product without any assurance that system designers will select our product for use in their electronic systems. If we incur such expenditures and fail to be selected, our operating results will be adversely affected. Furthermore, even if system designers use our products in their electronic systems, we cannot be assured that these systems will be commercially successful or that we will receive any associated revenue.

Even if our products are selected for design into a particular electronic system, a substantial period of time will elapse before we generate revenue related to the significant expenses we have incurred. The reasons for this delay generally include the following:

- it can take up to 12 months or longer from the time our products are selected to complete the design process;
- it can take an additional six to 12 months or longer to complete commercial introduction of the electronic systems that use our products, if they are introduced at all;
- our customers usually require a comprehensive technical evaluation of our products before they incorporate them into their electronic systems;
- OEMs typically limit the initial release of their electronic systems to evaluate performance and consumer demand; and
- the development and commercial introduction of products incorporating new technology are frequently delayed.

As a result, we are unable to accurately forecast the volume and timing of our orders and revenue. In addition, incurring expenses prior to generating revenue may cause our operating results to fluctuate significantly from period to period.

**Our products are highly complex and may require modifications to resolve undetected errors or failures and meet our customers' specifications, which could lead to an increase in our costs, a loss of customers, a delay in market acceptance of our products or product liability claims.**

Our power management products are highly complex and may contain undetected errors or failures when first introduced or as new revisions are released. If we deliver products with errors or defects, we may incur additional development, repair or replacement costs, and our credibility and the market acceptance of our products could be harmed. In the past, we have incurred costs in connection with the replacement of products due to a manufacturing defect in our products. Defects could also lead to liability for defective products as a result of lawsuits against our customers or us. We have agreed to indemnify our customers in some circumstances against liability from defects in our products. Although we maintain insurance coverage consistent with customary industry practice to defray potential costs from lawsuits, including lawsuits arising from product liability, if liabilities arise that are not effectively limited or covered by such insurance, a successful product liability claim could require us to pay a significant amount of damages, which could have a material adverse impact on our financial results and financial position.

Our products comprise only part of the complex electronic systems in which they are used. As a result, our products must operate according to specifications with the other components in the electronic system. If other components of the electronic system fail to operate properly with our products, we may be required to incur additional development time and costs to enable interoperability of our products with these other components.

**We face significant competition and many of our competitors have greater resources than we have, and thus we may be unsuccessful in competing against current and future competitors.**

The markets for semiconductors generally, and power management semiconductors in particular, are intensely competitive, and we expect competition to increase and intensify in the future. Increased competition may result in price pressure, reduced profitability and loss of market share, any of which could seriously harm our business, revenue and operating results. Our ability to compete effectively and to expand our business will depend on a number of factors, including:

- our ability to continue to recruit and retain engineering talent;
- our ability to introduce new products in a timely manner;
- the pricing of components used in competing solutions;
- the pace at which our customers incorporate our products into their systems;
- the availability of foundry, assembly and test capacity for our products;
- protection of our products by effective utilization of intellectual property laws; and
- general economic conditions.

We consider our primary competitors to include Analog Devices, International Rectifier, Intersil, Linear Technology, Maxim Integrated Products, Semtech and Texas Instruments. In addition, we compete with a number of other companies, some of which may become significant competitors. We may also face competition from new and emerging companies that may enter our existing or future markets.

Many of our competitors and potential competitors have longer operating histories, greater name recognition, complementary product offerings, a larger customer base, longer relationships with customers and distributors, and significantly greater financial, sales, marketing, manufacturing, distribution, technical and other resources than we do. As a result, they may be able to respond more quickly to customer requirements, to devote greater resources to the development, promotion and sales of their products and to influence industry acceptance of their products better than we can. These competitors may also be able to adapt more quickly to new or emerging technologies or standards and may be able to deliver products with performance comparable or superior to that of our products

at a lower cost. In addition, in the event of a manufacturing capacity shortage, these competitors may have or be able to obtain silicon wafer fabrication capacity when we are unable to.

We expect our competitors to continue to improve the performance of their current products, reduce their prices and introduce new or enhanced technologies that may offer greater performance and improved pricing, any of which could cause our products to become obsolete or uncompetitive and harm our operating results.

**Our dependence on third-party semiconductor manufacturers reduces our control over the manufacture of our products, which could harm our business.**

We are a fabless semiconductor company and, as such, we rely on third parties to manufacture our products. In 2004, our principal third-party semiconductor manufacturers, or foundries, were Taiwan Semiconductor Manufacturing Corporation, Chartered Semiconductor Corporation and Samsung Electronics. The ability of these foundries to provide silicon wafers to us is limited by their available capacity. Moreover, the price of our silicon wafers has in the past fluctuated and is expected to continue to fluctuate, based on changes in available industry capacity. We do not have long-term supply contracts with any of our foundries. Therefore, our manufacturers could choose to prioritize capacity for other customers, particularly larger customers, reduce or eliminate deliveries to us on short notice or increase the prices they charge us. There are significant risks associated with our reliance on these third-party manufacturers, including:

- inability to increase production and achieve acceptable yields on a timely basis;
- reduced control over delivery schedules and product quality;
- inability of our foundries to obtain an adequate supply of the raw materials used in the manufacturing of our products on a timely and cost-effective basis;
- increased exposure to potential misappropriation of our intellectual property;
- limited warranties on silicon wafers or products supplied to us;
- labor shortages or labor strikes;
- natural disasters affecting countries in which we conduct our business or in which our products are manufactured; and
- political instability in countries where our products are manufactured.

In addition, because we work with foundries to make specified modifications to their standard process technologies, transitioning the manufacturing of our products to other foundries can require substantial lead time. Any such delay resulting from such transition could negatively affect product performance, delivery and yields or increase manufacturing costs. If we are not able to obtain foundry capacity as required, our relationships with our customers would be harmed and our net revenue would likely decline.

**If our foundries fail to achieve satisfactory yields or quality, our revenue and operating results could decrease, and our relationships with our customers and our reputation may be harmed.**

The manufacturing process of our products is technically challenging. Minor deviations in the manufacturing process can cause substantial decreases in yields, and in some cases, cause production to be suspended. When our products are qualified with our foundries, minimum acceptable yields are established. If actual yields are above the minimum, we incur the cost of the silicon wafers. Manufacturing yields for our new products tend to be lower initially and increase as we achieve full production. Poor yields from our foundries or defects, integration issues or other performance problems in our products could cause us significant customer relations and business reputation problems, resulting in potential loss of revenue and lower profitability.

**We rely on third-party subcontractors to assemble and test our products and our failure to successfully manage our relationships with these subcontractors could damage our relationships with our customers, decrease our net revenue and limit our growth.**

We rely on third-party subcontractors, such as Amkor Technology, Advanced Semiconductor Engineering and STATSCHIPac, to assemble and test our products. None of these third-party vendors are obligated to perform services or supply products to us for any specific period, or in any specific quantities, except as may be provided in a particular purchase order. Moreover, none of our assembly and test subcontractors has provided contractual assurances to us that adequate capacity will be available to us to meet future demand for our products. We are subject to many of the same risks with these vendors as with our foundries. If we do not successfully manage these relationships, the quality of products shipped to our customers may decline, which would damage our relationships with customers, decrease our net revenue and negatively impact our growth.

**Any disruption to our operations or the operations of our foundries or assembly and test subcontractors resulting from earthquakes, droughts or other natural disasters or public health issues could significantly delay the production or shipment of our products.**

Our principal offices are located in California. In addition, we rely on foundries in Taiwan, Singapore and South Korea, and assembly and test subcontractors in Singapore, South Korea, the Philippines and Taiwan. The risk of an earthquake in these Pacific Rim locations is significant. The occurrence of an earthquake, drought or other natural disaster near our principal offices or our subcontractors' locations could result in damage, power outages and other disruptions that impair our design, manufacturing and assembly capacity and otherwise interfere with our ability to conduct our business. In addition, public health issues could significantly delay the production or shipment of our products. Any disruption resulting from such events could cause significant delays in the shipment of our products until we are able to shift our fabrication, assembling, testing or other operations from the affected subcontractor to another third-party vendor.

**The average selling prices of our products could decrease rapidly, which may negatively impact our net revenue and operating results.**

The average selling prices for power management solutions have historically declined over time. Factors that we expect to cause downward pressure on the average selling price for our products include competitive pricing pressures, the cost sensitivity of our customers, particularly in the higher-volume markets, new product introductions by us or our competitors and other factors. To maintain acceptable operating results, we will need to offset any reduction in the average selling prices of our products by developing and introducing new products and developing new generations and versions of existing products on a timely basis, increasing sales volume and reducing costs. If the average selling prices for our products decline and we are unable to offset those reductions, our operating results will suffer.

**We are subject to inventory risks and manufacturing costs that could negatively impact our operating results.**

To ensure availability of our products for our customers, in some cases we start the manufacturing of our products based on forecasts provided by these customers in advance of receiving purchase orders. However, these forecasts do not represent binding purchase commitments, and we do not recognize revenue from these products until they are shipped to the customer. In addition, because we primarily sell our products to distributors and not directly to system designers, we have more limited visibility into ultimate product demand, which makes forecasting more difficult for us. We incur inventory and manufacturing costs in advance of anticipated revenue. Because demand for our products may not materialize, manufacturing based on forecasts subjects us to risks of high inventory carrying costs and obsolescence and may increase our costs. If we overestimate customer demand for our products, if product changes occur or if purchase orders are cancelled or shipments delayed, we may end up with excess inventory that we cannot sell, which could result in the loss of anticipated revenue without allowing us sufficient time to reduce our inventory and operating expenses. Similarly, if we underestimate demand, we may not have sufficient product inventory and may lose market share and damage customer relationships, which also could harm our business.

**We have significant international activities and customers, and plan to continue such efforts, which subjects us to additional business risks including increased logistical complexity, political instability and currency fluctuations.**

In 2004, 92% of our net revenue was attributable to customers located outside of the United States, primarily in Asia, and we anticipate that a significant portion of our future revenue will be generated by sales to customers in Asia. We have engineering, sales and operations personnel in Taiwan and Singapore. Our foundries, assembly and test subcontractors and distributors are also primarily located in Asia. Our international operations and sales are subject to a number of risks, including:

- cultural and language barriers;
- increased complexity and costs of managing international operations;
- protectionist laws and business practices that favor local competition in some countries;
- multiple, conflicting and changing laws and regulatory and tax environments;
- potentially longer and more difficult collection periods;
- political instability, international terrorism and anti-American sentiment, particularly in emerging markets;
- highly volatile economies in Asia;
- difficulty in hiring qualified management, technical sales and applications engineers; and
- *less effective protection of intellectual property than is afforded to us in the United States.*

Substantially all sales to international customers and purchases of production materials and manufacturing services from international suppliers in 2004 were denominated in U.S. dollars. An increase in the value of the U.S. dollar relative to foreign currencies could make our products more expensive for our international customers to purchase, thus rendering the prices of our products less competitive.

Our inability to overcome these risks could adversely affect our foreign operations, and some of our customers and suppliers, and could harm our business and operating results.

**We rely on the services of our key personnel, and if we are unable to retain our current personnel and hire additional personnel, our ability to develop and successfully market our products could be harmed.**

We rely upon the continued service and performance of a relatively small number of key technical and senior management personnel. If we lose any of our key technical or senior management personnel, such as Jeffrey Staszak, our President and Chief Executive Officer, or are unable to fill key positions, our business could be harmed. As a result, our future success depends on retaining our management team and other key employees. We rely on these individuals for the management of our company, development of our products and business strategy and management of our strategic relationships. In addition, we rely on a relatively small number of analog and mixed-signal design engineers who have the training and experience to design our products. Any of these employees could leave our company with little or no prior notice and would be free to work with a competitor. We do not have "key person" life insurance policies covering any of our employees. Additionally, there is a limited number of qualified technical personnel with significant experience in the design, development, manufacture and sale of power management semiconductors, and we may face challenges in hiring and retaining these types of employees.

**If we do not effectively manage our growth, our resources, systems and controls may be strained and our operating results may suffer.**

In recent periods, we have significantly increased the scope of our operations and the size of our workforce. This growth has placed, and any future growth of our operations will continue to place, a significant strain on our management personnel, systems and resources. We anticipate that we will need to implement a variety of new and upgraded operational and financial systems, procedures and controls, including the improvement of our accounting and other internal management systems. We also will need to continue to expand, train, manage and motivate our workforce, and manage our customer and distributor relationships, develop our internal sales force, and manage

our foundry and assembly and test subcontractors. All of these endeavors will require substantial management effort and skill, and we anticipate that we will require additional personnel and internal processes to manage these efforts. We plan to fund the costs of our operational and financial systems, additional personnel and internal processes from current cash balances and funds generated from operations. If we are unable to effectively manage our expanding operations, our revenue and operating results could be materially and adversely affected.

**Our ability to compete will be harmed if we are unable to adequately protect our intellectual property.**

We rely primarily on a combination of patent, trademark, trade secret and copyright law and contractual restrictions to protect our intellectual property. These afford only limited protection. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to obtain, copy or use information that we regard as proprietary, such as product design and manufacturing process expertise. As of December 31, 2004, we had 29 issued patents and 14 patent applications pending in the United States. These U.S. patents have expiration dates ranging from December 2017 to June 2023. Our pending patent applications and any future applications may not result in issued patents or may not be sufficiently broad to protect our proprietary technologies. Moreover, policing any unauthorized use of our products is difficult and costly, and we cannot be certain that the measures we have implemented will prevent misappropriation or unauthorized use of our technologies, particularly in foreign jurisdictions where the laws may not protect our proprietary rights as fully as the laws of the United States. The enforcement of patents by others may harm our ability to conduct our business. Others may independently develop substantially equivalent intellectual property or otherwise gain access to our trade secrets or intellectual property. Our failure to effectively protect our intellectual property could harm our business.

**Assertions by third parties of infringement by us of their intellectual property rights could result in significant costs and cause our operating results to suffer.**

The semiconductor industry is characterized by vigorous protection and pursuit of intellectual property rights and positions, which has resulted in protracted and expensive litigation for many companies. In the future we may receive communications from various industry participants alleging infringement of patents, trade secrets or other intellectual property rights. Any lawsuits resulting from such allegations could subject us to significant liability for damages and invalidate our proprietary rights. These lawsuits, regardless of their success, would likely be time-consuming and expensive to resolve and would divert management's time and attention. Any potential intellectual property litigation also could force us to do one or more of the following:

- stop selling products or using technology that contain the allegedly infringing intellectual property;
  - pay damages to the party claiming infringement;
  - attempt to obtain a license to the relevant intellectual property, which may not be available on reasonable terms or at all; and
  - attempt to redesign those products that contain the allegedly infringing intellectual property.
- We may also initiate claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. We have agreed to indemnify customers for certain claims of infringement arising out of the use of our products.

**Any potential dispute involving our patents or other intellectual property could also include our customers, which could trigger our indemnification obligations to them and result in substantial expense to us.**

In any potential dispute involving our patents or other intellectual property, our customers could also become the target of litigation. Because we indemnify our customers against claims made against them based on allegations that our products infringe intellectual property rights, such litigation could result in substantial expense for us. In addition to the time and expense required for us to indemnify our customers, any such litigation could hurt our relations with our customers and cause our operating results to be harmed.

**We may need to raise additional capital, which might not be available or which, if available, may be on terms that are not favorable to us.**

We believe our existing cash balances and cash expected to be generated from our operating activities will be sufficient to meet our working capital, capital expenditures and other cash needs for at least the next 12 months. In the future, we may need to raise additional funds, and we cannot be certain that we will be able to obtain additional financing on favorable terms, if at all. If we issue equity securities to raise additional funds, the ownership percentage of our stockholders would be reduced, and the new equity securities may have rights, preferences or privileges senior to those of existing holders of our common stock. If we borrow money, we may incur significant interest charges, which could harm our profitability. Holders of debt would also have rights, preferences or privileges senior to those of existing holders of our common stock. If we cannot raise needed funds on acceptable terms, we may not be able to develop or enhance our products, take advantage of future opportunities or respond to competitive pressures or unanticipated requirements, which could seriously harm our business, operating results and financial condition.

**We may undertake acquisitions to expand our business that may pose risks to our business and dilute the ownership of our existing stockholders.**

We will evaluate opportunities to acquire other businesses, products or technologies that would complement our current offerings, expand the breadth of markets we can address or enhance our technical capabilities. Acquisitions that we may potentially make in the future entail a number of risks that could materially and adversely affect our business, operating and financial results, including:

- our lack of experience acquiring other businesses;
- problems integrating the acquired operations, technologies or products with our existing business and products;
- diversion of management's time and attention from our core business;
- the need for financial resources above our planned investment levels;
- overestimation of potential synergies or a delay in realizing those synergies;
- difficulties in retaining business relationships with suppliers and customers of the acquired company;
- risks associated with entering markets in which we lack prior experience; and
- the potential loss of key employees of the acquired company.

Future acquisitions also could cause us to incur debt or contingent liabilities or cause us to issue equity securities that would reduce the ownership percentages of existing stockholders. Furthermore, acquisitions could result in adverse tax consequences, substantial depreciation, deferred compensation charges, in-process research and development charges, impairment of goodwill or the amortization of amounts related to deferred compensation and to identifiable purchased intangible assets, any of which would negatively affect our operating results.

**Our stock price will fluctuate and may be volatile, which could result in substantial losses for investors and significant costs related to litigation.**

Investors may be unable to resell their shares at or above the purchase price and this could result in substantial losses for those investors. The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control. These factors include:

- actual or anticipated fluctuations in our revenue, operating results or growth rate;
- failure to meet the expectations of securities analysts or investors with respect to our financial performance;
- actual or anticipated fluctuations in our competitors' operating results or changes in their growth rates;
- sales of our common stock or other securities in the future;
- stock market price and trading volume fluctuations of publicly-traded companies in general and semiconductor companies in particular;

- the trading volume of our common stock;
- changes in financial estimates and ratings by securities analysts for us, our competitors or companies in the semiconductor industry generally;
- changes in the condition of the financial markets, the economy as a whole, the semiconductor industry, our customers or our competitors;
- publicity about the semiconductor industry, our competitors or our customers; and
- additions or departures of key personnel.

The stock market in general, and the Nasdaq National Market in particular, have experienced extreme price and volume fluctuations in recent years that have often been unrelated or disproportionate to the operating performance of the listed companies. Broad market and industry factors may materially harm the market price of our common stock, regardless of our operating performance.

In the past, securities class action litigation has often been brought against companies following periods of volatility and decline in the market price of their securities. Technology companies have experienced stock price volatility that is greater than that experienced by many other industries in recent years and as a result have been subject to a greater number of securities class action claims. If our stock price is volatile or declines, we may be the target of similar litigation in the future. Securities litigation could result in significant costs and divert management's attention and resources, which could seriously harm our business and operating results.

**If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.**

The trading market for our common stock will depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our stock, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

**Our principal stockholders have significant voting power and may influence actions that may not be in the best interests of our other stockholders.**

We believe that our executive officers, directors and principal stockholders, in the aggregate, beneficially own approximately 40% of our outstanding common stock as of January 31, 2005. As a result, these stockholders, acting together, may have the ability to exert substantial influence over matters requiring approval of our stockholders, including the election and removal of directors and the approval of mergers or other business combinations. This concentration of beneficial ownership could be disadvantageous to other stockholders whose interests are different from those of our executive officers, directors and principal stockholders. For example, our executive officers, directors and principal stockholders, acting together with stockholders owning a relatively small percentage of our outstanding stock, could delay or prevent an acquisition or merger even if the transaction would benefit other stockholders.

**Being a public company will increase our expenses and administrative burden.**

We completed our initial public offering in August 2004. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, our administrative staff will be required to perform additional tasks. For example, in 2004, we created or revised the roles and duties of our board committees, adopted additional internal controls and disclosure controls and procedures, retained a transfer agent and a financial printer, adopted an insider trading policy and will have all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002 and related regulations implemented by the Securities and Exchange Commission and the National Association of Securities Dealers, are creating uncertainty for public companies,

increasing legal and financial compliance costs and making some activities more time consuming. We are currently evaluating and monitoring developments with respect to new and proposed rules and cannot predict or estimate the amount of the additional costs we may incur or the timing of such costs. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to practice, regulatory authorities may initiate legal proceedings against us and our business may be harmed. We also expect that being a public company and these new rules and regulations will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee, and qualified executive officers.

**Our internal controls over financial reporting may not be effective and our independent auditors may not be able to certify as to their effectiveness, which could have a significant and adverse effect on our business.**

We are evaluating our internal controls over financial reporting in order to allow management to report on, and our independent auditors to attest to, our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act of 2002 and the rules and regulations of the SEC, which we collectively refer to as Section 404. We are currently performing the system and process evaluation and testing required in an effort to comply with the management assessment and auditor certification requirements of Section 404, which will initially apply to us as of December 31, 2005. In the course of our ongoing Section 404 evaluation, we have identified areas of internal controls that may need improvement and have instituted remediation efforts where necessary. Currently, none of our identified areas that need improvement have been categorized as material weaknesses or significant deficiencies. However, we are still in the evaluation process, and we may identify conditions that may result in significant deficiencies or material weaknesses in the future.

**Anti-takeover provisions of our charter documents and Delaware law could prevent or delay transactions resulting in a change in control.**

Our certificate of incorporation and our bylaws may make more difficult or discourage, delay or prevent a change in the ownership of our company or a change in our management or our board of directors. The following are examples of provisions that are included in our certificate of incorporation and bylaws that might have those effects:

- our board of directors is classified so that not all members of our board may be elected at one time;
- directors may only be removed "for cause" and only with the approval of stockholders holding a majority of our outstanding voting stock;
- the ability of our stockholders to call a special meeting of stockholders is prohibited;
- advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon at stockholder meetings;
- stockholder action by written consent is prohibited, thereby requiring all stockholder actions to be taken at a meeting of our stockholders; and
- our board of directors may designate the terms of and issue new series of preferred stock, commonly referred to as "blank check" preferred stock, with rights senior to those of common stock without stockholder approval.

In addition, we are also subject to Section 203 of the Delaware General Corporation Law, which provides, subject to enumerated exceptions, that if a person acquires 15% or more of our voting stock, the person is an

“interested stockholder” and may not engage in “business combinations” with us for a period of three years from the time the person acquired 15% or more of our voting stock.

These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirors at a premium over prevailing prices. This potential inability to obtain a premium could reduce the price of our common stock.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk**

The primary objective of our investment activities is to preserve principal while maximizing income without significantly increasing risk. Some of the securities in which we invest may be subject to market risk. This means that a change in prevailing interest rates may cause the market value of the investment to fluctuate. To minimize this risk, we may maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, debt securities and certificates of deposit. The risk associated with fluctuating interest rates is limited to our investment portfolio and we do not believe that a 10% change in interest rates would have a significant impact on our interest income. As of December 31, 2004, all of our short-term investments were government agency securities and our cash equivalents were held in checking accounts, money market accounts and government agency securities.

Our exposure to market risk also relates to the increase or decrease in the amount of interest expense we must pay on our outstanding debt instruments, primarily certain borrowings under our bank line of credit. The advances under this line of credit bear a variable rate of interest based on the prime rate. The risk associated with fluctuating interest expense is primarily limited to this debt instrument and we do not believe that a 10% change in the prime rate would have a significant impact on our interest expense. As of December 31, 2004, we had no outstanding amounts under the bank line of credit, and \$2.2 million remained available based on eligible accounts receivable.

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

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**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED BALANCE SHEETS**

(In thousands except share data)

	<u>December 31,</u> <u>2004</u>	<u>December 31,</u> <u>2003</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents .....	\$ 24,895	\$ 10,129
Short-term investments .....	19,838	—
Accounts receivable, net of allowances for sales returns and doubtful accounts of \$1,102 and \$666, respectively .....	2,097	2,430
Inventory .....	5,134	2,002
Prepaid expenses and other current assets .....	<u>726</u>	<u>332</u>
Total current assets .....	52,690	14,893
Property and equipment, net .....	1,414	1,189
Other assets .....	<u>34</u>	<u>34</u>
Total assets .....	<u>\$ 54,138</u>	<u>\$ 16,116</u>
<b>Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)</b>		
Current liabilities:		
Accounts payable .....	\$ 1,768	\$ 1,621
Accrued liabilities .....	2,105	1,109
Line of credit .....	<u>—</u>	<u>1,800</u>
Total current liabilities .....	<u>3,873</u>	<u>4,530</u>
Commitments and contingencies .....		
Convertible preferred stock .....	<u>—</u>	<u>60,818</u>
Stockholders' equity (deficit):		
Preferred stock, \$0.001 par value; 5,000,000 shares authorized, and none issued and outstanding .....	—	—
Common stock, \$0.001 par value; 200,000,000 shares authorized; 23,336,165 and 5,534,598 shares issued and outstanding, respectively .....	23	6
Additional paid-in capital .....	94,412	1,160
Deferred stock-based compensation .....	(462)	—
Notes receivable from stockholders .....	—	(1,581)
Accumulated deficit .....	<u>(43,708)</u>	<u>(48,817)</u>
Total stockholders' equity (deficit) .....	<u>50,265</u>	<u>(49,232)</u>
Total liabilities, convertible preferred stock and stockholders' equity (deficit) .....	<u>\$ 54,138</u>	<u>\$ 16,116</u>

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

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF OPERATIONS**

(In thousands, except per share amounts)

	Years Ended December 31,		
	2004	2003	2002
Net revenue .....	\$43,935	\$25,118	\$15,674
Cost of revenue .....	<u>19,635</u>	<u>14,543</u>	<u>11,514</u>
Gross margin .....	<u>24,300</u>	<u>10,575</u>	<u>4,160</u>
Operating expenses:			
Research and development .....	13,062	10,460	9,241
Selling, general and administrative .....	5,584	4,148	4,443
Stock-based compensation (*) .....	682	—	16
Restructuring charge .....	<u>—</u>	<u>142</u>	<u>—</u>
Total operating expenses .....	<u>19,328</u>	<u>14,750</u>	<u>13,700</u>
Income (loss) from operations .....	<u>4,972</u>	<u>(4,175)</u>	<u>(9,540)</u>
Interest and other income .....	385	162	320
Interest and other expense .....	<u>(14)</u>	<u>(14)</u>	<u>(14)</u>
Income (loss) before income taxes .....	5,343	(4,027)	(9,234)
Income tax expense .....	<u>234</u>	<u>—</u>	<u>—</u>
Net income (loss) .....	<u>\$ 5,109</u>	<u>\$ (4,027)</u>	<u>\$ (9,234)</u>
Basic net income (loss) per share .....	<u>\$ 0.40</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>
Shares used in computing basic net income (loss) per share .....	<u>12,891</u>	<u>5,473</u>	<u>5,359</u>
Diluted net income (loss) per share .....	<u>\$ 0.22</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>
Shares used in computing diluted net income (loss) per share .....	<u>23,100</u>	<u>5,473</u>	<u>5,359</u>
(*) Stock-based compensation consists of:			
Cost of revenue .....	\$ 28	—	—
Research and development .....	402	—	\$ 16
Selling, general and administrative .....	<u>252</u>	<u>—</u>	<u>—</u>
Total .....	<u>\$ 682</u>	<u>—</u>	<u>\$ 16</u>

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

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

(In thousands)

	Years Ended December 31,		
	2004	2003	2002
<b>Cash flows from operating activities:</b>			
Net income (loss) .....	\$ 5,109	\$ (4,027)	\$ (9,234)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation .....	514	490	723
Provision for doubtful accounts .....	22	130	85
Loss on disposals of equipment .....	—	—	5
Interest income on stockholders' notes receivable .....	(53)	(87)	(82)
Stock-based compensation .....	682	—	16
Changes in operating assets and liabilities:			
Accounts receivable .....	311	642	(2,288)
Inventory .....	(3,132)	1,114	(1,830)
Prepaid expenses and other current assets .....	(394)	34	(40)
Accounts payable .....	147	(666)	1,143
Accrued liabilities .....	1,187	86	26
Other .....	(4)	—	—
Net cash provided by (used in) operating activities .....	<u>4,389</u>	<u>(2,284)</u>	<u>(11,476)</u>
<b>Cash flows from investing activities:</b>			
Acquisitions of property and equipment .....	(739)	(396)	(265)
Purchase of short-term investments .....	(19,838)	—	—
Other .....	—	15	(1)
Net cash used in investing activities .....	<u>(20,577)</u>	<u>(381)</u>	<u>(266)</u>
<b>Cash flows from financing activities:</b>			
Borrowings under line of credit .....	3,350	8,155	—
Payments on line of credit .....	(5,150)	(6,355)	—
Payments on notes payable .....	—	—	(960)
Proceeds from initial public offering, net of offering expenses ..	31,885	—	—
Proceeds from issuance of common stock, net .....	869	353	83
Proceeds from issuance of preferred stock, net .....	—	493	6,193
Net cash provided by financing activities .....	<u>30,954</u>	<u>2,646</u>	<u>5,316</u>
Net increase in cash and cash equivalents .....	14,766	(19)	(6,426)
Cash and cash equivalents, beginning of period .....	<u>10,129</u>	<u>10,148</u>	<u>16,574</u>
Cash and cash equivalents, end of period .....	<u>\$ 24,895</u>	<u>\$ 10,129</u>	<u>\$ 10,148</u>
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid for interest .....	<u>\$ 14</u>	<u>\$ 14</u>	<u>\$ 14</u>
<b>Supplemental disclosure of non-cash investing and financing activities:</b>			
Deferred stock-based compensation .....	<u>\$ 917</u>	<u>\$ —</u>	<u>\$ —</u>
Increase/decrease in liability for early option exercises, net ..	<u>\$ (192)</u>	<u>\$ 192</u>	<u>\$ —</u>
Cancellation of notes receivable from stockholders in connection with stock repurchase .....	<u>\$ 1,634</u>	<u>\$ —</u>	<u>\$ —</u>
Conversion of convertible preferred stock to common stock .....	<u>\$ 60,818</u>	<u>\$ —</u>	<u>\$ —</u>

See accompanying notes to consolidated financial statements.

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)**  
**Years Ended December 31, 2004, 2003 and 2002**  
(In thousands, except share amounts)

	Stockholders' Equity (Deficit)						
	Convertible Preferred Stock	Common Stock	Additional Paid-In Capital	Deferred Stock-Based Compensation	Notes Receivable From Stockholders	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Amount	Amount	Amount
Balances as of December 31, 2001 . . . . .	12,200,633	\$ 54,132	5,331,006	\$ 5	\$ 709	\$(1,412)	\$(36,254)
Series E preferred stock issued for cash, net of issuance costs of \$7 . . . . .	775,000	6,193	—	—	—	—	—
Common stock issued for cash . . . . .	—	—	82,397	—	83	—	83
Interest income on stockholder receivables . . . . .	—	—	—	—	—	(82)	(82)
Fair value of warrants and options issued to non-employees . . . . .	—	—	—	—	16	—	16
Net loss . . . . .	—	—	—	—	—	—	(9,234)
Balances as of December 31, 2002 . . . . .	12,975,633	60,325	5,413,403	5	808	(1,494)	(45,471)
Series E preferred stock issued for cash, net of issuance costs of \$7 . . . . .	62,500	493	—	—	—	—	—
Common stock issued for cash, net of repurchases and invested early option exercises . . . . .	—	—	121,195	1	352	—	353
Interest income on stockholder receivables . . . . .	—	—	—	—	—	(87)	(87)
Net loss . . . . .	—	—	—	—	—	—	(4,027)
Balances as of December 31, 2003 . . . . .	13,038,133	60,818	5,534,598	6	1,160	(1,581)	(48,817)
Common stock issued for cash and vesting of early exercises, net of repurchases . . . . .	—	—	366,003	—	1,060	—	1,060
Deferred stock-based compensation to employees . . . . .	—	—	—	—	917	(917)	—
Amortization of deferred stock-based compensation . . . . .	—	—	—	—	—	455	455
Stock-based compensation to non-employees . . . . .	—	—	—	—	227	—	227
Interest income on stockholder receivables . . . . .	—	—	—	—	—	(53)	(53)
Repurchase of common stock in retirement of notes receivable . . . . .	—	—	(327,500)	—	(1,634)	1,634	—
Initial public offering, net of costs . . . . .	—	—	4,558,601	4	31,881	—	31,885
Conversion of preferred stock . . . . .	(13,038,133)	(60,818)	13,038,133	13	60,805	—	60,818
Warrants net exercised . . . . .	—	—	166,330	—	(4)	—	(4)
Other . . . . .	—	—	—	—	—	—	—
Net income . . . . .	—	—	—	—	—	—	5,109
Balances as of December 31, 2004 . . . . .	—	\$ —	23,336,165	\$23	\$94,412	\$(462)	\$(43,708)

See accompanying notes to consolidated financial statements.

# VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

### 1. Description of Business

Volterra Semiconductor Corporation (the Company or Volterra) was incorporated in Delaware in 1996, and its principal offices are located in Fremont, California. The Company designs, develops and markets proprietary, high-performance analog and mixed-signal power management semiconductors for the computing, storage, networking and consumer markets. In August 2004, the Company completed its initial public offering and received net proceeds of \$31.9 million.

### 2. Summary of Significant Accounting Policies

#### *(a) Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant inter-company balances and transactions have been eliminated in consolidation. The functional currency of foreign subsidiaries is the U.S. dollar and foreign currency transaction gains and losses are recorded in income. For all periods presented, there have been no material foreign currency transaction gains and losses.

#### *(b) Use of Estimates*

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates.

#### *(c) Financial Instruments and Concentrations of Credit Risk*

Financial instruments consist of cash equivalents, short-term investments, accounts receivable, accounts payable, a line of credit and convertible preferred stock. The carrying value of the Company's cash equivalents, short-term investments, accounts receivable and accounts payable approximates their respective fair value due to the relatively short maturities of these instruments. The carrying value of the line of credit approximates fair value based on the terms and interest rates in relation to current market rates for similar instruments. The carrying value of convertible preferred stock approximates its fair value in a liquidation scenario.

Cash equivalents consist of highly liquid investments with original maturities of 90 days or less.

Short-term investments are comprised of government agency debt securities with remaining contractual maturities on the date of purchase greater than 90 days but less than one year. These investments are classified as held-to-maturity and carried at amortized cost.

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of investments and trade accounts receivable.

The Company maintains cash, cash equivalents and short-term investments with high credit quality financial institutions.

The Company sells its products to international distributors and original equipment manufacturers (and their outsourced suppliers) in the computing, storage, networking and consumer electronic industries. The Company performs continuing credit evaluations of its customers' financial condition and generally does not require collateral from its customers. An allowance is provided for estimated accounts receivable that may not be collected.

VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

2. Summary of Significant Accounting Policies (Continued)

(d) Segment Reporting and Significant Customers

The Company is organized and operates as a single business segment: analog and mixed-signal power management semiconductors. The Company's chief operating decision maker, the Chief Executive Officer, reviews financial information presented on a consolidated basis for the purposes of making operating decisions and assessing financial performance. Substantially all of the Company's long-lived assets are located in the United States.

Significant customers are those customers accounting for more than 10% of the Company's total net revenue or accounts receivable. For each significant customer, net revenue as a percentage of total net revenue and accounts receivable as a percentage of total accounts receivable are as follows:

Customer	Net Revenue			Accounts Receivable	
	2004	2003	2002	Dec. 31, 2004	Dec. 31, 2003
A .....	20%	21%	*	21%	36%
B .....	17%	*	*	9%	23%
C .....	15%	*	*	43%	*
D .....	15%	*	*	*	*
E .....	*	28%	62%	*	*
F .....	*	19%	11%	11%	13%
G .....	*	10%	*	*	14%
H .....	*	*	11%	*	*

\* Less than 10%

The Company reports its net revenue in geographic areas according to the destination to which the product was shipped. Net revenue by geographic area was as follows:

	2004	2003	2002
Singapore .....	37%	35%	14%
Hong Kong .....	28%	1%	—
Taiwan .....	14%	34%	62%
United States .....	8%	13%	10%
Japan .....	7%	7%	11%
Other .....	6%	10%	3%

The geographic area to which a product was shipped is not necessarily the same location in which the product is ultimately used. In all periods, substantially all of the Company's net revenue was denominated in U.S. dollars.

(e) Inventory

Inventory is stated at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market. Provisions, when required, are made to reduce excess and obsolete inventories to their estimated net realizable values. Once a provision is recorded to reduce the cost of inventory to net realizable value, it is not reversed until the inventory is sold or disposed of.

(f) Property and Equipment

Property and equipment are stated at cost and depreciated using the straight-line method over their estimated useful lives. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the asset. Estimated useful lives of assets are as follows:

VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

2. Summary of Significant Accounting Policies (Continued)

Computer hardware and software .....	3 years
Equipment and furniture .....	5 to 7 years
Leasehold improvements .....	7 years

*(g) Revenue Recognition*

Revenue from the sale of semiconductor products is recognized upon shipment when title transfers to the customer provided that persuasive evidence of an arrangement exists, the price is fixed or determinable, and collection of the resulting receivable is reasonably assured. An allowance is recorded at the time of sale to provide for estimated future returns and allowances. The allowance is based upon historical experience, current trends and the Company's expectations regarding future experience. Sales returns must be authorized by Volterra and are generally limited to instances of potential product failure under the Company's standard warranty that provides that products will be free from defects for a period of one year from shipment.

The Company has made no sales to U.S. distributors. Volterra's sales to international distributors are made under agreements that do not provide for price adjustments after purchase and provide limited return rights under the Company's standard warranty. Revenue on these sales is recognized upon shipment when title passes to the distributor. Volterra estimates future international distributor sales returns and allowances based on historical data and current business expectations and reduces revenue for estimated future returns and allowances through the allowance for sales returns. Sales returns from distributors must be authorized by the Company and are generally limited to instances of potential product failure under the same standard warranty described above.

Costs of shipping and handling for delivery of the Company's products that are reimbursed by its customers are recorded as revenue in the statement of operations. Shipping and handling costs are charged to cost of revenue as incurred.

*(h) Advertising Costs*

Advertising costs are expensed as incurred and are included in selling, general and administrative expense. For all periods presented, advertising costs were immaterial.

*(i) Earnings Per Share*

Basic net income (loss) per share is calculated by dividing net income (loss) by the weighted average shares of common stock outstanding during the period less weighted average shares outstanding of restricted common stock subject to repurchase during the period. Diluted net income (loss) per share is calculated by dividing the net income (loss) by the weighted average shares outstanding of common stock and dilutive potential common shares outstanding during the period. Dilutive potential common shares consist of dilutive shares issuable upon the exercise of outstanding stock options and warrants, computed using the treasury stock method, and conversion of convertible preferred stock.

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(In thousands, except share and per share data)

**2. Summary of Significant Accounting Policies (Continued)**

The following table sets forth for all periods presented the computation of basic and diluted net income (loss) per share, including the reconciliation of the numerator and denominator used in the calculation:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Numerator:			
Net income (loss) .....	\$ 5,109	\$ (4,027)	\$ (9,234)
Denominator:			
Weighted average common shares .....	12,891,066	5,473,178	5,371,203
Unvested restricted shares subject to repurchase ..	<u>—</u>	<u>—</u>	<u>(12,008)</u>
Total shares: Basic .....	12,891,066	5,473,178	5,359,195
Effect of dilutive securities:			
Stock options .....	2,460,934	—	—
Convertible preferred stock .....	7,605,577	—	—
Convertible preferred warrants .....	<u>142,462</u>	<u>—</u>	<u>—</u>
Total shares: Diluted .....	<u>23,100,039</u>	<u>5,473,178</u>	<u>5,359,195</u>
Net income (loss) per share — Basic .....	<u>\$ 0.40</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>
Net income (loss) per share — Diluted .....	<u>\$ 0.22</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>

The following securities outstanding were excluded from the calculation of diluted net income (loss) per share in the periods below as they had an antidilutive effect:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Stock options .....	110,600	3,274,563	3,343,085
Convertible preferred stock .....	—	13,038,133	12,975,633
Convertible preferred warrants .....	—	181,692	181,692
Unvested restricted shares subject to repurchase ....	<u>—</u>	<u>—</u>	<u>12,008</u>
	<u>110,600</u>	<u>16,494,388</u>	<u>16,512,418</u>

The securities outstanding as of December 31, 2004 could dilute net income per share in the future.

**(j) Income Taxes**

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that a portion of deferred tax assets will not be realized.

**(k) Accounting for Stock-Based Compensation**

The Company applies the intrinsic value based method of accounting prescribed by Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations including Financial Accounting Standards Board (FASB) Interpretation (FIN) No. 44, *Accounting for Certain Transactions Involving Stock Compensation, an Interpretation of APB Opinion No. 25*, to account for the Company's fixed plan stock options. Under this method, deferred stock-based compensation has been recorded only if the deemed fair value of the underlying common stock exceeded the exercise price of options granted to employees on the date

VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
(In thousands, except share and per share data)

2. Summary of Significant Accounting Policies (Continued)

of grant. Deferred stock-based compensation expense is amortized on an accelerated basis over the vesting period of each grant using the method prescribed by FASB FIN 28, *Accounting for Stock Appreciation Rights and Other Variable Stock Option or Awards Plans*.

Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation*, and SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure, an Amendment of FASB Statement No. 123*, established accounting and disclosure requirements using a fair value based method of accounting for stock-based employee compensation plans. As permitted by existing accounting standards, the Company has elected to continue to apply the intrinsic value based method of accounting described above, and has adopted only the disclosure requirements of SFAS No. 123, as amended. The following table illustrates the effect on net income (loss) if the fair value based method had been used in each period:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income (loss) as reported .....	\$ 5,109	\$(4,027)	\$(9,234)
Add: stock-based compensation for employee awards included in the determination of net income (loss), net of tax .....	455	—	—
Less: stock-based compensation for employee awards determined under the fair-value method, net of tax .....	<u>(1,335)</u>	<u>(340)</u>	<u>(601)</u>
Pro forma net income (loss) .....	<u>\$ 4,229</u>	<u>\$(4,367)</u>	<u>\$(9,835)</u>
Basic net income (loss) per share:			
As reported .....	<u>\$ 0.40</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>
Pro forma .....	<u>\$ 0.33</u>	<u>\$ (0.80)</u>	<u>\$ (1.84)</u>
Diluted net income (loss) per share:			
As reported .....	<u>\$ 0.22</u>	<u>\$ (0.74)</u>	<u>\$ (1.72)</u>
Pro forma .....	<u>\$ 0.18</u>	<u>\$ (0.80)</u>	<u>\$ (1.84)</u>

The fair value of each option grant was estimated on the date of grant using the Black-Scholes valuation model. The following assumptions were used in the fair value calculations:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Expected life .....	4 years	4 years	4 years
Expected volatility .....	0-60%	—	—
Risk-free interest rates .....	2.7%-3.5%	2.1%-2.9%	2.7%-4.4%
Expected dividend yield .....	—	—	—

The per share weighted average fair value of stock options granted to employees during the years ended December 31, 2004, 2003 and 2002 was \$3.21, \$0.57 and \$0.46, respectively.

**(l) Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of**

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by comparison of the carrying value of the asset to future undiscounted net cash flows expected to result from the use and eventual disposition of the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying value of the asset exceeds its fair value, as determined by the discounted cash flows.

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(In thousands, except share and per share data)

**2. Summary of Significant Accounting Policies (Continued)**

*(m) Comprehensive Income (Loss)*

Under SFAS No. 130, *Reporting Comprehensive Income*, comprehensive income (loss) is defined as the changes in financial position of an enterprise excluding stockholder transactions. For the years ended December 31, 2004, 2003 and 2002, comprehensive income (loss) equaled net income (loss).

**3. Inventory**

Inventory as of December 31, 2004 and 2003 consisted of the following:

	<b>2004</b>	<b>2003</b>
Work-in-process .....	\$3,430	\$1,415
Finished goods .....	1,704	587
	<b>\$5,134</b>	<b>\$2,002</b>

**4. Property and Equipment**

Property and equipment as of December 31, 2004 and 2003 consisted of the following:

	<b>2004</b>	<b>2003</b>
Computer hardware .....	\$ 966	\$ 889
Computer software .....	1,979	1,977
Equipment and furniture .....	2,107	1,475
Leasehold improvements .....	626	598
	5,678	4,939
Less accumulated depreciation .....	(4,264)	(3,750)
	<b>\$ 1,414</b>	<b>\$ 1,189</b>

Depreciation expense for the years ended December 31, 2004, 2003 and 2002 was \$514, \$490 and \$723, respectively.

**5. Accrued Liabilities**

Accrued liabilities as of December 31, 2004 and 2003 consisted of the following:

	<b>2004</b>	<b>2003</b>
Accrued compensation .....	\$ 726	\$ 484
Customer prepayments .....	500	—
Professional services .....	260	154
Product liability .....	121	142
Employee early option exercises .....	—	192
Other accrued liabilities .....	498	137
	<b>\$2,105</b>	<b>\$1,109</b>

Common stock issued to employees upon early exercise of stock options is subject to the repurchase right of the Company at a price equal to the exercise price in the event of termination of the employee prior to vesting. In accordance with EITF Issue No. 00-23, *Issues Related to the Accounting for Stock Compensation under APB Opinion No. 25 and FASB Interpretation No. 44*, the proceeds from the early exercise of options after March 21, 2002 are accounted for as a deposit from the employee and a liability of the Company until the options vest. Deposits from employees included in accrued liabilities for the early exercise of stock options totaled \$0 and \$192, as of December 31, 2004 and 2003, respectively.

VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

6. Line of Credit

The Company has an agreement with a financial institution for a revolving line of credit (the Agreement). The Agreement allows the Company to borrow based on eligible accounts receivable up to a maximum of \$5,000 and expires on June 24, 2005, at which time payment of any amount outstanding is due. Interest on borrowings under the Agreement accrues at the bank's prime rate plus 0.5%. Borrowings under the Agreement are secured by substantially all of the tangible assets of the Company. The Agreement contains covenants related to material adverse changes, liquidity, and profitability. As of December 31, 2004, the Company was in compliance with all covenants under the bank line of credit and has no balance outstanding.

7. Convertible Preferred Stock and Stockholders' Equity (Deficit)

(a) Convertible Preferred Stock

Beginning in November 1996 through January 1997, the Company issued 1,020,000 shares of Series A convertible preferred stock at \$0.50 per share in exchange for cash and conversion of a note payable. Beginning in October 1997 through April 1998, the Company issued 3,413,326 shares of Series B convertible preferred stock at \$1.50 per share. In June 1999, the Company issued 3,191,544 shares of Series C convertible preferred stock at \$3.76 per share. In October and November 1999, the Company issued 2,750,000 shares of Series D convertible preferred stock at \$8.00 per share. Beginning in October 2001 through April 2003, the Company issued 2,663,250 shares of Series E convertible preferred stock at \$8.00 per share.

While outstanding, the convertible preferred stock had special rights related to conversion, voting and dividends and a liquidation preference over holders of common stock. Upon the closing of the Company's initial public offering in August 2004, all outstanding shares of the Company's convertible preferred stock automatically converted into an aggregate of 13,038,133 shares of common stock with the same rights as other common stockholders.

(b) Common Stock

On July 8, 2004, the Company completed a one-for-two reverse stock split of the common and preferred stock. All share and per share amounts have been retroactively restated in the accompanying consolidated financial statements and notes for all periods presented to reflect the reverse stock split.

In August 2004, the Company sold 4,558,601 shares of its common stock in its initial public offering at an offering price of \$8.00 per share. The Company received total proceeds of \$31.9 million, net of related issuance fees and estimated offering costs.

The Company has reserved shares of common stock for future issuance at December 31, 2004 as follows:

Stock options outstanding .....	4,097,170
Stock options available for future grants .....	3,452,119
Stock purchase plan .....	<u>450,000</u>
	<u>7,999,289</u>

(c) Warrants

During 1997 and 1998, the Company issued warrants to lessors and creditors to purchase, in aggregate, 31,250 shares of Series A preferred stock at a purchase price of \$0.50 per share and 150,442 shares of Series B preferred stock at purchase prices ranging from \$1.50 to \$2.63 per share.

## VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

#### 7. Convertible Preferred Stock and Stockholders' Equity (Deficit) (Continued)

Upon the closing of the Company's initial public offering in August 2004, all outstanding preferred stock warrants converted to common stock warrants. During 2004, all outstanding warrants were net exercised resulting in the issuance of 166,330 shares of common stock.

##### *(d) Stock Option Plans*

As of December 31, 2004, the Company had authorized 9,688,750 shares of common stock for issuance under all of the Company's stock option plans.

In October 1996, the Company authorized the 1996 Stock Option Plan (the 1996 Plan) under which the board of directors may issue stock options to employees, officers, directors, and consultants. Under the 1996 Plan, 6,733,750 shares of the Company's common stock were reserved for issuance of stock options. Incentive and nonqualified options to purchase shares of common stock are granted at not less than 100% and 85%, respectively, of the fair value of the common stock at the date of grant as determined by the board of directors, and expire no later than 10 years from the date of grant. Options granted under the 1996 Plan vest and become exercisable at the rate of at least 20% per year over 5 years from the date the option is granted. Any shares issued upon early exercise of an option are subject to a right of repurchase in the Company's favor; however, such repurchase rights shall lapse at the rate of at least 20% per year over 5 years from the date the option is granted.

In May 2004, the Company authorized the 2004 Equity Incentive Plan (the 2004 Plan) as an amendment and restatement of the 1996 Stock Option Plan and the amendment became effective upon the Company's initial public offering. Options granted under the 1996 Plan prior to its amendment and restatement will continue to be subject to the terms and conditions as set forth in the agreements evidencing such options and the terms of the 1996 Plan. In addition to the shares authorized by the 1996 Plan, 1,750,000 additional shares were authorized upon the Company's initial public offering. Thus, under the 2004 Plan, 8,483,750 shares were initially authorized and the number of authorized shares will be increased annually on December 31 of each year, from 2004 until 2013, by 5% of the number of fully-diluted shares of common stock outstanding; provided, however, that the Board of Directors may designate a smaller number of shares by which the authorized number of shares will be increased on such dates.

On December 14, 2004, the Board of Directors approved an increase of 1,080,000 shares under the 2004 Plan effective December 31, 2004, bringing the authorized shares to 9,563,750 of common stock for issuance.

In May 2004, the Company authorized the 2004 Non-Employee Directors' Stock Option Plan, which became effective upon the Company's initial public offering. The 2004 Non-Employee Directors' Stock Option Plan provides for the automatic grant of nonstatutory stock options to purchase shares of common stock to our non-employee directors. The aggregate number of shares of common stock that may be issued pursuant to options granted under the 2004 Non-Employee Directors' Stock Option Plan is 125,000 shares, which will be increased annually on December 31 of each year, from 2004 and until 2013, by no more than the number of shares of common stock subject to options granted during that calendar year. As of December 31, 2004, there were no shares issued under this plan.

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(In thousands, except share and per share data)

**7. Convertible Preferred Stock and Stockholders' Equity (Deficit) (Continued)**

The following table summarizes stock option activity under the plans during the years 2002, 2003 and 2004:

	Options Available for Grant	Options Outstanding	
		Number of Shares	Weighted Average Exercise Price
Balances as of December 31, 2001	512,312	2,733,275	\$2.17
Additional shares authorized	950,000	—	—
Granted	(1,018,472)	1,018,472	\$3.28
Exercised	—	(82,397)	\$1.00
Canceled	<u>326,266</u>	<u>(326,266)</u>	<u>\$0.41</u>
Balances as of December 31, 2002	770,106	3,343,084	\$2.70
Granted	(388,275)	388,275	\$3.50
Exercised	—	(185,269)	\$3.02
Canceled	<u>271,528</u>	<u>(271,528)</u>	<u>\$2.86</u>
Balances as of December 31, 2003	653,359	3,274,562	\$2.77
Additional shares authorized	3,905,000	—	—
Granted	(1,226,930)	1,226,930	\$7.51
Exercised	—	(283,632)	\$3.08
Canceled	<u>120,690</u>	<u>(120,690)</u>	<u>\$3.90</u>
Balances as of December 31, 2004	<u>3,452,119</u>	<u>4,097,170</u>	<u>\$4.13</u>

The following table summarizes options outstanding as of December 31, 2004:

Range of Exercise Prices	Options Outstanding				Options Vested	
	Shares Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Shares Vested	Weighted Average Exercise Price	
\$0.05-\$1.50	567,683	4.0	\$ 0.43	567,683	\$0.43	
\$3.20-\$3.50	2,337,870	6.7	\$ 3.26	1,714,827	\$3.23	
\$5.00-\$8.00	937,755	9.3	\$ 6.16	11,875	\$5.00	
\$8.10-\$24.95	<u>253,862</u>	9.6	<u>\$12.80</u>	—	N/A	
\$0.05-\$24.95	<u>4,097,170</u>	7.1	<u>\$ 4.13</u>	<u>2,294,385</u>	<u>\$2.55</u>	

Under the intrinsic-value method of accounting for stock-based compensation arrangements for employees, compensation cost is recognized to the extent the fair value of the underlying common stock exceeds the exercise price of the stock options at the date of grant. Deferred stock-based compensation, net of cancellations, of approximately \$917 was recorded during 2004, for the excess of fair value of the common stock underlying the options at the date of grant over the exercise price of the options. These amounts are being amortized over the vesting period. Amortization of deferred stock-based compensation related to employee grants was approximately \$455 during 2004.

During 2002, options to purchase 7,380 shares were granted to non-employees with immediate vesting; compensation expense resulting from these grants was \$16. The fair value of each option granted to non-employees was estimated on the date of grant using the Black-Scholes option-pricing model. No stock options were granted to non-employees in 2003. During 2004, options to purchase 30,000 shares and 22,500 shares of restricted stock were granted to non-employees; compensation expense in 2004 resulting from these grants was \$184.

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(In thousands, except share and per share data)

**7. Convertible Preferred Stock and Stockholders' Equity (Deficit) (Continued)**

*(e) Employee Stock Purchase Plan*

In June 2004, the Company authorized the 2004 Employee Stock Purchase Plan (the ESPP Plan). The ESPP Plan authorizes the issuance of 450,000 shares of common stock pursuant to purchase rights granted to employees or to employees of any designated affiliates, which amount will be increased on December 31 of each year, from 2004 until 2013, by the lesser of 1,000,000 shares of common stock or 1.75% of the fully-diluted number of shares of common stock outstanding on that date; provided, however, that the Board of Directors may designate a smaller number of shares by which the authorized number of shares will be increased on such dates. As of December 31, 2004, the plan had not yet commenced initial offerings.

*(f) Notes Receivable from Stockholders*

In April 2004, the Company exercised its call options to repurchase 327,500 shares of common stock from stockholders and offset the aggregate purchase price of \$1,634 against indebtedness of the stockholders. As a result, the stockholders' notes receivable and accrued interest were retired in full and the repurchased shares were retired.

**8. Income Taxes**

The components of income (loss) before income taxes are as follows:

	<b>2004</b>	<b>2003</b>	<b>2002</b>
United States .....	\$ 8,658	\$ (407)	\$(9,234)
Foreign .....	<u>(3,315)</u>	<u>(3,620)</u>	<u>—</u>
Income (loss) before income taxes .....	<u>\$ 5,343</u>	<u>\$(4,027)</u>	<u>\$(9,234)</u>

Income tax expense in 2004 is comprised of federal, state and foreign taxes. The Company incurred no material income tax expense and did not recognize any income tax benefits in periods prior to 2004. All state franchise taxes have been recorded in selling, general and administrative expense in prior periods.

The components of the income tax expense are as follows:

	<b>2004</b>	<b>2003</b>	<b>2002</b>
Current:			
Federal .....	\$ 188	\$ —	\$ —
State .....	34	—	—
Foreign .....	<u>12</u>	<u>—</u>	<u>—</u>
	<u>234</u>	<u>—</u>	<u>—</u>
Deferred:			
Federal .....	—	—	—
State .....	<u>—</u>	<u>—</u>	<u>—</u>
	<u>—</u>	<u>—</u>	<u>—</u>
Total income tax expense .....	<u>\$ 234</u>	<u>\$ —</u>	<u>\$ —</u>

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(In thousands, except share and per share data)

**8. Income Taxes (Continued)**

The reconciliation of expected income tax expense (benefit) computed by applying the statutory federal income tax rate to income (loss) before income taxes and actual income tax expense recorded is as follows:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Income tax expense (benefit) at statutory rate .....	\$ 1,817	\$ (1,369)	\$(3,140)
State tax, net of federal benefit .....	22	—	—
Foreign tax .....	12	—	—
Alternative minimum tax .....	188	—	—
Nondeductible expenses .....	127	6	16
Credits .....	(516)	(532)	(361)
Valuation allowance adjustments related to net operating losses .....	<u>(1,416)</u>	<u>1,895</u>	<u>3,485</u>
Total tax provision .....	<u>\$ 234</u>	<u>\$ —</u>	<u>\$ —</u>

Deferred tax assets consisted of the following as of December 31, 2004 and 2003:

	<u>2004</u>	<u>2003</u>
Deferred tax assets:		
Property and equipment .....	\$ 91	\$ 50
Accruals and reserves .....	1,834	1,055
Research and development and MIC credits .....	4,595	3,422
Capitalized research and development costs .....	8,590	9,694
Net operating loss carryforwards .....	2,318	6,698
Gross deferred tax assets .....	17,428	20,919
Valuation allowance .....	<u>(17,428)</u>	<u>(20,919)</u>
	<u>\$ —</u>	<u>\$ —</u>

The realization of the tax benefits of deferred tax assets is dependent on future levels of taxable income in the periods the items are deductible or creditable. For periods prior to 2004, the Company incurred a pre-tax loss in each period since inception. Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets as of December 31, 2004 and 2003. The valuation allowance for deferred tax assets as of December 31, 2004 and 2003 was \$17,428 and \$20,919, respectively. The net increase (decrease) in the valuation allowance was approximately \$(3,491) and \$1,911 for the years ended December 31, 2004 and 2003, respectively.

As of December 31, 2004, the Company has net operating loss carryforwards of approximately \$6,196 for federal and \$3,616 for state tax purposes. If not utilized, these carryforwards will begin to expire in 2023 for federal tax purposes and 2014 for state tax purposes.

As of December 31, 2004, the Company has research credit carryforwards of approximately \$2,476 and \$2,639 for federal and state tax purposes. If not utilized, the federal carryforwards will expire in various amounts beginning in 2012. The California credit can be carried forward indefinitely. As of December 31, 2004, the Company has state manufacturer investment tax credits (MIC) of \$159, which begin to expire in 2009. As of December 31, 2004, the Company has a federal alternative minimum tax credit of \$272, which can be carried forward indefinitely.

Under the Tax Reform Act of 1986, the amount of benefit from net operating loss and tax credit carryforwards may be impaired or limited in certain circumstances. Events which cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**  
(In thousands, except share and per share data)

**8. Income Taxes (Continued)**

of more than 50%, as defined, over a three-year period. At December 31, 2004, the Company has not yet determined whether an ownership change had occurred that would result in limitations on the current and future utilization of its net operating loss carryforwards. An ownership change likely occurred as a result of the initial public offering but is not expected to impact the current utilization of our net operating loss carryforwards..

**9. Commitments**

The Company leases its facilities under operating lease agreements expiring between 2005 and 2007. Rent expense for the years ended December 31, 2004, 2003 and 2002 was \$485, \$443 and \$402, respectively.

The following table sets forth the Company's contractual obligations as of December 31, 2004 and the years in which such obligations are expected to be settled:

	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008 and thereafter</u>	<u>Total</u>
Future minimum lease commitments .....	\$ 458	\$ 448	\$ 270	\$ —	\$ 1,176
Inventory purchase commitments .....	<u>1,725</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1,725</u>
	<u>\$ 2,183</u>	<u>\$ 448</u>	<u>\$ 270</u>	<u>\$ —</u>	<u>\$ 2,901</u>

Inventory purchase commitments are comprised of the estimated obligation for in-process silicon wafers.

**10. Restructuring Charge**

In order to improve operating efficiency, the Company initiated a restructuring plan in June 2003. The restructuring plan was completed in July 2003. The restructuring action involved a reduction-in-force, which eliminated 13 positions. Affected employees were eligible for severance benefits upon their termination. In 2003, the Company recorded a special charge of \$142 for the severance costs of these employee terminations. All liabilities relating to the restructuring plan were paid as of December 31, 2003.

**11. Valuation and Qualifying Accounts**

<u>Description</u>	<u>Balance at beginning of period</u>	<u>Additions deducted from revenue/ charged to expense</u>	<u>Deductions</u>	<u>Balance at end of period</u>
<b>Year ended December 31, 2004:</b>				
Allowance for doubtful accounts .....	\$ 129	\$ 22	\$ —	\$ 151
Sales returns and allowances .....	537	900	(486)	951
Deferred tax asset valuation allowance ...	\$20,919	\$ —	\$(3,491)	\$17,428
<b>Year ended December 31, 2003:</b>				
Allowance for doubtful accounts .....	\$ 98	\$ 31	\$ —	\$ 129
Sales returns and allowances .....	215	1,174	(852)	537
Deferred tax asset valuation allowance ...	\$19,008	\$1,911	\$ —	\$20,919
<b>Year ended December 31, 2002:</b>				
Allowance for doubtful accounts .....	\$ 40	\$ 58	\$ —	\$ 98
Sales returns and allowances .....	103	1,960	(1,848)	215
Deferred tax asset valuation allowance ...	\$15,462	\$3,546	\$ —	\$19,008

**VOLTERRA SEMICONDUCTOR CORPORATION AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

(In thousands, except share and per share data)

**12. Subsequent Events**

*(a) Employee Stock Purchase Plan*

In February 2005, the Compensation Committee of the Company's Board of Directors adopted initial offerings of the Company's common stock under the Company's 2004 Employee Stock Purchase Plan for employees of the Company and its wholly-owned subsidiary.

The initial offerings began on February 21, 2005 and will end on May 15, 2005 and will consist of one purchase period. The purchase date for the initial offerings is May 15, 2005. Employees who participate in the initial offerings may contribute up to 15% of their earnings for the purchase of common stock, and may purchase up to 1,250 shares of common stock, pursuant to the offerings, subject to certain limitations. The price of the Company's common stock purchased pursuant to the initial offerings is 85% of the lesser of the fair market value of the common stock on February 21, 2005 or May 15, 2005.

**13. Selected Quarterly Financial Information (unaudited)**

<u>2004</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Net revenue .....	\$ 7,615	\$ 9,144	\$ 12,562	\$ 14,614
Gross margin .....	\$ 3,957	\$ 4,902	\$ 6,993	\$ 8,448
Net income .....	\$ 269	\$ 566	\$ 1,540	\$ 2,734
Earnings per common share:				
Basic .....	\$ 0.05	\$ 0.10	\$ 0.09	\$ 0.12
Diluted .....	\$ 0.01	\$ 0.03	\$ 0.06	\$ 0.10
<u>2003</u>	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Net revenue .....	\$ 6,069	\$ 6,237	\$ 6,308	\$ 6,504
Gross margin .....	\$ 2,349	\$ 2,216	\$ 2,943	\$ 3,067
Net loss .....	\$(1,200)	\$(1,487)	\$ (791)	\$ (548)
Loss per common share:				
Basic .....	\$ (0.22)	\$ (0.27)	\$ (0.14)	\$ (0.10)
Diluted .....	\$ (0.22)	\$ (0.27)	\$ (0.14)	\$ (0.10)

Basic and diluted earnings (loss) per share are computed independently for each of the quarters presented. Therefore, the sum of quarterly basic and diluted per share information may not equal annual basic and diluted earnings (loss) per share.

## Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Volterra Semiconductor Corporation:

We have audited the accompanying consolidated balance sheets of Volterra Semiconductor Corporation and subsidiaries (the Company) as of December 31, 2004 and 2003, and the related consolidated statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2004. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements 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 Volterra Semiconductor Corporation and subsidiaries as of December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America.

/s/ KPMG LLP

Mountain View, California  
January 28, 2005, except as to Note 12,  
which is as of February 21, 2005

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

Not applicable.

**Item 9A. Controls and Procedures**

As of the end of the period covered by this report, an evaluation was performed under the supervision and with the participation of our management, including our chief executive officer and chief financial officer (collectively, our “certifying officers”), of the effectiveness of the design and operation of our disclosure controls and procedures. Based on their evaluation, our certifying officers concluded that these disclosure controls and procedures are effective in providing reasonable assurance that the information required to be disclosed by us in our periodic reports filed with the Securities and Exchange Commission (“SEC”) is recorded, processed, summarized and reported within the time periods specified by the SEC’s rules and SEC reports.

We believe that a controls system, no matter how well designed and operated, is based in part upon certain assumptions about the likelihood of future events, and therefore can only provide reasonable, not absolute, assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

In addition, we have reviewed our internal controls over financial reporting and have made no changes during the quarter ended December 31, 2004, that our certifying officers concluded materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

Not applicable.

**PART III**

Certain information required by Part III of this Form 10-K is omitted from this report because the registrant will file a definitive Proxy Statement within 120 days after the end of its fiscal year pursuant to Regulation 14A for its 2005 Annual Meeting of Stockholders (the “Proxy Statement”), and certain information included therein is incorporated herein by reference.

**Item 10. Directors and Executive Officers of the Registrant**

The information required by this item, including such information regarding our directors and executive officers and compliance with Section 16(a) of the Securities Exchange Act of 1934, is incorporated herein by reference from the Proxy Statement. We have adopted a written code of ethics that applies to our principal executive officer, principal financial officer and principal accounting officer, or persons performing similar functions. The code of ethics is posted on our website at [www.voltera.com](http://www.voltera.com). Amendments to, and waivers from, the code of ethics that applies to any of these officers, or persons performing similar functions, and that relates to any element of the code of ethics definition enumerated in Item 406(b) of Regulation S-K, will be disclosed at the website address provided above and, to the extent required by applicable regulations, on a Current Report on Form 8-K.

**Item 11. Executive Compensation**

The information required by this item is incorporated herein by reference from the section entitled “Executive Compensation” in the Proxy Statement.

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

The information required by this item is incorporated herein by reference from the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement.

### **Item 13. *Certain Relationships and Related Transactions***

The information required by this item is incorporated herein by reference from the sections entitled “Certain Transactions” and “Equity Compensation Plan Information” in the Proxy Statement.

### **Item 14. *Principal Accountant Fees and Services***

The information required by this item is incorporated herein by reference from the section entitled “Proposal 2 — Ratification of Selection of Independent Auditors” in the Proxy Statement.

Consistent with Section 10A(i)(2) of the Securities Exchange Act of 1934, as added by Section 202 of the Sarbanes-Oxley Act of 2002, we are responsible for listing the non-audit services approved by our Audit Committee to be performed by KPMG LLP, our independent registered public accounting firm. Non-audit services are defined as services other than those provided in connection with an audit or a review of our financial statements and other than those services that are normally provided in connection with statutory and regulatory filings or engagements. In the period covered by this report, our Audit Committee pre-approved the following non-audit services rendered, currently being rendered, or to be rendered, to us by KPMG LLP: services rendered in connection with a Singapore grant application.

## **PART IV**

### **Item 15. *Exhibits and Financial Statement Schedules***

#### **(a) 1. *Financial Statements***

See Index to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K, which is incorporated herein by reference.

#### **2. *Financial Statement Schedules***

See Note 11 on page 47 in Notes to Consolidated Financial Statements.

#### **3. *Exhibits***

<b><u>Exhibit Number</u></b>	<b><u>Description Of Document</u></b>
3.1(1)	Amended and Restated Certificate of Incorporation of Volterra Semiconductor Corporation.
3.2(2)	Amended and Restated Bylaws of Volterra Semiconductor Corporation.
4.1	Reference is made to Exhibits 3.1 and 3.2.
4.2(3)	Specimen Stock Certificate.
10.1(3)	Amended and Restated Investor Rights Agreement, dated October 2, 2001, by and among the Registrant and certain holders of the Registrant’s securities.
10.2(3)	Amendment to Amended and Restated Investor Rights Agreement, dated January 17, 2002, by and among the Registrant and certain holders of the Registrant’s securities.
10.3(3)*	1996 Stock Option Plan and forms of related agreements.
10.4*	2004 Equity Incentive Plan and forms of related agreements.
10.5(3)*	2004 Non-Employee Directors’ Stock Option Plan and form of related agreement.
10.6(3)*	2004 Employee Stock Purchase Plan.
10.7(3)*	Form of Indemnity Agreement entered into between the Registrant and certain of its officers and directors.
10.8(3)*	Offer letter between the Registrant and Jeffrey Staszak, dated February 24, 1999.
10.9(3)*	Offer letter between the Registrant and William Numann, dated October 11, 2000.
10.10(3)*	Offer letter between the Registrant and Daniel Wark, dated September 13, 2000.

<u>Exhibit Number</u>	<u>Description Of Document</u>
10.11(3)*	Offer letter between the Registrant and Anthony Stratakos, dated September 27, 1996.
10.12(3)*	Offer letter between the Registrant and Craig Teuscher, dated September 27, 1996.
10.13(3)*	Offer letter between the Registrant and Greg Hildebrand, dated September 27, 1996.
10.14(4)	Lease Agreement, dated June 23, 2000, between ProLogis Limited Partnership — I and the Registrant.
10.15	First Amendment to Lease Agreement, dated October 20, 2004, between ProLogis Limited Partnership — I and the Registrant.
10.16*	2005 Management Bonus Plan.
21.1(3)	Subsidiaries of the Registrant.
23.1	Consent of KPMG LLP.
24.1	Power of Attorney (included on the signature pages hereto).
31.1	Certification of Chief Executive Officer required under Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Chief Financial Officer required under Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1(5)	Certification of Chief Executive Officer required under Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350.
32.2(5)	Certification of Chief Financial Officer required under Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350.

- 
- (1) Previously filed as Exhibit 3.1 to Volterra Semiconductor Corporation's Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2004, as filed with the Securities and Exchange Commission on September 9, 2004, and incorporated by reference herein.
  - (2) Previously filed as Exhibit 3.4 to Volterra Semiconductor Corporation's Registration Statement on Form S-1 (No. 333-115614), as filed with the Securities and Exchange Commission on May 19, 2004, as amended, and incorporated by reference herein.
  - (3) Previously filed as the correspondingly numbered exhibit to Volterra Semiconductor Corporation's Registration Statement on Form S-1 (No. 333-115614), as filed with the Securities and Exchange Commission on May 19, 2004, as amended, and incorporated by reference herein.
  - (4) Previously filed as Exhibit 10.15 to Volterra Semiconductor Corporation's Registration Statement on Form S-1 (No. 333-115614), as filed with the Securities and Exchange Commission on May 19, 2004, as amended, and incorporated by reference herein.
  - (5) The certifications attached as Exhibits 32.1 and 32.2 accompany this Annual Report on Form 10-K pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed "filed" by Volterra Semiconductor Corporation for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

\* Indicates a management contract or compensatory plan or arrangement.

(b) *Exhibits*

See Item 15(a) above.

(c) *Financial Statement Schedules*

See Item 15(a) above.

**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.

VOLTERRA SEMICONDUCTOR CORPORATION

By:           /s/ JEFFREY STASZAK            
          Jeffrey Staszak  
          *President and Chief Executive Officer*

Dated: February 28, 2005

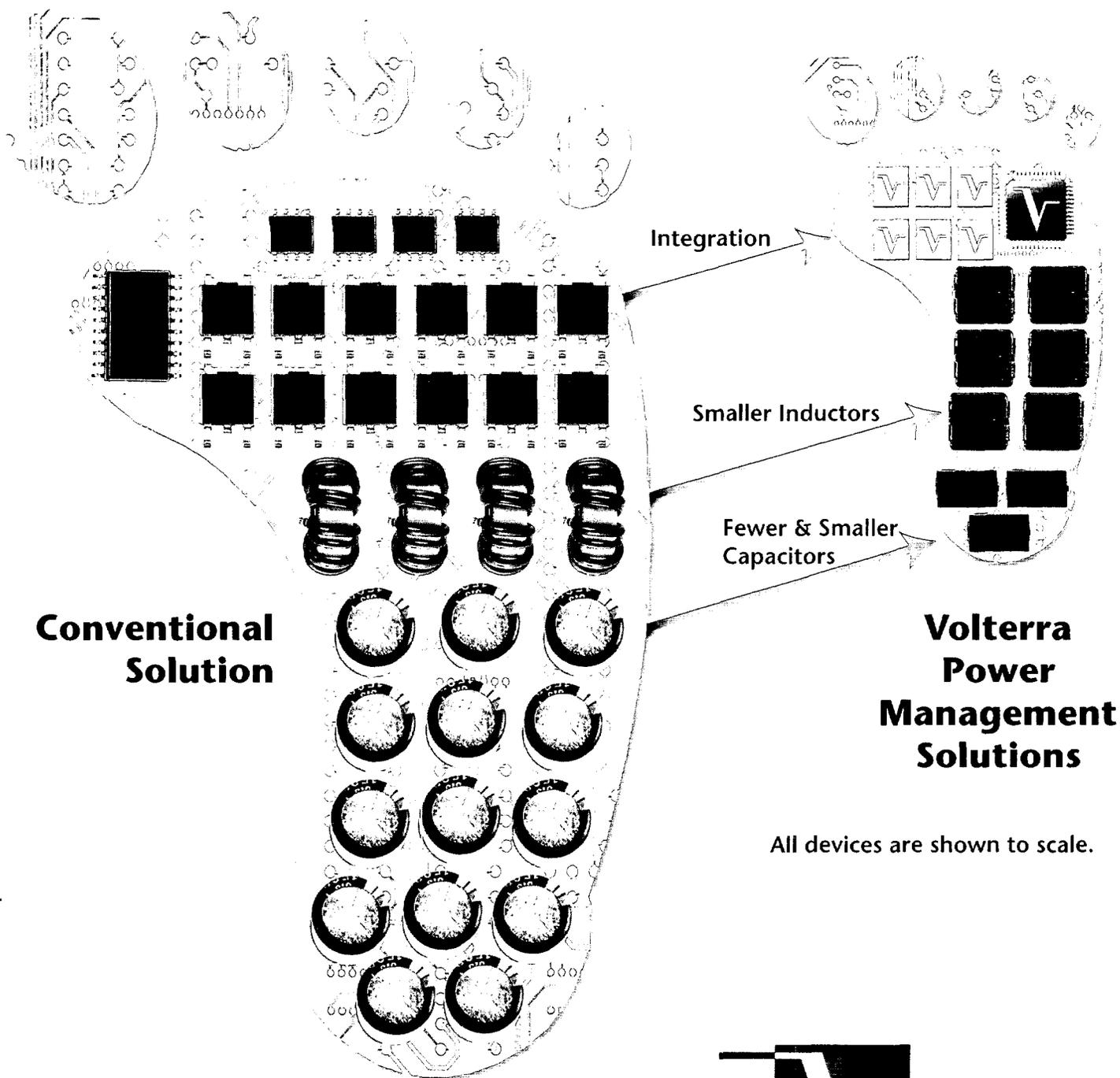
## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jeffrey Staszak and Greg Hildebrand, and each of them, acting individually, as his attorney-in-fact, each with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this annual report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JEFFREY STASZAK</u> Jeffrey Staszak	President, Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2005
<u>/s/ GREG HILDEBRAND</u> Greg Hildebrand	Chief Financial Officer (Principal Financial and Accounting Officer)	February 28, 2005
<u>/s/ CHRIS BRANSCUM</u> Chris Branscum	Director	February 28, 2005
<u>/s/ MEL FRIEDMAN</u> Mel Friedman	Director	February 28, 2005
<u>/s/ ALAN KING</u> Alan King	Director	February 28, 2005
<u>/s/ CHRISTOPHER PAISLEY</u> Christopher Paisley	Director	February 28, 2005
<u>/s/ EDWARD ROSS</u> Edward Ross	Director	February 28, 2005
<u>/s/ ANTHONY STRATAKOS</u> Anthony Stratakos	Director	February 28, 2005
<u>/s/ CRAIG TEUSCHER</u> Craig Teuscher	Director	February 28, 2005
<u>/s/ EDWARD WINN</u> Edward Winn	Director	February 28, 2005

Volterra designs, develops and markets proprietary high-performance analog and mixed-signal power management semiconductors for the computing, storage, networking and consumer markets.



All devices are shown to scale.



*Silicon Power Solutions™*

# Volterra Corporate Information

## OFFICERS

Jeffrey Staszak  
*President & Chief Executive Officer*

Greg Hildebrand  
*Vice President of Finance & Chief Financial Officer*

William Numann  
*Vice President of Marketing*

Anthony Stratakos, Ph.D.  
*Vice President of Advanced Research and Development & Chief Technical Officer*

Craig Teuscher, Ph.D.  
*Vice President of Sales and Applications Engineering*

Daniel Wark  
*Vice President of Operations*

## DIRECTORS

Alan King  
*Chairman of the Board*

Chris Branscum  
*Director*

Mel Friedman  
*Director*

Christopher Paisley  
*Director*

Edward Ross, Ph.D.  
*Director*

Jeffrey Staszak  
*President, Chief Executive Officer & Director*

Anthony Stratakos, Ph.D.  
*Vice President of Advanced Research and Development, Chief Technical Officer & Director*

Craig Teuscher, Ph.D.  
*Vice President of Sales and Applications Engineering & Director*

Edward Winn  
*Director*

## ANNUAL MEETING

The 2005 Annual Meeting of Stockholders will be held at 11:00 a.m. on Wednesday, May 18, 2005 at:

Fremont Marriott  
46100 Landing Parkway  
Fremont, California

## COMMITTEES OF THE BOARD

### Audit Committee

Christopher Paisley, Chairman  
Chris Branscum  
Edward Winn

### Compensation Committee

Edward Ross, Chairman  
Chris Branscum  
Christopher Paisley

### Nominating and Corporate Governance Committee

Alan King, Chairman  
Mel Friedman  
Edward Ross

## TRANSFER AGENT

For inquiries related to stock certificates, including changes of address, lost certificates and dividends, please contact:

### Registrar & Transfer Company

10 Commerce Drive  
Cranford, New Jersey 07016  
Phone: 800.368.5948  
Website: [www.rtco.com](http://www.rtco.com)

## EXCHANGE LISTING

Volterra's common stock is quoted on the Nasdaq National Market under the symbol "VLTR."

## INDEPENDENT AUDITORS

KPMG LLP - Mountain View, CA

## LEGAL COUNSEL

Cooley Godward LLP - Palo Alto, CA

## ADDITIONAL INFORMATION

If you would like to receive additional information regarding the company, including annual and quarterly reports, we will gladly mail it directly to you without charge. You may add your name to our mailing list by either calling Investor Relations at 510.743.1718 or by visiting our website at [www.volterra.com](http://www.volterra.com).

## CORPORATE HEADQUARTERS

Volterra Semiconductor Corporation  
3839 Spinnaker Court  
Fremont, California 94538  
Phone: 510.743.1200  
Fax: 510.743.1600  
Website: [www.volterra.com](http://www.volterra.com)



**Worldwide Headquarters**  
3839 Spinnaker Court  
Fremont, CA 94538-6537  
USA  
Tel: 510.743.1200

**Asia Regional Headquarters**  
No. 10 Ang Mo Kio Street 65  
TechPoint #06-03  
Singapore 569059  
Tel: +65 6483.2922