ADVANCED POWER TECHNOLOGY INC
Form 10-K
March 08, 2005

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

ý **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

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

Commission file number 001-16047

ADVANCED POWER TECHNOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware	**93-0875072**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

405 SW Columbia Street, Bend, Oregon 97702

(Address of principal executive offices and zip code)

(541) 382-8028

(Registrant s telephone number)

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

None

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

Common Stock, par value $.01 per share

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 the filing requirements for the past 90 days. Yes ý No o

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 the registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or in any amendment to this Form 10-K. ý

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). Yes ý No o

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of June 30, 2004, the last trade date for the end of our most recent fiscal second quarter, was $79 million based upon the composite closing price of the Registrant s Common Stock on the Nasdaq National Market System on that date.

The number of shares of the Registrant s Common Stock outstanding as of February 22, 2005 was 10,696,510 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s proxy statement in connection with its 2005 Annual Meeting of Shareholders are incorporated by reference into Part III.

ADVANCED POWER TECHNOLOGY, INC.

FORM 10-K

TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS.

Advanced Power Technology, Inc. was incorporated in Delaware in 1984. Except as expressly indicated or unless the context otherwise requires, the Company , APT , we , our or us means Advanced Power Technology, Inc. and its subsidiar Additional information about our Company, including access to periodic and current reports are available free of charge on our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Our website address is www.advancedpower.com

Company Overview

We are a leading designer, manufacturer and marketer of high-performance RF and switching power semiconductors. We are primarily focused on the high-power, high-speed segment of the power semiconductor market. Power semiconductors function as power amplifiers and power switches. They increase system efficiency and reliability by precisely managing and regulating electricity and converting it into the form required by electrical and electronic products. Our products permit the design of more compact end products and improve system features and functionality. Our products are found in diverse applications, such as F-22 fighter cockpits, the Boeing 777 back-up power system, the International Space Station, air traffic control radar systems, semiconductor capital equipment, MRI systems, arc welding equipment, industrial lasers, solar power panels and wireless communications base stations.

Power semiconductors generally dissipate more than one watt of power and have a broad range of frequency capabilities. We primarily focus on high-power, high-speed devices that dissipate at least several hundred watts of power and require operating frequencies greater than 20 kHz, or 20,000 cycles per second (e.g., the product may switch on and off up to 20,000 times per second).

Our RF power semiconductors are transistors used as amplifiers for electrical signals and as high-frequency electronic switches. Our RF transistors are used in power amplifier applications, such as radio transmitters or receivers for communications, radar and avionics. Our RF transistors are also used in RF power sources for induction heating, dielectric heating, plasma generation and illumination.

Our switching power semiconductors include transistors and diodes, each of which control the flow of electricity. Our switching power semiconductors are typically used in power converters/supplies to provide power to electronic equipment in the required format. This typically involves converting electrical power from alternating current (AC) to direct current (DC), converting one DC voltage to another or converting DC power to AC power. As an example, the microprocessor and memory chips in a computer server require a power converter because they typically operate at less than five volts DC while a standard electrical wall outlet supplies 110 to 220 volts AC.

We provide a wide variety of standard products as well as highly customized solutions for our customers, depending on their requirements. Our products are available as discrete components or as modules, which are integrated solutions that combine many discrete components to provide a complete power function. We sell our products directly to OEMs and through distributors. Markets for our products, typical applications and examples of customers and end users include:

Military and aerospace. We supply manufacturers of systems such as radar and avionics equipment, including Boeing, Lockheed Martin, Raytheon and Rockwell Collins;

Semiconductor capital equipment. We supply manufacturers of equipment such as thin film deposition and plasma etch semiconductor capital equipment, including Advanced Energy Industries, or AEIS, Applied Materials, MKS Instruments and Novellus;

Medical and industrial. We supply manufacturers of products such as MRI systems, implantable defibrillators and arc welding equipment, including Analogic, Fronius, Guidant, Microsemi and Siemens Medical; and

Communications and data processing. We supply manufacturers of computer servers, data storage equipment and wireless communications infrastructure, including EMC, Emerson, IBM, L-3 and Motorola.

Market Overview and Key Trends

Our high-performance RF and switching products serve a portion of the large and growing high-speed, high-power subset of the overall power semiconductor market. Statistics published by the Semiconductor Industry Association (SIA) report in November of 2004 reflect that the worldwide market for all power semiconductors for 2005 is projected to remain flat compared to 2004 and increase by 12.5% from $11.2 billion in 2005 to $12.6 billion in 2007. For the worldwide markets in which we participate (radio frequency, or RF transistors, Power MOSFETs, Insulated Gate Bipolar Transistors, or IGBTs and high power rectifiers), the SIA has also forecasted that 2005 will also remain flat compared to 2004 and that 2005 to 2007 will increase by 13.5% from $8.0 billion in 2005 to $9.0 billion in 2007. APT s product lines serve a collection of niche markets which make up a subset of the overall power semiconductor markets referenced above, focusing on high power and high frequency applications. We focus on parts of the overall power semiconductor market where we believe that our advanced technology is best suited to meet the needs of customers. Industry statistics related to APT s specific markets are not generally available and cannot be reasonably estimated.

We believe demand is being driven by the emergence of new applications that require higher power, higher frequency semiconductors that more precisely manage power, and also by the need to increase performance and improve power quality for existing applications. Within each of our markets, we expect the following key trends to drive demand:

Military and aerospace. Security concerns, increasing domestic and international air traffic volumes and national defense are becoming catalysts for purchases of advanced radar and avionics, such as collision-avoidance equipment, that require precise, high-performance power management solutions. In addition, RF power semiconductors are being used in radar systems as a replacement for vacuum tubes, enhancing the performance and reducing the size of those systems.

Semiconductor capital equipment. According to the SIA, the worldwide semiconductor market is expected to remain at 2004 levels in 2005 and grow from $213.8 billion in 2005 to $259.4 billion in 2007, or 21%. Gartner Dataquest also projects a strengthening of the market from 2005-2007, forecasting that semiconductor device manufacturers will increase purchases of semiconductor capital equipment by a total of 21% from 2005 to 2007. In addition to overall market expansion, advancements in thin film deposition and plasma etching processes are increasing the need for high-performance, high-power, high-speed power semiconductors.

Medical and industrial. Advanced medical technology increasingly requires manufacturers of electronic components to improve functionality and decrease size. For example, implantable defibrillators have critical power regulation requirements and size constraints. In the industrial markets, new applications that utilize the same technologies used in semiconductor processing to produce flat panel displays and optical and glass coatings are expected to drive significant future growth for high-performance, high-power, high-speed power semiconductors. We believe demand is also being driven by the need for more efficient energy use resulting from rising energy costs, government mandates and environmental concerns.

Communications and data processing. As voice, video and data continue to converge into one digital stream, the power demands of traditional and emerging transmission systems are changing. Communications service providers

and equipment manufacturers are looking to modify and supplement existing infrastructures to address these new demands for data transmission and storage. High-performance power semiconductors give providers and manufacturers improved flexibility in addressing these demands.

Our Competitive Strengths

Our extensive experience as a supplier of high-performance, high-power, high-speed power semiconductors has enabled us to develop the following key strengths, which we believe differentiate us from our competitors:

Technological leadership in the market for high-performance power semiconductors

We are a pioneer in our industry, and have been designing and manufacturing power semiconductor devices since 1984. As of December 31, 2004 we have received 22 U.S. patents and 25 foreign patents on our core technology, with applications pending for 20 additional U.S. and foreign patents. In 1989 we introduced our core Power MOS product line, which is now in its fourth generation. Our technology provides among the highest frequency and power capabilities available. Our RF product line was introduced in 1996, was bolstered by two acquisitions in 2002 and provides among the highest operating voltages available. In January 2005, we also acquired 1 new patent and 5 pending applications in connection with our acquisition of PowerSicel, Inc. Our focus has positioned us as a technology leader in certain key applications such as MRI systems, semiconductor capital equipment, avionics and L-band and S-band radar systems.

Full suite of high-performance RF and switching power semiconductors

We provide our customers with a broad portfolio of RF and switching power semiconductor solutions, which are available in thousands of configurations. Our RF products are available in voltage and speed configurations ranging from 12 to 250 volts and 1 MHz to 4 GHz frequencies. Our switching products are available in voltage and speed configurations ranging from 100 to 1400 volts and 20 kHz to 1 MHz frequencies. Our products are available as standard or customized solutions and are offered as discrete components or modules that may consist of more than 500 components.

Close collaboration with and support for our customers

We typically collaborate closely with our customers in order to optimize their use of our power semiconductor products. We believe that the work of our team of product and application engineers enables us to strengthen our relationship with these customers. For example, significant cooperative efforts with Microsemi and certain of the leading implantable medical device manufacturers have earned us design wins for devices manufactured by Guidant and St. Jude Medical. Our support services ensure that our products are deployed correctly and continue to meet or exceed customer expectations.

Diversified end markets that provide opportunities for growth and a defense against cyclical business environments

For the year ended December 31, 2004, the revenue from our military and aerospace, semiconductor capital equipment, medical and industrial, and communications and data processing markets were 28.0%, 25.1%, 26.2% and 20.7%, respectively. Given the broad range of applications for our products and the increased demand for high-performance, high-power, high-speed power semiconductors in our target markets, we believe these markets provide continued opportunities for growth. Furthermore, because the markets we serve are diversified, we believe that this provides a mitigating factor for the cyclical effects of any one industry on our business. For example, military spending has been relatively stable for applications containing our products, which may moderate the peaks and troughs of highly cyclical businesses, such as semiconductor capital equipment.

Long product lifecycles with frequent sole-source supply relationships

The manufacturers we supply tend to produce infrastructure equipment or complex systems that have relatively long product life cycles. Generally, once a manufacturer has incorporated our products in a system, they remain a component of the manufacturer s equipment until it is redesigned, which is often many years later. In addition, we are a sole-source supplier for many of our customers applications as a result of our technological advantages and our close collaboration in the design phase with our customers.

Network of leading distributors, OEM customers and end users

Throughout our history, we have developed relationships with many key distributors, large OEMs and end users that are leaders in their respective markets. Examples of the manufacturers we supply are described in Business Company Overview. We believe that the strength of this

network reflects the quality of our technology and service and provides opportunities for growth.

Proven management and strong Board of Directors

Patrick Sireta, our President, Chief Executive Officer and Chairman of the Board, joined us in 1985, and other key members of senior management have been with us for more than 15 years, including Russell Crecraft, our Chief Operating Officer, Greg Haugen, our Chief Financial Officer, Dah Wen Tsang, our Vice President of Engineering, Research and Development, John Hess, our Vice President of Power Products, and Thomas Loder, our Vice President of Sales and Marketing. Members of our Board also have extensive semiconductor industry experience and include the current Chief Executive Officer of AEIS and the former Chief Executive Officer of VLSI Technology.

Our Strategy

Our goal is to be the world leader in providing high-performance power semiconductors for high-power, high-speed applications. To achieve our goal, we intend to:

Increase our penetration of core markets and customers and expand globally

We intend to increase revenue by further expanding our customer base and our core markets and further penetrating key customers. For example, we recently added a leading Japanese semiconductor capital equipment vendor as a customer and have secured a number of new design wins with existing customers. We will continue to seek new customers in Asia and Europe and leverage our technology to penetrate new and adjacent market opportunities. For example, a leading German manufacturer recently selected our products for use in alternative energy solar panels, and we were awarded a $4.0 million purchase order for an Asian radar system.

Continue to develop and commercialize leading-edge technology for new and existing applications

Our expertise in serving the high-performance, high-power, high-speed power semiconductor market has enabled us to establish a strong foundation of core technologies. We intend to increase the scope of this portfolio by improving our core platform and by developing and commercializing new technologies. For example, we have recently released a family of RF products designed for use in S-band radar systems, which is a growing area within the military and aerospace market. In addition, in order to decrease certain of our customers time to market and product costs, we recently introduced a line of standard switching modules that offer industry standard package outlines and footprints but utilize our proprietary technology. We have also announced new discrete and module products using silicon carbide, or SiC, and Schottky diodes that offer our customers faster switching speeds and reduced power consumption.

Capitalize on and expand our RF expertise

We intend to increase our profitability by continuing to increase sales of our higher margin RF products. Our RF products represented approximately half of our revenue and more than half of our gross profit for the years ended December 31, 2004 and 2003. Because these products require the highest levels of performance and consistency, we intend to continue to manufacture them using our own proprietary manufacturing processes. We consider our proprietary RF technical and manufacturing expertise to be a key competitive differentiator and intend to expand this expertise through internal development and acquisitions.

Continue to optimize manufacturing operations

We plan to continue to optimize and rationalize our manufacturing operations in efforts to reduce and control costs. For example, we consolidated our internal manufacturing operations, largely by transferring the wafer fabrication processes located at our Montgomeryville, Pennsylvania site to our Bend, Oregon facilities. We also intend to utilize lower cost offshore subcontractors for both foundry services and assembly and testing to reduce our overall product manufacturing costs. In 2004, we transferred more of our RF assembly and testing from our subcontractor in Mexico to our Malaysian provider, which also reduced our manufacturing costs. Other initiatives, which include shipping products directly to customers from our subcontractors when possible and increasing the use of lower cost plastic packaging, may also reduce our future expenses. We will continue to monitor our manufacturing operations and needs to identify other potential efficiencies and costs savings.

Seek to enhance growth through selective acquisitions

Our strategy includes acquiring and integrating additional technological capabilities and complementary product lines through selective acquisitions and strategic investments. We are particularly focused on opportunities in RF power semiconductors.

In 2002, we demonstrated this by acquiring GHz Technology and the product lines and certain assets of Microsemi RF Products to help us further penetrate the markets for RF devices. We believe that these acquisitions have positioned us as a leading supplier in bipolar RF power transistors and added substantial RF technology, engineering, manufacturing and marketing capabilities.

In 2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. In January 2005, we acquired PowerSicel, Inc. PowerSicel s and Zeus Semiconductor s combined expertise in silicon carbide and other compound semiconductor technology and products complement APT s current portfolio of RF products which operate at frequencies ranging from 1 MHz to 4 GHz and are sold into applications such as semiconductor capital equipment, medical imaging, radar, avionics and wireless communications. We believe these acquisitions add valuable development capability to APT s core capability in RF power transistors allowing APT to better serve its current markets and to expand into new markets.

Products

Our power semiconductor products combine innovative proprietary and patented semiconductor technology, designs, processes and packaging solutions that are optimized for our customers applications. They can be broadly categorized into two categories: RF and switching power semiconductors. The following table summarizes our major product offerings:

Product Group	Product Family	Product	Voltage	Frequency	Typical End Applications
RF	Transistors	Bipolar	12 - 50	1 MHz - 4 GHz	Avionics, Radar,
			100 - 250	1 MHz - 200 MHz	MRI, Plasma
	Transistors	MOSFETs	28 - 50	1 MHz - 500 MHz	Generation, Lasers,
			28	1 GHz - 2 GHz	Two-way Radios
	Modules	Power Function	100 - 250	1 MHz - 13 MHz	
Switching	Transistors	MOSFETs	100 - 1400	20 kHz - 1 MHz	Cellular Base
		IGBTs	300 - 1200	20 kHz - 200 kHz	Stations, Sonar,
	Diodes	FREDs	200 - 1200	20 kHz - 200 kHz	Defibrillators, Solar
		Schottky	200 - 1200	20 kHz - 1 MHz	Power, Arc Welding,
	Modules	Power Function	100 - 1200	20 kHz - 1 MHz	Plasma Generation

IGBT stands for an insulated gate bipolar transistor.

FRED stands for a fast recovery epitaxial diode.

MOSFET stands for a metal oxide semiconductor field effect transistor.

RF Power Semiconductors

RF power semiconductors are typically used as amplifiers of electrical signals or as high-frequency electronic switches. Our RF products span the frequency range from 1 MHz to 4 GHz with operating voltages from as low as a few volts to as high as 250 volts. RF power semiconductors are used in virtually all of our end markets and share many of the same customers as our switching power semiconductors. With these products we are positioned to serve such applications as communication radios, non-cellular base stations, MRI systems, semiconductor capital equipment, radar, avionics and military communications.

Our RF power semiconductor products include:

Bipolar transistors. These products are primarily used in military and aerospace and non-cellular communication applications and were acquired as part of our two acquisitions in 2002; and

MOSFETs. We introduced our first RF MOSFETs in 1996, and bolstered this capability with two acquisitions in 2002.

Switching Power Semiconductors

Switching power semiconductors are generally used as electronic switches in power supplies for the highly efficient and precise control of electrical power. These power supplies are the dominant type of power supply used for high power applications and are deployed in virtually all of our end markets. Our switching products span the frequency range from 20 kHz to 1 MHz with operating voltages from as low as 100 volts to as high as 1400 volts.

Our switching power semiconductor products include:

MOSFETs. Based on our original core proprietary and patented technology, our MOSFET products include Power MOS IV introduced in 1989, Power MOS V introduced in 1999, Power MOS VI introduced in 1999 and Power MOS 7 introduced in 2000. Each succeeding generation offers performance improvements over the preceding generation allowing us to continue to provide leading-edge products to our customers.

IGBTs. Our IGBTs are based on our core MOSFET technologies and are used as lower cost alternatives to MOSFETs in a number of applications.

Diodes. Our FRED and Schottky diodes are complementary products to our transistors since most applications require both transistors and diodes. Diodes control current flow in circuits by allowing current to pass in one direction but not in the other. Transistor performance is often affected by the performance of the diode in the power circuit and our diodes are optimized to take maximum advantage of our advanced transistor technologies.

Packaging

We package our discrete products in either plastic or hermetically sealed packages. Plastic packaged products are more cost effective and represent the majority of our unit volumes. Our hermetically sealed products are typically used in high-reliability applications, such as those within the military and aerospace market.

We also package our solutions as modules, which combine a number of single components together to provide a complete power function. These modules cover a wide range of integration and complexity, from relatively simple functions integrating less than ten components to fully integrated functions integrating more than 500 components in a single power module. These modules can often provide performance, size, cost and time to market advantages over discrete power semiconductors. For customer-specific applications we offer customized Application Specific Power Modules, or ASPMs. In addition, we recently introduced a line of standard modules that offer industry standard package outlines and footprints but utilize our proprietary technology.

Research and Development

Our research and development efforts focus on improving and developing new core technologies and products. We continually focus on internal improvements in our technology, such as reducing feature size, to improve the efficiency and speed of our products, and on incorporating outside technological advances, for example, in packaging processes and materials, to ensure that our products meet our high performance standards. We also spend significant engineering time deriving new products from our core products in order to address specific customer or market needs.

Our RF semiconductor research and development takes place at our Bend, Oregon, Santa Clara, California and Montgomeryville, Pennsylvania facilities. Our discrete switching power semiconductor research and development takes place at our Bend, Oregon facility. Power module research and development takes place at our Bordeaux, France facility. In January 2005, we acquired PowerSicel, Inc., in Boulder, Colorado, where we will conduct our research and development efforts on silicon carbide and other compound semiconductor technology and products for wide band gap applications.

Sales, Marketing and Distribution

We sell our products to most of our OEM customers through a network of independent sales representatives that are managed by our internal sales organization. As of December 31, 2004, we had 36 independent sales representatives.

We generally use independent distributors to develop and service our smaller volume accounts worldwide and as our primary sales channels in several countries. We have two global distributors, four national distributors in North America, and 19 single country distributors who cover Western Europe and Asia. Currently, Richardson Electronics is our leading distributor based on revenue. In 2003, we added Future Electronics as a worldwide distributor. Our distributors not only enhance our ability to meet the needs of our smaller volume customers, but also permit increased revenue to large manufacturing customers by freeing up sales and support resources. Our distributors have certain stock rotation rights which allow them to rotate up to 5% of their products every six months in exchange for an order of an equal amount of new product. We monitor inventory levels at our key distributors on a monthly basis. In certain circumstances we may elect to give product-specific price protection to our distributors.

Our application engineering, product engineering and product marketing organizations provide technical support for the sales force. We employ 30 engineers in these organizations, as well as support staff. Customer service for all of our accounts is handled by our customer service organizations in each of our locations. Our website gives our customers access to information about us and our products, enables them to request quotations or technical assistance and provides links to our local sales channels worldwide.

Sales Process

We work closely with our OEM customers, and often the end customers of our distributors, in identifying opportunities for system designs using our products. The customer s decision to use our product in its system design is based upon product features and

performance, breadth of product line, customer service and support, quality and reliability and competitive pricing. Typically, a customer s design engineers will then collaborate with our application and product engineering organizations to design and test the end product before finalizing a decision.

Once an end user begins production of a system, it will typically continue to incorporate our products for several years, since these systems usually have long lifecycles. Our sales managers monitor products through this cycle for changes or developments with our end users. We are often a sole-source supplier for many of our customers applications, particularly in the military and aerospace, semiconductor capital equipment and medical markets.

Orders

As of December 31, 2004, our twelve month backlog, representing booked orders with delivery dates scheduled within the next twelve months, was $17.2 million, compared to $15.2 million as of December 31, 2003. The amount of the backlog shippable in the first quarter of 2005 was $10.5 million compared to $10.7 million for the first quarter of 2004. This represents 61% and 70% of booked backlog at December 31, 2004 and 2003, respectively. Our business is characterized by short-term orders and shipment schedules, and customer orders typically can be canceled or rescheduled without penalty to the customer.

Customers

For the year ended December 31, 2004, our largest volume OEM customers were AEIS, MKS Instruments, Microsemi, Rockwell Collins, and Emerson. In 2004, approximately 65.3% of our revenue was from customers in North America, 15.3% from customers in Europe, and 19.4% from customers in Asia and the rest of the world.

Revenue from our five largest OEM and distributor customers accounted for 46.6%, 38.0%, and 37.2% of our total revenue in 2004, 2003, and 2002, respectively. Richardson Electronics accounted for 21.9% of our revenue in 2004, 15.8% of our revenue in 2003, and 12.0% of our revenue in 2002. The 2004 increase for Richardson Electronics in the overall percentage of our revenue is primarily due to utilizing Richardson to import products to certain key Asian customers. No other customer exceeded 10.0% of our revenue during these periods. We generally provide our customers a 12-month repair or replacement warranty.

Geographic information regarding our revenue is included in Note 12 of the Notes to Consolidated Financial Statements of this Report.

Manufacturing and Facilities

RF Power Semiconductors

Wafer fabrication for our RF semiconductor products is performed in our internal wafer fabrication sites located in Bend, Oregon, and Santa Clara, California. Package assembly and testing of these products is performed in our own domestic facilities located in Santa Clara, California and Montgomeryville, Pennsylvania, in addition to subcontractors in Malaysia. In 2004, we moved more assembly and testing of RF products to our subcontractor in Malaysia from Mexico, which we expect will reduce our manufacturing costs. Manufacturing of our military and aerospace products for avionics and radar applications, where state-of-the-art RF performance and repeatability are critical, will continue in Santa Clara, California at our automated assembly and test line.

Switching Power Semiconductors

Wafer fabrication for switching power semiconductor products is performed in our internal wafer fabrication site located in Bend, Oregon, and by our manufacturing partners, Infineon Technologies in Austria and Episil Technologies in Taiwan.

Our current manufacturing strategy is to expand our use of these foundries to provide for the manufacturing needs to support our growth. Our agreements with Infineon and Episil extend indefinitely and require a two-year notice of termination. Episil is located in close proximity to our subcontract assembly and test partners and our expanding customer base in Asia. This close proximity provides for reduced cycle times and improved customer service.

We have agreements with Team Pacific and PSI Technologies, subcontractors in the Philippines, for assembly and testing of most of our plastic encapsulated discrete products. Our subcontractors currently electrically test the majority of the products that they manufacture for us. The products not tested by subcontractors are shipped to us for testing. We manufacture and assemble all of our discrete hermetic packages in our facility located in Bend, Oregon.

Modules

Our modules are manufactured at our own facilities in Bordeaux, France and Bend, Oregon as well as on a captive manufacturing line located at one of our subcontractor s facilities in the Philippines. During 2004, we transferred additional module assembly and testing, to our captive line in the Philippines, which we expect to result in lower production costs.

Quality and Reliability

Our manufacturing processes emphasize quality and reliability, and involve testing at various stages of the manufacturing process. We, together with our subcontractors, test 100% of our products. Our Bend and Santa Clara facilities are certified to ISO-9001-2000 standards and to U.S. military specifications.

Raw Materials

We rely on raw materials to manufacture our products, including silicon, various chemicals, gases and compounds. In particular, we obtain silicon wafers and ceramic packaging through limited sources of supply. We monitor our sources of supply and consider our current portfolio of suppliers to be adequate to meet the needs of the business.

Competition

We encounter varying degrees of competition for our products, depending on the nature of the product and the particular market served. The power semiconductor industry is highly competitive and subject to price erosion. Many of our competitors are larger companies with greater financial resources. There are a number of companies that manufacture products that compete directly with our products. For our RF products, our principal competitors include Integra, MA/Com, Philips and ST Microelectronics. For our switching products, our principal competitors include Fairchild Semiconductor, International Rectifier, IXYS and ST Microelectronics.

We believe that the primary elements of competition in our markets are product features and performance, breadth of product line, customer service and support, quality, reliability and competitive pricing. We believe that we compete effectively in our markets.

Intellectual Property Matters

As of December 31, 2004, we have received 22 U.S. patents and 25 foreign patents and have applications pending for 20 additional U.S. and foreign patents on different aspects of our core technology. In January 2005, we also acquired 1 new patent and 5 pending applications in connection with our acquisition of PowerSicel, Inc. We rely on patents, trade secrets and other intellectual property laws, as well as

confidentiality and intellectual property assignment agreements with our employees to protect our proprietary rights. Three U.S. patents and five corresponding foreign patents on important aspects of our core technology will expire in 2007 to 2008 and 2009, respectively. We regard certain of our processes, information and knowledge that we have developed and use to design and manufacture our products as proprietary. We have also registered trademarks for Power MOS IV, Power MOS V, Power MOS VI, Power MOS 7 and ASPM.

We have licensed a portion of our intellectual property for commercialization in certain foreign markets. In 1990, we entered into two non-exclusive, non-transferable licenses and technology transfer agreements for the manufacture of our products in Japan. In 1991, we entered into a similar arrangement with a manufacturer in the United Kingdom for sales in Europe. Each of these agreements resulted in one-time payments to us and entitles us to certain royalties over the life of the licenses. To date, on-going royalties from these licensing arrangements have not been material.

Employees

As of December 31, 2004, we had 277 permanent employees. Of these, 155 were at our facilities in Bend, Oregon, 26 at our facility in Bordeaux, France, 58 at our facility in Santa Clara, California, 38 at our facility in Montgomeryville, Pennsylvania. Our continued success depends heavily on our ability to attract and retain qualified personnel. We consider our relations with our employees to be good. None of our employees are represented by a union; however, our employees in Bordeaux, France are represented by an employee works council pursuant to French industrial relations law.

Environmental Regulation

While we believe we are in material compliance with present environmental regulations, increased public attention has been focused on the environmental impact of semiconductor operations. In the conduct of our manufacturing operations, we have handled and do handle materials that are considered hazardous, toxic or volatile under environmental laws; therefore, we are subject to regulations related to the use, storage, discharge and disposal of materials. The risk of accidental release of such materials cannot be completely eliminated, and if such a release occurs, we could be held financially responsible for the clean up or other consequences of the release. Along with the rest of the semiconductor industry, we are subject to variable interpretations and governmental priorities concerning environmental laws and regulations. Environmental statutes have been interpreted to provide for joint and several liability and strict liability regardless of actual fault. We may be required to incur costs to comply with current or future environmental laws or regulations, and our operations, business or financial condition could be adversely affected by such requirements.

ITEM 2. PROPERTIES.

Our primary facilities are as follows:

We lease a 41,000 square foot building in Bend, Oregon where our internal wafer fab is located, as well as our engineering and research and development organization. We manufacture four-inch wafers in this facility.

We lease an 18,000 square foot building in Bend, Oregon that houses some of our administrative functions, as well as some assembly, testing and shipping,

We lease 4,125 square feet in an additional building in Bend, Oregon which houses additional administrative functions.

We lease a 10,250 square foot facility in Bordeaux, France that houses our ASPM® manufacturing, shipping and warehousing functions, as well as the administrative and product development staff for our European operation.

We lease a 19,700 square foot building in Santa Clara, California for semiconductor manufacturing, shipping and warehousing, research and development, and administrative functions.

In November of 2003, APT purchased a previously leased 5,000 square foot building in Santa Clara, California for approximately $1.3 million out of current available cash and available-for-sale securities. As announced on November 6, 2003, the building purchase was a restructuring action we undertook for the purpose of reducing rent expense through the purchase and subsequent resale of the building. The buyout reduced our operating lease commitments by approximately $530,000 over 2004 and 2005. The building is reported as an asset held for sale and is actively marketed for sale as APT no longer requires the space. In accordance with SFAS 144, the asset held for sale is carried at estimated net fair value.

We own a 20,600 square foot building in Montgomeryville, Pennsylvania. The facility houses assembly and test operations, shipping, warehousing, research and development, and administrative functions for the operation.

In connection with our acquisition of PowerSicel, Inc. in January 2005, we lease 7,641 square feet in a building in Boulder, Colorado. This facility houses primarily research and development functions.

ITEM 3. LEGAL PROCEEDINGS.

From time to time the Company is involved in various legal matters that arise out of the ordinary conduct of our business, including those related to litigation over intellectual property rights, commercial transactions, contracts, product liability, environmental, safety and health, and employment matters. The Company is not currently involved in any legal proceedings. The Company accrues loss contingencies in connection with its litigation when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated.

On August 15, 2002, IXYS Corporation filed a patent infringement lawsuit against APT with the United States District Court, Northern District of California. During 2004, the case was dismissed by the Court and resolved in APT s favor.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

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

PART II

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

Our common stock is traded on the Nasdaq National Market under the symbol APTI. Our common stock began trading on August 8, 2000. The high and low sales prices as reported on the Nasdaq National Market for the two most recent fiscal years ended December 31, 2003 and December 31, 2004 were as follows:

	High	Low
Fiscal year 2004		
Quarter 4	$ 9.34	$ 5.97
Quarter 3	12.36	6.56
Quarter 2	14.52	8.99
Quarter 1	11.75	8.58
Fiscal year 2003		
Quarter 4	$ 9.04	$ 6.78
Quarter 3	9.70	6.80
Quarter 2	8.28	3.00
Quarter 1	4.99	3.01

As of February 22, 2005, the last reported sale price of our common stock on the Nasdaq National Market was $7.60 per share, there were approximately 85 stockholders of record and we estimate approximately 2,000 beneficial stockholders of our common stock.

We have not declared or paid any cash dividends on our capital stock, and we do not anticipate doing so in the foreseeable future. We currently intend to retain future earnings, if any, to operate and expand our business. We did not repurchase any of our stock in 2004 and do not have any repurchase plans or programs.

ITEM 6. SELECTED FINANCIAL DATA.

	Years Ended December 31,				
	2004 (4)	2003 (2)	2002 (1)	2001	2000
	(In thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenue, net	$ 67,837	$ 48,892	$ 43,425	$ 36,855	$ 44,168
Gross profit	24,425	15,512	12,237	11,832	17,455
Net income (loss)	3,056	(3,330)	(3,687)	1,796	3,759
Basic net income (loss) per share	0.29	(0.32)	(0.36)	0.21	0.59
Diluted net income (loss) per share	0.27	(0.32)	(0.36)	0.19	0.50
Consolidated Statement of Cash Flows Data:					
Cash flow from operations	3,694	2,261	5,074	1,067	4,986
Capital expenditures (3)	3,690	4,828	2,649	2,335	2,957
Consolidated Balance Sheet Data:					
Working capital	$ 36,375	$ 31,780	$ 33,181	$ 45,508	$ 42,945
Total assets	78,482	74,503	76,948	58,075	57,313
Long-term obligations, less current portion					130
Stockholders equity	72,038	68,210	71,172	53,948	51,118

(1) In 2002, we acquired GHz Technology, Inc. (effective January 25) and the product lines and certain assets of Microsemi RF Products, Inc. (effective May 24). As a result of these transactions, during fiscal 2002 we recorded acquisition related charges for purchased in-process research and development (IPR&D), amortization of intangible assets, inventory fair value adjustments and deferred compensation amortization of $4,330, of which $1,974 was included in costs of goods sold and $2,356 in operating expenses. The total amount of these items net of taxes was $3,544.

(2) As a result of the prior acquisitions made, we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,168, of which $1,118 was included in costs of goods sold and $50 in operating expenses during 2003. Also recorded in 2003 was $645 of restructuring related charges included in operating expenses. During 2003 we acquired the administrative building we leased in Santa Clara, California in order to avoid future lease payments which were substantially above market rate. The building is reported as assets held for sale, and accordingly we took a $350 impairment charge to adjust the carrying value to fair market value. Also included in restructuring charges is severance related to downsizing and organizational changes. During 2003 we recorded a tax expense for a valuation allowance against our net deferred tax assets for $846. The total amount for these items net of taxes was $2,659.

(3) Capital expenditures in 2003 included the purchase of the building in Santa Clara for $1,332. Capital expenditures other than the building purchase were $3,496.

(4) As result of the prior acquisitions made, we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,098, of which $1,086 was included in costs of goods sold and $12 in operating expenses during 2004. In 2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. As a result of this transaction, during 2004 we recorded acquisition related charges for purchased IPR&D of $170. Also recorded in 2004 was $558 of restructuring related charges included in operating expenses. These charges included severance related to downsizing and organizational changes we began in 2003. The charges also include an additional impairment charge on the administrative building we purchased in 2003 as explained in note (2) above, as well as costs to exit certain production activities. The latter charges relate to accelerated depreciation on certain production related equipment to be abandoned after shutdown and contractual closing costs. During 2004 we

also incurred $225 of charges in connection with the filing and subsequent withdrawal of a registration statement. The total amount of these items net of taxes was $2,028.

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

Business Overview

We are a leading designer, manufacturer and marketer of high-performance RF and switching power semiconductors. We are primarily focused on the high-power, high-speed segment of the power semiconductor market. Power semiconductors function as power amplifiers and power switches. They increase system efficiency and reliability by precisely managing and regulating electricity and converting it into the form required by electrical and electronic products. Our products permit the design of more compact end products and improve system features and functionality. Our products are found in diverse applications, such as F-22 fighter cockpits, the Boeing 777 back-up power system, the International Space Station, air traffic control radar systems, semiconductor capital equipment, MRI systems, arc welding equipment, industrial lasers, solar power panels and wireless communications base stations.

Certain markets we serve, such as the semiconductor capital equipment and communications and data processing markets, have historically been quite cyclical. During periods of contraction in the these cyclical markets, we have experienced downward pressure on our revenues and gross margins. We have attempted to reduce this volatility through acquisitions and product development in less cyclical markets, such as the military aerospace and medical equipment markets, and by rigorously managing our expenses through increased offshore production.

Power semiconductors generally dissipate more than one watt of power and have a broad range of frequency capabilities. We primarily focus on high-power, high-speed devices that dissipate at least several hundred watts of power and require operating frequencies greater than 20 kHz, or 20,000 cycles per second (e.g., the product may switch on and off up to 20,000 times per second).

We sell our products in North America, Europe, and Asia primarily pursuant to customer purchase orders. We sell through a network of independent sales representatives and distributors. We recognize revenue upon shipment of our products. We have operations in Bend, Oregon, Santa Clara, California, Montgomeryville, Pennsylvania, Boulder, Colorado, and Bordeaux, France. Each site has production, research and development and administrative activities. We also make use of subcontract manufacturers for the fabrication of our wafers and for assembly and test operations. Our locations are more fully described in Business Properties.

In 2002, we acquired GHz Technology and the product lines and certain assets of Microsemi RF Products to help us further penetrate the markets for RF devices. We believe that these acquisitions have positioned us as a leading supplier in bipolar RF power transistors and added substantial RF technology, engineering, manufacturing and marketing capabilities.

In 2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc., for $175 paid in cash from operations. In January 2005, we acquired PowerSicel, Inc. for approximately $5.4 million in cash from operations in exchange for all of the existing shares of PowerSicel, 63,525 APT stock options in exchange for the PowerSicel stock options and 19,402 APT stock options for the retention of key employees. PowerSicel s and Zeus Semiconductor s combined expertise in silicon carbide and other compound semiconductor technology and products complement APT s current portfolio of RF products which operate at frequencies ranging from 1 MHz to 4 GHz and are sold into applications such as semiconductor capital equipment, medical imaging, radar, avionics and wireless communications. We believe these acquisitions add valuable development capability to APT s core capability in RF power transistors allowing APT to better serve its current markets and to expand into new markets.

As a result of the acquisitions of GHz Technology, Inc. and the product lines and certain assets of Microsemi RF Products, Inc. in 2002, we recorded acquisition related charges for purchased in-process research and development (IPR&D), amortization of intangible assets, inventory fair value adjustments and deferred compensation amortization of $4,330, of which $1,974 was included in costs of goods sold and $2,356 in operating expenses. The total amount of these items net of taxes was $3,544.

In 2003, as a result of the 2002 acquisitions made, we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,168, of which $1,118 was included in costs of goods sold and $50 in operating expenses. Also recorded in 2003 was $645 of restructuring related charges included in operating expenses. During 2003 we acquired the administrative building we leased in Santa Clara, California in order to avoid future lease payments which were substantially above market rate. The building is reported as assets held for sale, and accordingly we took a $350 impairment charge to adjust the carrying value to fair market value. Also included in restructuring charges is severance related to downsizing and organizational changes. During 2003 we recorded a tax expense for a valuation allowance against our net deferred tax assets for $846. The total amount for these items net of taxes was $2,659.

In 2004, as result of the 2002 acquisitions made, we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,098, of which $1,086 was included in costs of goods sold and $12 in operating expenses. In

2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. As a result of this transaction, during 2004 we recorded acquisition related charges for purchased IPR&D of $170. Also recorded in 2004 was $558 of restructuring related charges included in operating expenses. These charges included severance related to downsizing and organizational changes we began in 2003. The charges also include an additional impairment charge on the administrative building we purchased in 2003 as explained above, as well as costs to exit certain production activities. The latter charges relate to accelerated depreciation on certain production related equipment to be abandoned after shutdown and contractual closing costs. During 2004 we also incurred $225 of charges in connection with the filing and subsequent withdrawal of a registration statement. The total amount of these items net of taxes was $2,028.

The following discussion should be read in conjunction with the consolidated financial statements provided under Part II, Item 8 of this Annual Report on Form 10-K. Certain statements contained herein may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve a number of risks, uncertainties and other factors that could cause actual results to differ materially, as discussed more fully herein.

Our Markets

We operate on a worldwide basis. As such, our operations are affected by global, regional and industry-specific economic and political factors. In 2004, 65.3% of our revenue was from customers in North America, 15.3% from customers in Europe, and 19.4% from customers in Asia and the rest of the world. We allocate revenue geographically based on the location to which we ship our products. The markets for our products are diversified, and include military and aerospace, semiconductor capital equipment, medical and industrial, and communications and data processing.

We believe demand is being driven by the emergence of new applications for higher power, higher frequency semiconductors that more precisely manage power, and also by the need to increase performance and improve power quality for existing applications. In particular, demand in our target markets is being driven by the cyclical upturn in the semiconductor capital equipment market and a recovery in the communications and data processing market, as well as growth in demand for complex medical equipment and military and commercial radar equipment. We believe demand is also being driven by the need for more efficient energy use resulting from rising energy costs, government mandates and environmental concerns.

Business Strategies

Our goal is to be the world leader in providing high-performance power semiconductors for high-power, high-speed applications. To achieve our goal, we intend to:

Increase our penetration of core markets and customers and expand globally;

Continue to develop and commercialize leading-edge technology for new and existing applications;

Capitalize on and expand our RF expertise;

Continue to optimize manufacturing operations; and

Seek to enhance growth through selective acquisitions

Critical Accounting Policies and Estimates

The 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 generally accepted accounting principles in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to product returns and warranty obligations, allowance for doubtful accounts, excess and obsolete inventories, income taxes, valuation of goodwill and intangible assets with indefinite lives, valuation of long-lived assets, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the timing of revenue recognition that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies involve more significant judgments and estimates used in the preparation

of our consolidated financial statements.

Revenue Recognition, Sales Allowances, Returns and Warranty Obligations

We recognize revenue when products are shipped and the customer takes ownership and assumes risk of loss, collection of the relevant receivable is probable, persuasive evidence of an arrangement exists, and the sales price is fixed or determinable. In general, we provide for a one-year repair or replacement warranty on our products. We use independent distributors to sell some of our products. Our distributors have certain stock rotation rights which allow them to rotate up to 5% of their products every six months in exchange for an order of an equal amount of new product. In addition, we may on a case-by-case basis grant to distributors certain price protections on purchased products. Upon shipment, we record an allowance for the estimated cost that may be incurred for product warranty and sales returns based on historical experience and any contractual requirements with our distributors.

While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product non-conformance rates, material usage and service delivery costs incurred in correcting a product non-conformance. Should actual product non-conformance rates, material usage, service delivery costs, or distributor returns differ from our estimates, revisions to the estimated warranty liability would be required.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. We regularly review the adequacy of the allowance after considering the size of the accounts receivable balance, historical bad debts, the customer s expected ability to pay and our collection history with each customer. We review significant individual accounts that are past due to determine whether an allowance should be made based on these factors. If the financial condition of our customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required.

Excess and Obsolete Inventories

Inventories are stated at the lower of standard cost (approximates actual cost on a first-in, first-out basis) or market (net realizable value). We adjust inventory costs for estimated unmarketable (excess) or obsolete inventory to estimated net realizable value based upon assumptions about future demand and market conditions. We establish reserves for excess component order cancellation costs based on estimated net realizable value of the components purchased and any additional cancellation charges. We evaluate historical usage of the product, current customer demand, purchase commitments and forecasted usage of the product. If actual market conditions are less favorable than those projected by management, additional adjustments or reserves may be required.

Income Taxes

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. We consider future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance. In the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of our net recorded amount, an adjustment to decrease the valuation allowance would increase income in the period such determination was made. Should we determine that we would not be able to realize all or part of our net deferred tax asset in the future, an adjustment to increase the valuation allowance would be charged to income in the period such determination was made. As of December 31, 2004, we had a full valuation allowance recorded against our net deferred tax assets.

Valuation of Goodwill and Intangible Assets with Indefinite Lives

We value goodwill and intangible assets with indefinite lives in accordance with Statement of Financial Accounting Standards No. (SFAS) 142 Goodwill and Other Intangible Assets. Currently we carry a goodwill balance in connection with previous acquisitions, but have no other intangible assets with indefinite lives. We annually review goodwill for impairment and when events or circumstances indicate the carrying value of the asset might exceed its current fair value. We determine fair value using discounted cash flow analysis and other acceptable valuation methodologies such as market multiples and comparable transactions. This requires us to make assumptions and estimates regarding industry economic factors and future profitability. It is our policy to conduct impairment testing based on our most current business plans, which reflect changes we anticipate in the economy and industry. If actual results are not consistent with our assumptions and judgments, we could be exposed to a material impairment charge as a result of writing down the carrying value of goodwill.

Valuation of Long-Lived Assets

We value long-lived assets, including intangible assets with finite lives, in accordance with SFAS 144 Accounting for the Impairment or Disposal of Long-Lived Assets. We evaluate our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We determine the potential impairment using undiscounted cash flow analysis, which requires us to make certain assumptions and estimates regarding industry economic factors and future profitability. It is our policy to conduct impairment testing based on our most current business plans, which reflect changes we anticipate in the economy and industry. If actual results are not consistent with our assumptions and judgments, we could be exposed to a material impairment charge as a result of writing down the carrying value of long-lived assets. If the asset group is determined to be unable to recover the carrying amount of its assets, then intangible assets are written down first, followed by the other long-lived assets of the operation, to fair value. Fair value is determined based on discounted cash flows or appraised values, depending on the nature of the assets. Long-lived assets considered held for sale are valued at the lower of historical cost or fair value less costs to sell. Such assets are not depreciated while so classified.

Contingencies and Litigation

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. We consider the likelihood of loss or impairment of an asset or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss in determining loss contingencies. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of loss can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals should be adjusted.

Results of Operations

The following table presents our consolidated statement of operations data for the periods indicated as a percentage of net revenue:

	Years Ended December 31,		
	2004	**2003**	**2002**
Revenue, net	100.0%	100.0%	100.0%
Cost of goods sold	62.4	66.0	67.3
Amortization of technology rights and other charges	1.6	2.3	4.5
Total cost of goods sold	64.0	68.3	71.8
Gross profit	36.0	31.7	28.2
Operating expenses:			
Research and development	5.6	6.1	8.9
Selling, general and administrative	24.8	30.2	28.4
Restructuring charges	0.8	1.3	
In-process research & development	0.3		4.9
Total operating expenses	31.5	37.6	42.2
Income (loss) from operations	4.5	(5.9)	(14.0)
Other income (expense):			
Interest income, net	0.3	0.4	1.4
Other, net	(0.2)		

Income (loss) before income taxes	4.6	(5.5)	(12.6)
Income tax (benefit) expense	0.1	1.3	(4.1)
Net income (loss)	4.5%	(6.8)%	(8.5)%

Years Ended December 31, 2004 and 2003

Revenue. Our revenue for 2004 was $67.8 million, compared to $48.9 million in 2003, or a 38.7% increase. Overall we experienced year over year growth in each of the four markets we serve. Communications and data processing revenue increased by 49.9%, semiconductor capital equipment increased by 65.1%, military/aerospace increased by 25.0% and industrial/medical increased by 27.0%. Improved demand in the wireless base station and other communications infrastructure applications contributed to our year over year growth in the communications and data processing markets, particularly in Asia. Our revenue for the semiconductor capital equipment market grew sequentially each quarter from the fourth quarter of 2003 through the second quarter of 2004, but then declined in the second half of the year due to an inventory correction underway at our customers and weakened market conditions. Our year over year growth in the semiconductor equipment market was a result of strong market conditions in the first half of 2004 and the geographical expansion of our customer base into Japan. Revenue for our industrial and medical market grew sequentially each quarter from the fourth quarter of 2003 through the third quarter of 2004, but declined into the fourth quarter of 2004. During 2004 our military and aerospace revenue benefited from the shipment of products related to a large radar systems order which was received in the fourth quarter of 2003. We expect to continue to benefit from increased spending on commercial and military aerospace programs as well as from designs we have won in aviation and radar systems in foreign markets. However, revenue in this market can experience sharp variability due to the ordering pattern of our end customers.

Overall, our revenue by geographic area for 2004 was 65.3% in North America, 15.3% in Europe, and 19.4% in Asia and the rest of the world. This compares to 65.3% in North America, 18.5% in Europe and 16.2% in Asia and the rest of the world in 2003. We allocate revenue geographically based on the location to which we ship our products. Our RF products revenue was 50.0% of the total in 2004, compared to 49.0% in 2003.

Overall, we experienced a record revenue year in 2004 at $67.8 million. The growth and strength came from a broad base of end markets, applications, and customers, as we continue to pursue opportunities in each of our end markets, which helps us to diversify our product portfolio. Over time we expect that each of the four markets we serve will contribute approximately equally to our revenue. In 2004, our revenue by market was 20.7%, 25.1%, 26.2%, and 28.0% versus 19.2%, 21.1%, 28.7%, and 31.0% in 2003, in the communications and data processing, semiconductor capital equipment, industrial/medical, and military/aerospace markets, respectively. In the second half of 2004 we did experience slowing of revenue in the communications and data processing, semiconductor capital equipment, and industrial/medical markets as a result of reduced customer demand and inventory corrections at some customers. In 2005, we believe that revenue growth will be derived primarily from new products and design wins rather than from significantly improved market conditions.

Gross Profit. Our gross profit margin was 36.0% in 2004 compared to 31.7% in 2003, or an increase of 4.3%. Excluding the non-cash purchase accounting charges for the fair value of inventory acquired and the amortization of the technology rights assets, gross profit margin was 37.6% in 2004 compared to 34.0% in 2003, or an increase of 3.6%. Increased production volumes and the resulting increased factory utilization at all of our domestic facilities resulted in improved factory overhead absorption in 2004 compared to 2003. Our Bend wafer production increased by over 60% in 2004 from 2003, contributing approximately 3.7% to our improved gross margin. While our Santa Clara facility production volume also increased, it was offset by higher costs associated with the acceleration of a production ramp-up for a major RF customer and a less profitable overall product mix. The overall impact of the Santa Clara facility contributed a slight decline to consolidated gross margin. During 2004 we idled our wafer fabrication facility in Montgomeryville, Pennsylvania as we moved the production of these wafers to our Bend,

Oregon facility, resulting in lower manufacturing spending at the Pennsylvania location. Full production ramp up for these wafers in Bend, Oregon is expected in mid 2005. The lower manufacturing costs at our Montgomeryville, Pennsylvania facility contributed to a slight increase to consolidated gross margin, essentially offsetting the decline from Santa Clara. During 2004 we also completed a reduction in work force at our Bordeaux, France facility and moved more of the production to lower cost subcontractors. At the volumes experienced in 2004, this did not have a significant impact on consolidated gross margin.

Research and Development Expense. Our research and development expenses were $3.8 million in 2004 compared to $3.0 million in 2003, or approximately 5.6% and 6.1% of revenue, respectively. During 2004, our spending on materials and supplies increased by approximately $450,000 compared to 2003. During 2003, fewer resources were used for pre-production and prototype lots as many of the new products we introduced utilizing our MOS7® technology moved into full production, resulting in lower spending in 2003 on materials and supplies. In addition, in 2004, we continued our spending on materials and supplies in developing both new RF and switching power products. In 2004 our spending on payroll costs increased by approximately $306,000 compared to 2003. This was due to the addition of new personnel and also to the reallocation of existing personnel to research and development activities. New personnel accounted for approximately half of the payroll spending increase. The decrease in the research and development expense as a percentage of revenue is also due to our higher revenue levels in 2004. The Company plans to continue its research and development programs leading to the introduction of new products for use in both switching and RF applications. Therefore, we expect the level of research and development expenses to be approximately 7.5% of revenue over sustained periods of time.

Selling, General and Administrative Expense. Our selling, general and administrative expenses totalled $16.9 million in 2004 compared to $14.8 million in 2003, or approximately 24.8% and 30.2% of revenue in 2004 and 2003, respectively. The increase in expenses over the prior year is partially attributable to higher legal costs in connection with a patent litigation matter. In 2004 the these legal expenses were $2.0 million, compared to $1.1 million in 2003. As previously announced in June, 2004, the United States District Court of the Northern District of California has granted summary judgment in favor of APT, dismissing IXYS Corporation s claims of patent infringement against APT. Therefore our legal costs decreased substantially in the second half of 2004. A portion of the increase over 2003 was also due to additional sales commission expense of $495,000 on higher overall revenue and higher payroll costs of $620,000 primarily due to the management cash bonus incentive plan.

Interest and Other Income (Expense). Interest income in 2004 was $226,000 compared to $246,000 in 2003. Overall, our invested cash and prevailing interest rates were comparable between 2004 and 2003. Interest expense was $17,000 in 2004 compared to $29,000 in 2003. Other income (expense), net was an expense of $109,000 in 2004 compared to an expense of $29,000 in 2003. In 2004, the Company expensed approximately $225,000 in professional costs associated with the filing and subsequent withdrawal of our registration statement on form S-3 for a securities offering.

Restructuring Charges. As part of management s strategic plans, the Company announced in November of 2003 restructuring actions intended to improve manufacturing efficiencies and lower administrative costs. The actions include consolidation of certain administrative functions, rationalization of internal and external assembly and test manufacturing, and the reduction of rent expense through the purchase and resale of one of the two buildings currently occupied by the Company s Santa Clara, California subsidiary. These announced actions were in addition to previously disclosed plans to consolidate our wafer fabrication plant in Montgomeryville, Pennsylvania to Bend, Oregon. Total restructuring related charges recognized in 2004 and 2003 were $558,000 and $645,000, respectively.

The total severance related charges recognized in 2004 and 2003 were $103,000 and $295,000, respectively. The severance charges related to already separated personnel and personnel costs associated with benefits expected to be paid upon completion of certain eligible transfer activities. The building purchase is reported as an asset held for sale and is being marketed for sale as APT no longer requires the space. In accordance with SFAS 144, an asset held for sale is carried at estimated net fair value. As such, APT recorded an impairment charge for the building of approximately $80,000 and $350,000 in 2004 and 2003, respectively. Fair value was estimated based on comparable sales data of similar commercial space in the area. The net carrying value of the building as of December 31, 2004 was approximately $930 and is included as a component of other current assets. Additional restructuring costs of $375,000 associated with costs to exit certain production activities were also recognized in 2004. The charges relate to accelerated depreciation on certain production related equipment to be abandoned after shutdown and contractual closing costs.

Income Taxes. In 2004, the Company recorded a tax expense of $82,000, for an effective rate of 2.6%. The Company recorded a full valuation allowance against its remaining net deferred tax assets in the fourth quarter of 2003. In assessing the valuation of deferred tax assets, SFAS No. 109 Accounting for Income Taxes, requires a more likely than not standard. The ultimate realization of deferred tax assets is dependent on the generation of future domestic taxable income during the periods in which the associated temporary differences become deductible. Management considers the scheduled reversals of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. Although the Company anticipates future long term profitability, SFAS No. 109 requires that recent historical operating performance weigh more heavily in assessing the valuation of deferred tax

assets. The more likely than not assessment was principally based upon the losses generated during 2002 and 2003 and the cyclical nature of the industry which make projections of industry trends difficult. While the Company has sufficient net operating loss carry-forwards (NOL s) to offset federal taxable income for regular tax purposes, the Company s use of its NOL s for alternative minimum tax (AMT) purposes are limited to 90% of its AMT income (AMTI). Therefore, the Company expects to pay AMT of approximately 20% on the remaining AMTI, resulting in an approximate effective tax rate of 2% on domestic taxable income. However, at such time the Company is able to determine if it is more likely than not that it will be able to utilize its net operating losses, the reserve against the net deferred tax asset would be reversed. As of December 31, 2004, APT has federal and state net operating loss carry forwards of $3.0 million and $4.4 million, respectively, which expire beginning in years 2020 through 2023. In 2003, we recorded a tax expense of approximately 23% on our net loss of $2.7 million. Our effective tax rate in 2003 differs from the federal statutory rate primarily due to the recording of a non-cash charge of $846,000 to establish a full valuation reserve against our net deferred tax assets, offset by a reduction in our taxes payable by $225,000.

Years Ended December 31, 2003 and 2002

Revenue. Our revenue for 2003 was $48.9 million, compared to $43.4 million in 2002, or a 12.6% increase. Approximately 7.1% of the increase reflects the additional months of revenue contributed by the acquisitions we made during 2002, while 5.5% of the increase represents organic growth on higher unit volumes. Overall we experienced year over year strength in each of the markets we serve. Communications and data processing revenue increased by 16.4%, semiconductor capital equipment increased by 19.6%, military and aerospace increased by 10.7% and industrial/medical increased by 7.8%. As a result of incremental capital spending by companies that produce semiconductors, we experienced significant strengthening in the semiconductor capital equipment market which grew by 36.7% in the second half of 2003 compared to the first half. Overall, our revenue by geographic area for 2003 was 65% in North America, 19% in Europe, and 16% in Asia and the rest of the world. This compares to 64% in North America, 24% in Europe and 12% in Asia and the rest of the world in 2002.

Gross Profit. Our gross profit margin was 31.7% in 2003 compared to 28.2% in 2002. Excluding the non-cash purchase accounting charges for the fair value of inventory acquired and the amortization of the technology rights assets, gross profit margin was 34.0% in 2003 compared to 32.7% in 2002, or an increase of 1.3%. Lower sales returns and lower provisions for excess and obsolescent inventory contributed approximately 1.7% to the improved gross margin. Increased production volumes and the resulting increased factory utilization at our facility in Santa Clara, California resulted in improved factory overhead absorption in 2003 compared to 2002. The improved utilization added approximately 2.2% to our overall gross profit in 2003. The margin improvement due to increased utilization was partially offset by lower factory production volumes at our facility in Bordeaux, France which caused a drop of approximately 2.3% in our gross margin. The Company took actions to reduce production personnel by 23% at the Bordeaux facility and shift production to our lower cost offshore subcontractors. During 2003 we began the process to consolidate the silicon manufacturing currently performed in Montgomeryville, Pennsylvania to our Bend Oregon facility in order to reduce our overall wafer fabrication production costs.

Research and Development Expense. Our research and development expenses were $3.0 million in 2003 compared to $3.9 million in 2002, or approximately 6.1% and 8.9% of revenue, respectively. During 2002, higher expenses were incurred for pre-production and prototype lots, especially for our Power MOS7® technology, as the company prepared to introduce a large volume of new products in this technology. During 2003, fewer resources were used for pre-production and prototype lots as the new parts moved into full production. This resulted in an approximately $650,000 decline in spending on supplies, materials and prototypes over the prior year. The decrease in the research and development expense as a percentage of revenue is also due to our higher revenue levels in 2003.

Selling, General and Administrative Expense. Our selling, general and administrative expenses totaled $14.8 million in 2003 compared to $12.3 million in 2002, or approximately 30.2% and 28.4% of revenue in 2003 and 2002, respectively. The increase in expenses over the prior year level is attributable to higher payroll costs of $1.1 million as a result of the discontinuance of the graduated pay reductions we implemented in 2001 and the first half of 2002, as well as additional personnel in selling, general and administrative functions due to new hires, the additional companies we acquired, and to the transferring of job functions from other operating areas of the Company. In addition we incurred increased legal expenses of $900,000 in connection with a patent litigation matter, as more fully explained in Part I,

Item 3 to this report.

Stock Compensation Expense. Stock compensation expense includes costs relating to stock-based employee compensation arrangements, and is based on the difference between the fair market value of our common stock on the date of grant of options and the exercise price of options to purchase that stock. Stock compensation expense is recognized over the vesting periods of the related options, typically five years. Stock compensation expense of $150,000 was recorded in 2003 versus $498,000 in 2002. Of this amount, $41,000 was recorded in cost of goods sold, $109,000 was recorded in selling, general and administrative expense.

Interest Income (Expense). Interest income in 2003 was $246,000 compared to $630,000 in 2002. The decline in interest income was due to lower invested cash balances as a result of cash used to acquire GHz and MSC RF in 2002 and also due to lower interest rates available in the current market environment. Interest expense was $29,000 in 2003 compared to $60,000 in 2002.

Restructuring Charges. As part of management s strategic plans, the Company announced in November of 2003 restructuring actions intended to improve manufacturing efficiencies and lower administrative costs. The actions include consolidation of certain administrative functions, rationalization of internal and external assembly and test manufacturing, and the reduction of rent expense through the purchase and resale of one of the two buildings currently occupied by the Company s Santa Clara, California subsidiary. These announced actions were in addition to previously disclosed plans to consolidate our wafer fabrication plant in Montgomeryville, Pennsylvania to Bend, Oregon. Total restructuring related charges recognized in 2003 were $645,000.

The total severance related charges recognized in 2003 was $295,000. The severance charges relate to already separated personnel and personnel that are eligible for benefits upon completion of certain transfer activities. The building buyout reduced our operating lease commitments by approximately $530,000 over 2004 and 2005.

Income Taxes. We recorded a tax expense of approximately 23% on our net loss of $2.7 million in 2003, compared to a tax benefit of 32.4% in 2002. Our effective tax rate in 2003 differs from the federal statutory rate primarily due to the recording of a non-cash charge of $846,000 to establish a full valuation reserve against our net deferred tax assets, offset by a reduction in our taxes payable by $225,000.

Liquidity and Capital Resources

Management assesses the Company s liquidity in terms of its ability to generate cash to fund its operating, investing, and financing activities. Significant factors affecting the management of liquidity are: cash flows from operating activities, capital expenditures, investments in businesses, and access to bank credit when required and at reasonable rates. The Company s key cash flow metrics for the last five years are presented in Part I, Item 6, Selected Financial Data of this report.

Operating Cash Flows: In 2004, we generated approximately $3.7 million from operating activities. This resulted from our net income of $3.1 million plus non-cash charges for depreciation, amortization, and building impairment charges totaling $4.3 million, inventory provisions of $807,000, in process research and development costs of $170,000, the loss on disposal of property and equipment of $146,000, offset by a net change in working capital resulting in the use of cash of $4.8 million. Our collections from customers were approximately $65.4 million in 2004 compared to $48.2 million in 2003. As revenue increased over the prior year, we increased the investment in inventory and accounts receivable, partially offset by larger accounts payable balances and lower balances for prepaid expenses and other assets.

Investing Cash Flows: In 2004, we used approximately $3.7 million in investing activities, which consisted primarily of purchases of plant and equipment for $3.7 million, the purchase of short-term investments of $13.4 million, offset by $13.6 million in proceeds from the sale of short-term investments. We also used approximately $231,000 for acquisitions.

Financing Cash Flows: In 2004, we generated approximately $503,000 from financing activities, which consisted of net proceeds of $509,000 from the exercise of stock options, offset by payments on lease obligations.

As of December 31, 2004, we had $36.4 million in working capital. Our trade accounts receivable balance was $10.0 million reflecting a days sales outstanding ratio of 47 days, compared to trade accounts receivable of $7.6 million at December 31, 2003, reflecting a days sales outstanding ratio of 54 days. Based on the geographic mix of our customers and the credit terms we extend, management expects our days sales outstanding ratio to range from 50 to 60 days. Our inventory balance was $14.6 million reflecting inventory turns of 3.2 times per year, compared to an inventory balance of $12.4 million at December 31, 2003, reflecting inventory turns of 2.7 times per year. The Company continues to pursue actions to monitor inventory levels and improve inventory turns. The calculations above are based on yearly average balances of trade accounts receivable and inventory.

APT currently expects to fund expenditures for capital requirements as well as liquidity needs from a combination of available cash balances, internally generated funds, a line of credit for $10 million and other financing arrangements if needed. As of December 31, 2004, APT had $16.8 million in cash and cash equivalents and available-for-sale securities. APT s investment policy is to invest in short term, high-grade liquid investments with the goal of capital preservation. In February 2005, we agreed to the general terms of a $10 million line of credit with Silicon Valley Bank. The final agreement is expected to be complete in the first quarter of 2005. It is a revolving credit line that bears interest at the Silicon Valley Bank prime rate or such prime rate minus 25 basis points, depending on certain financial ratios. We will pay commitment fees of 20 basis points upon closing and 20 basis points on the unused portion of the line of credit payable quarterly. The line of credit expires on June 30, 2006. APT s ability to generate positive cash flow from operations may be affected by market conditions as well as other risk factors as described below. We expect from time to time to evaluate potential acquisitions and equity investments complementary to our market strategy. To the extent we pursue such transactions, we could require additional equity or debt financing to fund such activities or to fund our working capital requirements in the event of an industry downturn or an unexpected adverse change in our business operations. To the extent we require additional capital we cannot assure you that we will be able to obtain such financing on terms favorable to us, or at all.

Off Balance Sheet Arrangements & Commitments

As of December 31, 2004 and 2003 the Company did not have any unconsolidated entities or off balance sheet financial arrangements, guarantees or similar commitments with such entities. A summary of the Company s contractual obligations and commitments as of December 31, 2004 is presented in the table below. Purchase obligations include amounts committed under legally enforceable contracts or purchase orders.

	Payments due by period				
	Total	Less than one year	1-3 Years	3-5 years	More than 5 years
Long term debt	$	$	$	$	$
Operating leases	6,726	1,194	2,504	2,042	986
Capital leases					
Purchase obligations	12,085	7,593	4,492		
Other long term liabilities					
Total contractual obligations	$ 18,811	$ 8,787	$ 6,996	$ 2,042	$ 986

Recent Accounting Pronouncements

In November 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 151, Inventory Costs, an amendment of ARB No. 43, Chapter 4 (FAS 151). FAS 151 clarifies that abnormal inventory costs such as costs of idle facilities, excess freight and handling costs, and wasted materials (spoilage) are required to be recognized as current period charges. The provisions of FAS 151 are effective for the fiscal year beginning January 1, 2006. We are currently evaluating the provisions of FAS 151 and do not expect that the adoption will have a material impact on the Company s consolidated financial position or results of operations.

In December 2004, the FASB finalized SFAS No. 123R Share Based Payment, which will be effective for interim or annual reporting periods beginning after June 15, 2005. The new standard will require us to expense stock based compensation. Under SFAS No. 123R, we must evaluate and determine the appropriate fair value model to be used for valuing share-based payments, the amortization method for compensation cost and the transition method to be used at the date of adoption. We are currently evaluating the provisions of FAS 123R and expect that the adoption in our third fiscal quarter ending September 30, 2005 will have a material impact on the Company s consolidated results of operations and earnings per share, as the stock based compensation expense will be charged directly against our reported earnings. We do not expect the accounting change to materially affect our liquidity as equity-based compensation is a non-cash expense. The effect of expensing stock options on our results of operations and earnings per share using the Black-Scholes model is presented in the accompanying Notes to Consolidated Financial Statements (Note 1(k) - Stock-Based Compensation).

Risk Factors Affecting Business and Results of Operations

Some of the statements under Risk Factors Affecting Business and Results of Operations, Management s Discussion and Analysis of Financial Condition and Results of Operations, Business and elsewhere in this report constitute forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act.

In some cases, you can identify forward-looking statements by terminology such as may, will, should, could, expects, plans, anticipates, believes, estimates, predicts, potential or continue or the negative of such terms or other comparable terminology. For example, we make statements regarding:

Future growth of the semiconductor capital equipment, industrial and medical equipment and military and aerospace markets, and the factors affecting such growth;

Increased production volume from our manufacturing facilities and its related margin impact;

Favorable changes in our gross profit margins and increased sales of our RF products as part of overall sales;

Implementation of our restructuring plans;

Our prospects for future long term profitability;

Our future tax expenses and effective tax rate;

Our expectations with regard to research and development expenses;

Our expectations for funding future liquidity needs; and

Potential acquisitions and equity investments.

These and other forward looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These factors include, among other things, those listed under Risk Factors Affecting Business and Results of Operations and elsewhere in this report.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of such statements. We are under no duty to update any of the forward-looking statements after the date of this report.

Business Risks

The semiconductor industry is very cyclical, and an industry downturn could reduce our revenue.

The semiconductor industry is characterized by:

rapid technological change;

cyclical market patterns;

significant price erosion;

periods of over-capacity and production shortages;

variations in manufacturing costs and yields; and

significant expenditures for capital equipment and product development.

The semiconductor industry has from time to time experienced depressed business conditions. In the past, business conditions in this industry have rapidly changed from periods of strong demand to periods of weak demand. For example, according to the SIA, the semiconductor industry declined 31.9% in 2001, after growing 36.9% in 2000. Any future downturn in the industry could harm our business and cause our operating results to suffer. We cannot assure you that we will not experience substantial period-to-period fluctuations in operating results due to general semiconductor industry conditions or other factors beyond our control.

Certain of the markets we serve are cyclical and our ability to grow and sustain growth levels may be adversely affected by a slowdown in the global economy.

We serve customers and end users in the military and aerospace, semiconductor capital equipment, medical and industrial, and communications and data processing markets. The slowdown in the global economy during the early part of this decade generally reduced capital spending and consumer confidence, and caused us to experience weakness in our end markets and reduced our profitability. Slowdowns in the semiconductor and telecommunications industries were particularly severe and adversely affected the sales of our products used in these applications. Should the demand for our products in any of our primary target markets decline in the future, our business, financial condition and results of operations may be adversely affected.

We have historically experienced fluctuations in our operating results and we expect these fluctuations to continue, which may cause our common stock price to decline.

Our quarterly and annual operating results are affected by a wide variety of factors that could materially and adversely affect our net revenue, gross profits and operating results. These factors include:

- the volume and timing of orders received;
- market acceptance of our products and the products of our customers;
- competitive pricing pressures;
- our ability to expand manufacturing output to meet increasing demand;
- the cyclical needs of our customers;
- the timing of goodwill impairments or restructuring or other accounting-related charges;
- the timing and extent of our research and development expenses;
- the timing and extent of significant capital equipment purchases;
- fluctuations in manufacturing yields; and
- litigation expenses.

Our business is characterized by short-term orders and shipment schedules, and customer orders typically can be canceled or rescheduled without penalty to the customer. Because most of our backlog is cancelable without penalty, we typically plan our production and inventory levels based on internal forecasts of customer demand, which is highly unpredictable and can fluctuate substantially. In

addition, because of our fixed costs, we are limited in our ability to reduce costs quickly in response to any revenue shortfalls. As a result of the foregoing factors, or the other risk factors discussed in this prospectus, we may experience material adverse fluctuations in our future operating results on a quarterly or annual basis. We cannot assure you that we will be profitable on a quarterly or annual basis in future periods.

We have incurred significant losses in certain recent periods, and there can be no assurance that we will be able to sustain profitability in the future.

Although we recorded a net profit for the year ended December 31, 2004, we recorded net losses in two of the last five full fiscal years. We may incur losses in subsequent periods. Our ability to maintain profitability on a quarterly or fiscal year basis in the future will depend on a variety of factors, including our ability to increase net revenue, expand gross margins, introduce new products on a timely basis, secure sufficient fabrication capacity and control operating expenses.

If we cannot introduce new products on a timely basis, our financial results may suffer.

The markets for our products are characterized by rapid technological change and frequent new product introductions. Historically in the semiconductor industry, average selling prices of products have decreased over time. If we are unable to introduce new proprietary products with higher margins or reduce manufacturing costs to offset anticipated decreases in the prices of our existing products, then our operating results will be harmed. Our success depends upon our ability to develop improved power semiconductors for new and existing markets, to introduce these products in a timely manner, and to have these products gain market acceptance. The development of new power semiconductors is highly complex and from time to time we have experienced delays in developing and introducing new products. Successful product development and introduction depends on a number of factors, including:

- proper new product definition;
- timely completion of design and testing of new products;
- cost-effectiveness;
- achievement of acceptable manufacturing yields; and
- market acceptance of our products and the products of our customers.

We cannot assure you we will be able to meet these challenges or adjust to changing market conditions as quickly and cost-effectively as necessary to compete successfully. Due to the complexity and variety of power semiconductors, the limited number of qualified development engineers and the limited effectiveness of computer-aided design systems in the design of such circuits, we cannot assure you that we will be able to successfully develop and introduce new products on a timely basis. We cannot assure you that any products introduced by us will be adopted by existing or potential customers, or that any products initially accepted by our customers will become industry standard products. Our failure to develop and introduce new products successfully could significantly harm our business and cause our operating results to suffer.

If we cannot optimize our mix of product sales, our financial results may suffer.

If we are unable to optimize the mix of sales of relatively higher margin but lower volume products and relatively higher volume but lower margin products, our operating results may be harmed. In order to improve our margins through sales of higher margin products it is important that in the future they represent a greater percentage of our net revenue, requiring us to develop, introduce and market new proprietary products. We cannot assure you that we will be successful in developing new proprietary products with the features and functionality that customers in our key markets will demand.

Our revenue depends upon our products being designed into our customers products.

We generally work closely with our customers in the design stage and as a result of this collaboration from time to time we will be notified that some of our new products are incorporated into customers products or systems. Assuming we believe some volume of our products is likely to be purchased, we typically refer to this event as a design win. The value of any design win largely depends upon the customer s decision to manufacture the designed product in production quantities, the commercial success of the customer s product and on the extent to which the design of the customer s system also accommodates incorporation of components manufactured by our competitors. In addition, our customers could subsequently redesign their products or systems so that they no longer require our products. For these or other reasons, we may not achieve design wins or our design wins may not result in future revenue.

Strong competition in the power semiconductor market may reduce the demand for our products or the prices of our products, which could reduce our revenue and harm our business.

The power semiconductor industry is highly competitive. Significant competitive factors in the power semiconductor market include:

- product features and performance;
- product quality;
- product reliability;
- technical knowledge;
- breadth of product line;
- competitive pricing; and
- customer service and support.

Because the market for power semiconductors is diverse and highly fragmented, we encounter different competitors in our various product markets. Our principal competitors in one or more of our product areas include Fairchild Semiconductor, Integra, International Rectifier, IXYS, MA/COM, Philips and ST Microelectronics. Many of our competitors have substantially greater technical, financial and marketing resources and greater name recognition than we do and may be on more approved vendor lists than we are. We expect intensified competition from existing power semiconductor suppliers and the possible entry of new competitors. Increased competition could harm our business. We cannot assure you that we will be able to compete successfully in the future or that competitive pressures will not harm our financial condition or our operating results. Competitive pressures could reduce market acceptance of our products and result in price reductions and increases in expenses that could harm our business and our financial condition.

Our financial results could be harmed if we were to lose one of our major customers or key distributors.

Several of our major customers account for a significant portion of our net sales each year. During 2004, our top five customers accounted for 46.6% of our net revenue, and one distributor, Richardson Electronics, accounted for 21.9% of our net revenue. If we lost Richardson Electronics or one of our other major customers, or if one of them reduced or canceled significant orders, our net income and operating results could be harmed. If our relationship with Richardson Electronics were discontinued, or if Richardson Electronics should fail to provide adequate service to our customers, we could lose revenue and our operating results would suffer.

We rely heavily on our key subcontractors. If they fail to produce needed goods and services, our business and results of operations may suffer.

We increasingly rely on third party subcontractors in Europe and Asia to manufacture, assemble and test most of our products. We rely on Infineon Technologies, an outside foundry located in Europe, and Episil Technologies, located in Taiwan, which collectively produce a

significant percentage of our wafers. Our agreement with Infineon provides for fixed prices and a guaranteed purchase commitment and may be terminated upon two years notice. In addition, we rely on Siltronic to supply silicon wafers. We also rely on Team Pacific and PSI Technologies, subcontractors in the Philippines, to assemble and test most of our switching power semiconductor products. In addition, we rely on Semiconductor Assembler & Manufacturer in Malaysia to assemble and package our RF products. We also rely on Kyocera as our sole source of ceramic packaging for certain discrete RF power semiconductors. We do not have long-term fixed price contracts with any of these key subcontractors other than Infineon. Disruption or termination of these arrangements or any capacity constraints that our subcontractors experience could harm our business and operating results. Political instability, labor disputes, natural disasters and other factors could disrupt the operations of our subcontractors. If any of our subcontractors experience financial, operational, production or quality assurance difficulties resulting in a reduction or interruption in supply to us, our operating results could suffer. Additionally, our subcontractors may not be able to maintain the technological capability to meet our future needs. Working with such subcontractors may lead to reduced control over product quality and delivery schedules. In addition, our subcontractors also manufacture and package products for our competitors, and there is a risk that our subcontractors could allocate less of their production capacity and resources to our needs or demand price increases. If our subcontractors fail to provide needed products and services in a timely and cost effective manner, our revenue, business and results of operations may suffer.

Interruptions in wafer production may harm our operating results.

Any prolonged inability to utilize our Bend, Oregon, Santa Clara, California or third party foundries as a result of fire, natural disaster or otherwise could harm our financial condition and cause our operating results to suffer. While we do carry business interruption insurance, there is no assurance that it would be available or sufficient in the event that one of our facilities was rendered unavailable. Also, at times, there are shortages of foundry capacity in the industry. For example, in 2000, our sales were limited by the wafer fabrication capacity available to us. If we are not able to obtain additional foundry capacity as required, our relationships with our customers may be harmed and our sales would likely be limited. We may not be able to make arrangements for additional foundry capacity in a timely

fashion or at all, and such arrangements, if any, may not be on terms favorable to us, and could entail significant delay and additional expense. In addition, qualifying a new foundry could require the consent of or requalification by our customers. Moreover, if we are able to secure additional foundry capacity, we may be obligated to utilize all of that capacity or incur penalties. These penalties may be expensive and could harm our operating results.

Intellectual property litigation may harm our business.

The semiconductor industry in general is characterized by frequent litigation regarding patent and other intellectual property rights. This may require us to defend against assertions of intellectual property infringement or misappropriation raised by our competitors. If we are unable to successfully defend against such assertions, we may be exposed to substantial liability for damages, need to obtain licenses from the intellectual property owners, discontinue or change our processes or products, and/or expend significant resources to develop or acquire non-infringing technologies (if at all possible). We cannot be certain that licenses would be available under reasonable terms or that we could successfully develop or acquire non-infringing technologies. Moreover, any such efforts would likely be time-consuming and consume significant management and financial resources. Thus, any involvement in intellectual property litigation could harm our operating results and financial condition.

We also have certain indemnification obligations to customers with respect to the infringement of third party intellectual rights by our products. No assurance can be provided that future assertions of infringement or misappropriation will not occur, or that claims for indemnification by customers of our products will not be made, or that assertions of infringement or misappropriation (especially if proven to be true) will not harm our business.

If we cannot adequately protect our technologies and intellectual property rights, our financial results may suffer.

Our success depends on our ability to obtain and maintain protection of certain proprietary technologies used in our principal products. We rely on a combination of patents, trade secret laws and contractual provisions to protect our technologies. Our competitors may independently develop technologies that are as good as or better than ours, and absent patent protection, we would be unable to stop their use of such independently developed technologies.

The process of seeking patent protection can be long and expensive, and we cannot assure you that our current patents are or any new patents that may be issued will be of sufficient scope or strength to provide any meaningful protection or any competitive advantage to us. Although none of our patents or other intellectual property rights has been successfully challenged to date, we cannot assure you that any patent owned by us will not be invalidated, circumvented or challenged.

In addition, we have licensed a portion of our intellectual property rights to European and Japanese entities and entered into two joint ventures and licensing and technology transfer agreements in China. The China agreements were subsequently terminated. We cannot assure you that these foreign entities have at all times remained within the scope of their contractual obligations with respect to our technology and intellectual property, or that other foreign entities have not infringed or misappropriated our intellectual property. Intellectual property law and practice differs in foreign jurisdictions, and it may prove difficult for us to protect our rights in foreign countries.

If we are unable to protect our technology and intellectual property rights, whether in the U.S. or abroad, we could face increased competition in the market for our products and technologies, or possibly even exclusion from the market. This would negatively affect our ability to maintain or expand our business, and thus our revenue.

If our manufacturing processes become obsolete, our margins and profitability may be harmed.

Semiconductor design and process methodologies are subject to rapid technological change, requiring large expenditures for research and development in order to improve product performance and increase manufacturing yields. Our current process technology is likely to become obsolete at some point in the future. If we are unable to develop or obtain access to advanced silicon wafer processing technologies as they become needed, our future operating results may suffer.

Our business is subject to risks associated with operations in foreign countries.

In 2004, approximately 35% of our revenue was from customers located outside of the U.S. In addition, some of our manufacturing operations are not in the U.S. The following are some of the risks inherent in doing business on an international level:

economic and political instability;

foreign currency fluctuations;

transportation delays;

trade restrictions;

work stoppages;

disruption of local labor supply and/or transportation services;

inflexible employee contracts in the event of business downturns;

government and license requirements governing the transfer of technology and products abroad;

the burden and cost of complying with import and export regulations;

risks of conflict and terrorism;

diseases such as SARS; and

the laws, including tax laws of, and the policies of the United States toward, countries in which we manufacture our products.

In addition, we have supply agreements, assembly agreements, and other relationships with foreign companies that are subject to similar risks. These risks could negatively affect our results of operation.

We depend on the availability of raw materials to manufacture our products, and a disruption in supply could harm our operating results.

We rely on raw materials to manufacture our products, including silicon, various chemicals, gases and compounds. In particular, we obtain silicon wafers and ceramic packaging through limited sources of supply, and in the event of a shortage, we may be forced to locate alternative sources and be forced to pay higher prices. A severe shortage or an increase in the price of silicon wafers or packaging may harm our gross margins and our ability to deliver our products on a timely basis, if at all.

Our foundries may experience lower than expected yields, which could adversely affect our business.

The manufacture of power semiconductors is a highly complex and technically demanding process. Production yields and device reliability can be affected by a large number of factors. As is typical in the semiconductor industry, our foundries have from time to time experienced lower than anticipated manufacturing yields and device reliability problems, particularly in connection with the introduction of new products and changes in processing steps. There can be no assurance that our foundries will not experience lower than expected manufacturing yields or device reliability problems in the future, which could materially and adversely affect our business and operating results.

Our business may be harmed by acts of terrorism.

Acts of terrorism could interrupt or restrict our business in several ways. For example, we rely extensively on the use of air transportation to move our inventory to and from our vendors and to ship finished products to our customers. If terrorist acts cause air transportation to be grounded or interrupted, our business could be harmed.

In addition, acts of terrorism could cause existing export regulations to be changed, which could limit the extent to which we are allowed to export our products. To the extent that acts of terrorism also reduce customer confidence and create general economic weakness, our business could also be harmed.

An accident at our manufacturing facilities could cause serious damage for which we could be responsible.

Our manufacturing operations involve high voltage equipment, explosive gases and hazardous chemicals. An accident at our manufacturing facilities could result in serious personal injury or property damage for which we could be held financially responsible and could interrupt our operations, potentially for an extended period of time. Any losses in excess of available insurance, and any long-term effects of disrupted operations, could harm our financial results.

Our products are complex and could contain defects, which could reduce sales of those products or result in claims against us.

We develop complex and evolving products. Despite testing by us and our customers, defects or other performance problems may be found in existing or new products. This could result in loss of revenue, loss of market share or failure to achieve market acceptance. These defects may also cause us to incur significant warranty, support and repair costs, divert the attention of our engineering personnel from our product development efforts and harm our relationships with our customers. Any defects or other problems with our products could result in financial or other damages to our customers who could seek damages from us for their losses.

We may be subject to product liability claims with respect to our products. Our products are incorporated into highly expensive equipment such as aircraft, and into products where a failure may have severe consequences, such as defibrillators. Our product liability insurance coverage may be insufficient to pay any such claims. Product liability insurance may become too costly for us or may become

unavailable to us in the future. We may not have sufficient resources to satisfy any product liability claims not covered by insurance which would materially and adversely affect our financial position. Even an unsuccessful product liability claim would likely be time-consuming and costly to defend.

Our manufacturing operations involve hazardous substances, and the costs of complying with applicable environmental laws could harm our financial results.

Our manufacturing operations are subject to various federal, state, local and foreign environmental laws and regulations relating to the management, disposal and remediation of hazardous substances and the emission and discharge of pollutants into the air, water and soil. In the conduct of our manufacturing operations, we have handled and do handle materials that are considered hazardous, toxic or volatile under federal, state, local and foreign laws. The risk of accidental release of such materials cannot be completely eliminated, and if such an accidental release occurs, we could be held financially responsible for clean-up costs and other consequences of the release. In addition, if environmental laws become more stringent over time, or existing laws are more stringently enforced, we could incur greater compliance costs and be subject to increased risks and penalties for violations. We could be held liable for significant damages for violating environmental laws and could lose certain licenses or permits, which could harm our financial results.

Failure to attract and retain key technical and management personnel could harm our operating results.

Our success depends upon the continued service of our executive officers and other key management and technical personnel, particularly our development engineers, and on our ability to continue to attract, retain and motivate qualified personnel, particularly experienced development engineers, applications engineers and sales managers. There is intense competition for the services of engineers in our industry. The loss of the services of one or more of our executive officers, development engineers or other key personnel or our inability to recruit replacements for such personnel or to otherwise attract, retain and motivate qualified personnel could harm our business. We do not currently carry life insurance payable to us with respect to any of our employees.

If we fail to manage our growth effectively, we may lose business and experience reduced profitability or increased losses.

We have at times experienced rapid revenue growth, and we anticipate future growth if demand increases in the markets for our products. To manage this growth successfully, we will need to manage increased production requirements, attract, retain and train new employees, including engineers and management, improve our operational and administrative systems, and manage multiple relationships with customers and suppliers. We may be unable to accomplish any of these requirements, and our failure to do so could harm our operating results.

We may not be able to consummate future acquisitions or integrate acquisitions successfully into our business.

We have made four acquisitions since we became a public company in August 2000, and we plan to pursue additional acquisitions of related businesses. The expense incurred in consummating the future acquisition of related businesses, or our failure to integrate such businesses successfully into our existing businesses, could result in our company incurring unanticipated expenses and losses. In addition, we may not be able to identify or finance additional acquisitions or realize any anticipated benefits from acquisitions we do complete. In the event of future

acquisitions, we could:

- use a significant portion of our available cash;
- issue equity securities that would dilute current stockholders percentage ownership;
- incur substantial debt; or
- assume contingent liabilities.

Should we successfully acquire another business, the process of integrating acquired operations into our existing operations may result in unforeseen operating difficulties and may require significant financial resources that would otherwise be available for the ongoing development or expansion of existing operations. Some of the risks associated with acquisitions include:

- difficulties in the assimilation of acquired operations, technologies or products;
- unanticipated costs associated with an acquisition or joint venture;
- potential asset write-downs;
- adverse effects on existing business relationships with customers; and
- potential loss of key employees of acquired organizations.

Our ability to successfully manage these risks could be limited by the small size of our management team. The occurrence of any of these risks may result in a decrease in the value of our assets and may harm our business and results of operations.

Our reported financial results may be harmed by changes in U.S. generally accepted accounting principles.

We prepare our financial statements in conformity with U.S. generally accepted accounting principles, or GAAP. These accounting principles are subject to interpretation by the Financial Accounting Standards Board, the American Institute of Certified Public Accountants, the Securities and Exchange Commission and various bodies formed to create and interpret accounting policies. A change in these policies or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change. For example, while current accounting rules allow us to exclude the expense of stock options from our financial statements, the Financial Accounting Standards Board finalized SFAS No. 123R Share Based Payment in December 2004, which will require us to expense stock options. We are currently evaluating the provisions of FAS 123R and expect that the adoption will have a material impact on the Company s consolidated results of operations. This new accounting policy will be effective for interim or annual reporting periods beginning after June 15, 2005.

Recently enacted and proposed changes in securities laws and regulations may increase our costs.

The Sarbanes-Oxley Act of 2002 that became law in July 2002, as well as new rules subsequently implemented by the Securities and Exchange Commission and the Nasdaq Stock Market, have required, and will require, changes to some of our accounting and corporate governance practices, including a report on our internal controls as required by Section 404 of the Sarbanes-Oxley Act of 2002. We expect these new rules and regulations to continue to increase our accounting, legal and other costs, and to make some activities more difficult, time consuming and costly. These new rules and regulations have made, and we expect will continue to make, it more difficult and 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 additional expenses have and may continue to reduce our profits or increase our losses. These new rules and regulations could also make it more difficult for us to attract and retain qualified executive officers and qualified members of our board of directors, particularly to serve on our audit committee.

Investment Risks

The price of our common stock may fluctuate widely in the future.

The trading price of our common stock has been and is expected to be subject to wide fluctuations in response to:

quarter-to-quarter variations in our operating results;

general conditions or cyclicality in the semiconductor industry or the end markets that we serve;

new or revised earnings estimates by us or industry analysts;

comments or recommendations issued by analysts who follow us, our competitors or the semiconductor industry;

aggregate valuations and movement of stocks in the broader semiconductor industry;

announcements of new products, strategic relationships or acquisitions by us or our competitors;

increases or decreases in available wafer, assembly or test capacity;

governmental regulations, trade laws and import duties;

announcements related to future or existing litigation involving us or any of our competitors;

announcements of technological innovations by us or our competitors;

additions or departures of senior management; and

other events or factors, many of which are beyond our control.

In addition, stock markets have experienced extreme price and trading volume volatility in recent years. This volatility has had a substantial effect on the market prices of securities of many technology companies for reasons frequently unrelated to the operating performance of specific companies. These broad market fluctuations may adversely affect the market price of our common stock.

Six members of management, as a group, own a significant interest in our common stock.

As of December 31, 2004, six members of our senior management (Messrs. Sireta, Crecraft, Haugen, Hess, Loder and Tsang) beneficially own approximately 40.1% of our outstanding shares of common stock. As a result, these members of management exercise significant influence over all matters requiring stockholder approval. The concentrated holdings of management may result in a delay of, or serve as a deterrent to, possible attempts to take us over, which may reduce the market price of our common stock.

Our articles of incorporation and Delaware law contain provisions that may hinder or prevent a change in the control of our company.

The authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to take us over. Also, we are subject to provisions of Delaware law that may have similar effects. For example, we are governed by Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our articles of incorporation or under Delaware law may defer hostile takeovers or delay changes in control or management, which could reduce our stock price.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK.

We do not use derivative financial instruments in our investment portfolio. Due to the short duration and conservative nature of our cash equivalents, and the high quality and conservative nature of our long-term investments, we do not expect any material loss with respect to our investment portfolio.

Currently less than 2% of our revenue is transacted in local currencies, primarily Euros. As a result, our international results of operations have limited exposure to foreign exchange rate fluctuations. We do not currently hedge against foreign currency rate fluctuations. Most of our export revenue and revenue by APT Europe are in U.S. dollars, and most of our foreign currency revenue is from operations with significant expenses in the same currency. As a result, gains and losses from such fluctuations have not been material to our consolidated results of operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The information required by this item is included in Note 13 of Notes to Consolidated Financial Statements and as listed in Item 15 of Part IV of this Report.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by new Rule 13a-15 under the Securities Exchange Act of 1934, the Company carried out an evaluation under the supervision and with the participation of the Company s management, including the Company s Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company s disclosure controls and procedures, as of the end of the period covered by this report. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company s disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission s rules and forms.

Changes in Internal Controls over Financial Reporting

No change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) occurred during the fourth quarter of our fiscal year ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. We have performed an evaluation under the supervision and with the participation of our management, including our CEO and CFO, of the effectiveness of our internal control over financial reporting. Our management used the framework *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations

(COSO) to perform the evaluation. Based on that evaluation our CEO and CFO concluded that our internal control over financial reporting was effective as of December 31, 2004.

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

Management s assessment of the effectiveness of our internal control over financial reporting as of December 31, 2004 has been audited by KPMG LLP, an independent registered public accounting firm, as stated in their report. KPMG LLP also performed an audit of our financial statements as of December 31, 2004 and provided their report thereon. A copy of both reports is included in this Annual Report on Form 10-K.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

The information required by this item is included in our Proxy Statement for our 2005 annual meeting of shareholders.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item is included in our Proxy Statement for our 2005 annual meeting of shareholders.

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

The information required by this item is included in our Proxy Statement for our 2005 annual meeting of shareholders.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information required by this item is included in our Proxy Statement for our 2005 annual meeting of shareholders.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this item is included in our Proxy Statement for our 2005 annual meeting of shareholders.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

1. Index to Financial Statements

2. Financial Statement Schedules

Schedules have been omitted because the information required to be set forth therein is not applicable or is included in the Consolidated Financial Statements or notes thereto.

3. Index to Exhibits

The following exhibits are filed with, or incorporated by reference into, this Annual Report on Form 10-K:

Exhibit Number	Description
2.1	Agreement and Plan of Merger dates as of December 6, 2001, among Advanced Power Technology, Inc., a Delaware corporation (Parent), GHz Acquisition, Inc., a Delaware corporation and a wholly owned subsidiary of Parent (Merger Sub), and GHz Technology, Inc. a California corporation (the Company), incorporated by reference to Exhibits to the 8K filed January 25, 2002.
2.2	Amendment to Agreement and Plan of Merger dated as of January 10, 2002 among Advanced Power Technology, Inc. a Delaware corporation, (Parent), GHz Acquisition, Inc., a Delaware corporation and a wholly owned subsidiary of Parent (Merger Sub), and GHz Technology, Inc. a California corporation (the Company), incorporated by reference to Exhibits to the 8K filed January 25, 2002.
2.3	Asset Purchase Agreement as of May 7, 2002 by and between Microsemi RF Products, Inc., a Delaware corporation (the Seller , a wholly owned subsidiary of Microsemi Corporation, a Delaware corporation (Microsemi) and RF Acquisition Sub, Inc. (the Purchaser), a Delaware corporation and a wholly owned subsidiary of Advanced Power Technology, Inc. a Delaware corporation (APT), incorporated by reference to Exhibits to the 8K filed May 31, 2002.

3.1	Amended and Restated Certificate and Articles of Incorporation, incorporated by reference to Exhibits to the Company s Registration Statement on Form S-1, as amended, effective August 8, 2000, Registration No. 333-38418, (the S-1).
3.2	Amended and Restated Bylaws, incorporated by reference to Exhibits to the S-1.
4.1	Form of Common Stock Certificate, incorporated by reference to Exhibits to the S-1.
4.3	Registration Rights Agreement by and among Advanced Power Technology, Inc., a Delaware corporation, and the investors listed on Exhibit A, thereto, incorporated by reference to Exhibits to the 8K filed January 25, 2002.
4.4	Escrow Agreement by and among Advanced Power Technology, Inc., a Delaware corporation (APT), GHz Technology, Inc., a Delaware corporation (GHz), Frank Schneider, solely in his capacity as Shareholder Representative (Shareholder Representative), and Silicon Valley Bank (the Escrow Agent), incorporated by reference to Exhibits to the 8K filed January 25, 2002.
4.5	Form of Common Stock Purchase Warrant between Advanced Power Technology, Inc. and Mark Gates, incorporated by reference to Exhibits to the 8K filed January 25, 2002.
10.1*	Stock Option Plan dated December 31, 1995, as amended, incorporated by reference to Exhibits to the S-1.

10.2*	Employment Agreement: Patrick P.H. Sireta, incorporated by reference to Exhibits to the S-1.
10.3*	Employment Agreement: Russell J. Crecraft, incorporated by reference to Exhibits to the S-1 .
10.4*	Employment Agreement: Greg M. Haugen, incorporated by reference to Exhibits to the S-1.
10.5*	Employment Agreement: John I. Hess, incorporated by reference to Exhibits to the S-1.
10.6*	Employment Agreement: Thomas A. Loder, incorporated by reference to Exhibits to the S-1.
10.7*	Employment Agreement: Dah Wen Tsang, incorporated by reference to Exhibits to the S-1.
10.8	Lease Agreement between Shevlin No. One and Advanced Power Technology, Inc. dated as of March 21, 1985, as amended, incorporated by reference to Exhibits to the S-1.
10.9	Commercial Lease between Glassow Ventures, L.L.C. and Advanced Power Technology, Inc. dated March 6, 1996, incorporated by reference to Exhibits to the S-1.
10.11	Manufacturing Agreement by and between Siemens AG and Advanced Power Technology, Inc. dated October 14, 1997, incorporated by reference to Exhibits to the S-1.
10.12	Agreement for Wafer Production and Testing by and between Advanced Power Technology, Inc. and Siemens Aktiengesellschaft dated February 11, 1998, as amended, incorporated by reference to Exhibits to the S-1.
10.19	Agreement for Wafer Production and Testing between APT and Episil Technologies, Inc., incorporated by reference to Exhibits to the 10Q for the third quarter of 2001.
10.20**	Employment Agreement: George J. Krausse, III.
10.21**	Amendments to Stock Option Plan dated December 31, 1995, as amended.
10.22**	Amendments to Lease Agreement between Shevlin No. One and Advanced Power Technology, Inc. dated as of March 21, 1985, as amended.
10.23**	North America Distributor Agreement between Richardson Electronics, Ltd. and Advanced Power Technology, Inc. dated as of August 1, 2002.
10.24**	Amendment to Manufacturing Agreement by and between Siemens AG and Advanced Power Technology, Inc. dated October 14, 1997.
10.25**	Amendments to Agreement for Wafer Production and Testing by and between Advanced Power Technology, Inc. and Siemens Aktiengesellschaft dated February 11, 1998, as amended.
10.26**	Document of Understanding between Advanced Energy Industries, Inc. and Advanced Power Technology, Inc. dated January 15, 2001.
10.27**	Supply Contract between Siltronic Corporation and Advanced Power Technology, Inc. dated September 15, 2004.
10.28**	Subcontract Agreement between Team Pacific Corporation and Advanced Power Technology, Inc. dated January 26, 2000, as amended.
10.29**	Worldwide Distributor Agreement between Future Electronics and Advanced Power Technology, Inc. dated as of October 30, 2003.
10.30**	Lease Agreement between 3000 Oakmead Village Drive, LTD and GHz Technology, Inc. dated as of June 17, 1991, as amended.
21.1**	Subsidiaries of Advanced Power Technology, Inc.
23.1**	Consent of KPMG LLP, Independent Registered Public Accounting Firm.
31**	Rule13a-14(a)/15d-14(a) Certifications, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32**	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Confidential treatment has been requested with respect to certain portions of these agreements. The omitted portions have been filed separately with the Securities and Exchange Commission.

* This Exhibit constitutes a management contract or compensatory plan or arrangement.

** Submitted electronically herewith

SIGNATURES

Pursuant to the requirements of Sections 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on March 4, 2005.

ADVANCED POWER TECHNOLOGY, INC.
By: /s/ GREG M. HAUGEN
Greg M. Haugen
Vice President, Finance and Administration, Chief Financial Officer and Secretary

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on March 4, 2005 by the following persons on behalf of the Registrant and in the capacities indicated.

Signature	**Title**
/s/ PATRICK P.H. SIRETA Patrick P.H. Sireta	Chairman, President and Chief Executive Officer (Principal Executive Officer)
/s/ GREG M. HAUGEN Greg M. Haugen	Vice President, Finance and Administration, Chief Financial Officer and Secretary (Principal Financial and Accounting Officer)
/s/ ROBERT C. PEARSON Robert C. Pearson	Director
/s/ JAMES E. PETERSEN James E. Petersen	Director
/s/ DOUGLAS S. SCHATZ Douglas S. Schatz	Director
/s/ ALFRED J. STEIN Alfred J. Stein	Director
/s/ RONALD F. MCKENNA Ronald F. McKenna	Director

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders

Advanced Power Technology, Inc.:

We have audited the accompanying consolidated balance sheets of Advanced Power Technology, Inc. and subsidiaries as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders equity and comprehensive income (loss), 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 audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether 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 Advanced Power Technology, Inc. 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 U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Advanced Power Technology Inc. s internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*, and our report dated March 4, 2005 expressed an unqualified opinion on management s assessment of, and the effective operation of, internal control over financial reporting.

Portland, Oregon

March 4, 2005

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders

Advanced Power Technology, Inc.:

We have audited management s assessment, included in the accompanying Management s Report on Internal Control Over Financial Reporting appearing under Item 9A of this Form 10-K, that Advanced Power Technology, Inc. maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*. Advanced Power Technology, Inc. s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management s assessment and an opinion on the effectiveness of the Company s internal control over financial reporting based on our audit.

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

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

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

In our opinion, management s assessment that Advanced Power Technology, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on criteria established in *Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*. Also, in our opinion, Advanced Power Technology, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in *Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)*.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Advanced Power Technology, Inc. and subsidiaries as of December 31, 2004 and 2003, and the related consolidated statements

of operations, stockholders equity and comprehensive income (loss), and cash flows for each of the years in the three-year period ended December 31, 2004, and our report dated March 4, 2005, expressed an unqualified opinion on those consolidated financial statements.

Portland, Oregon

March 4, 2005

ADVANCED POWER TECHNOLOGY, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	December 31,	
	2004	**2003**
Assets		
Current assets:		
Cash and cash equivalents	$ 4,149	$ 3,664
Short-term investments in available-for-sale securities	11,675	11,900
Accounts receivable, net	10,044	7,564
Inventories, net	14,647	12,382
Prepaid expenses and other current assets	2,196	2,436
Total current assets	42,711	37,946
Property and equipment, net	11,357	11,002
Long-term investments in available-for-sale securities	1,000	1,000
Other assets	110	174
Intangible assets, net	7,734	8,811
Goodwill	15,570	15,570
Total assets	$ 78,482	$ 74,503
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable	$ 4,143	$ 3,471
Accrued expenses	2,193	2,695
Total current liabilities	6,336	6,166
Other long term liabilities	108	127
Total liabilities	6,444	6,293
Commitments and contingencies		
Stockholders equity:		
Preferred stock, par value $.001, 1,000,000 shares authorized; no shares issued and outstanding		
Common stock, par value $.01, 19,000,000 shares authorized; 10,804,620 shares issued and 10,687,770 outstanding in 2004, 10,579,930 shares issued and 10,463,080 outstanding in 2003	108	106
Additional paid-in capital	89,138	88,625
Treasury stock, at cost, 116,850 shares in 2004 and 2003	(1,761)	(1,761)
Deferred stock compensation		(21)
Accumulated other comprehensive income	545	309
Accumulated deficit	(15,992)	(19,048)
Total stockholders equity	72,038	68,210
Total liabilities and stockholders equity	$ 78,482	$ 74,503

See accompanying notes to consolidated financial statements.

ADVANCED POWER TECHNOLOGY, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

	Years Ended December 31,		
	2004	2003	2002
Revenue, net	$ 67,837	$ 48,892	$ 43,425
Cost of goods sold	42,326	32,262	29,214
Amortization of technology rights and other charges	1,086	1,118	1,974
Total cost of goods sold	43,412	33,380	31,188
Gross profit	24,425	15,512	12,237
Operating expenses:			
Research and development	3,804	3,001	3,858
Selling, general and administrative	16,855	14,763	12,313
Restructuring charges	558	645	
In-process research and development charges	170		2,108
Total operating expenses	21,387	18,409	18,279
Income (loss) from operations	3,038	(2,897)	(6,042)
Other income (expense), net:			
Interest income, net	209	217	570
Other, net	(109)	(29)	14
Total other income	100	188	584
Income (loss) before income taxes	3,138	(2,709)	(5,458)
Income tax expense (benefit)	82	621	(1,771)
Net income (loss)	$ 3,056	$ (3,330)	$ (3,687)
Net income (loss) per share:			
Basic	$ 0.29	$ (0.32)	$ (0.36)
Diluted	0.27	(0.32)	(0.36)
Weighted average number of shares used in the computation of net income (loss) per share:			
Basic	10,620	10,410	10,248
Diluted	11,202	10,410	10,248

See accompanying notes to consolidated financial statements.

ADVANCED POWER TECHNOLOGY, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE INCOME (LOSS)

(In thousands, except share amounts)

	Common Stock		Treasury Stock		Additional Paid-In	Deferred Stock	Accumulated Other Comprehensive	Comprehensive Income	Accumulated	
	Shares	Amount	Shares	Amount	Capital	Compensation	Income	(Loss)	Deficit	Total
Balance, December 31, 2001	8,836,637	$ 88	(108,857)	$ (1,700)	$ 67,640	$ (166)	$ 117		$ (12,031)	$ 53,948
Issuance of shares for acquisition	1,522,976	15			16,205					16,220
Issuance of stock options for acquisition					4,093					4,093
Deferred stock compensation due to acquisition						(497)				(497)
Exercise of stock options	143,606	2			365					367
Tax benefit from exercise of options					180					180
Amortization of deferred compensation						485				485
Stock compensation					14					14
Forfeiture of stock options					(7)	7				
Net loss								$ (3,687)	(3,687)	(3,687)
Unrealized loss on investments							(68)	(68)		(68)
Foreign currency translation							117	117		117
Comprehensive loss								$ (3,638)		
Balance, December 31, 2002	10,503,219	105	(108,857)	(1,700)	88,490	(171)	166		(15,718)	71,172
Exercise of stock options	33,496				75					75
Exercise of stock warrants	43,215	1	(7,993)	(61)	60					
Amortization of deferred stock compensation						150				150
Net loss								$ (3,330)	(3,330)	(3,330)
Unrealized loss on investments							(3)	(3)		(3)
Foreign currency translation							146	146		146
Comprehensive loss								$ (3,187)		
Balance, December 31, 2003	10,579,930	106	(116,850)	(1,761)	88,625	(21)	309		(19,048)	68,210
Exercise of stock options	224,690	2			507					509
Stock compensation					6					6
Amortization of deferred stock compensation						21				21
Net income								$ 3,056	3,056	3,056
Unrealized loss on investments							(3)	(3)		(3)
Foreign currency translation							239	239		239
Comprehensive income								$ 3,292		
Balance, December 31, 2004	10,804,620	$ 108	(116,850)	$ (1,761)	$ 89,138	$	$ 545		$ (15,992)	$ 72,038

See accompanying notes to consolidated financial statements.

ADVANCED POWER TECHNOLOGY, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Years Ended December 31,		
	2004	2003	2002
Cash flows from operating activities:			
Net income (loss)	$ 3,056	$ (3,330)	$ (3,687)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	3,193	3,079	2,623
Amortization of intangibles	1,076	1,077	875
Inventory provision	807	454	893
In-process research and development charges	170		2,108
Net loss on disposal of property and equipment	146	4	
Tax benefit from exercise of warrants and options			180
Deferred taxes		846	(1,716)
Deferred gain on sale-leaseback	(17)	(17)	(18)
Building impairment charge	80	350	
Amortization of deferred stock based compensation	27	150	498
Amortization of investment discount	6	14	154
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(2,430)	(526)	(835)
Inventories	(2,983)	(726)	1,626
Prepaid expenses and other assets	301	178	2,718
Accounts payable and accrued expenses	262	708	(345)
Net cash provided by operating activities	3,694	2,261	5,074
Cash flows from investing activities:			
Purchases of available-for-sale securities	(13,360)	(17,350)	(20,483)
Proceeds from available-for-sale securities	13,575	18,833	44,188
Acquisitions, net of cash acquired	(231)		(26,632)
Purchase of property and equipment	(3,690)	(4,828)	(2,649)
Proceeds from sale of property and equipment			72
Net cash provided by (used in) investing activities	(3,706)	(3,345)	(5,504)
Cash flows from financing activities:			
Payments on capital lease obligations	(6)	(63)	(78)
Exercise of stock options	509	75	367
Net cash provided by financing activities	503	12	289
Effects of exchange rate changes on cash	(6)	(22)	(53)
Net change in cash and cash equivalents	485	(1,094)	(194)
Cash and cash equivalents at beginning of year	3,664	4,758	4,952
Cash and cash equivalents at end of year	$ 4,149	$ 3,664	$ 4,758
Supplemental disclosure of cash flow information:			
Cash (paid) received during the year for: Interest	$ (17)	$ (32)	$ (28)
Income taxes	(163)	197	2,098
Supplemental disclosure of non-cash activities:			
Issuance of stock and options for acquisitions			20,313
Unrealized loss on short-term and long-term investments	(3)	(3)	(68)

See accompanying notes to consolidated financial statements.

ADVANCED POWER TECHNOLOGY, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share amounts)

(1) Summary of Significant Accounting Policies

(a) Company Background

We are a leading designer, manufacturer and marketer of high-performance RF and switching power semiconductors. We are primarily focused on the high-power, high-speed segment of the power semiconductor market. Power semiconductors function as power amplifiers and power switches. They increase system efficiency and reliability by precisely managing and regulating electricity and converting it into the form required by electrical and electronic products. Our products permit the design of more compact end products and improve system features and functionality. Our products are found in diverse applications, such as F-22 fighter cockpits, the Boeing 777 back-up power system, the International Space Station, air traffic control radar systems, semiconductor capital equipment, MRI systems, arc welding equipment, industrial lasers, solar power panels and wireless communications base stations.

Power semiconductors generally dissipate more than one watt of power and have a broad range of frequency capabilities. We primarily focus on high-power, high-speed devices that dissipate at least several hundred watts of power and require operating frequencies greater than 20 kHz, or 20,000 cycles per second (e.g., the product may switch on and off up to 20,000 times per second).

We sell our products in North America, Europe, and Asia primarily pursuant to customer purchase orders. We sell through a network of independent sales representatives and distributors. We recognize revenue upon shipment of our products. We have operations in Bend, Oregon, Santa Clara, California, Montgomeryville, Pennsylvania, and Bordeaux, France. Each site has production, research and development and administrative activities. We also make use of subcontract manufacturers for the fabrication of our wafers and for assembly and test operations.

In 2002, we acquired GHz Technology and the product lines and certain assets of Microsemi RF Products to help us further penetrate the markets for RF devices. We believe that these acquisitions have positioned us as an emerging, leading supplier in bipolar RF power transistors and added substantial RF technology, engineering, manufacturing and marketing capabilities.

In 2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. In January 2005, we acquired PowerSicel, Inc. PowerSicel s and Zeus Semiconductor s combined expertise in silicon carbide and other compound semiconductor technology and products complement APT s current portfolio of RF products which operate at frequencies ranging from 1 MHz to 4 GHz and are sold into applications such as semiconductor capital equipment, medical imaging, radar, avionics and wireless communications. These acquisitions add valuable development capability to APT s core capability in RF power transistors allowing APT to better serve its current markets and to expand into new markets.

(b) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of APT and its wholly-owned subsidiaries, Advanced Power Technology Europe, SAS, Advanced Power Technology RF, Inc. and Advanced Power Technology RF Pennsylvania, Inc. All intercompany balances have been eliminated in the consolidated financial statements.

(c) Revenue Recognition, Sales Returns and Allowances

APT complies with the revenue recognition guidance summarized in Staff Accounting Bulletin (SAB) No. 101, Revenue Recognition in Financial Statements, as updated by SAB No. 104 Revenue Recognition, corrected copy. The Company recognizes revenue when products are shipped and the customer takes ownership and assumes risk of loss, collection of the relevant receivable is probable, persuasive evidence of an arrangement exists, and the sales price is fixed or determinable. In general, APT provides for a one-year repair or replacement warranty on its products. Upon shipment, APT also provides for the estimated cost that may be incurred for product warranty and sales returns based on historical experience and any contractual requirements with our distributors. APT uses independent distributors to sell its products. Our distributors have certain stock rotation rights which allow them to rotate up to 5% of their products every six months in exchange for an order of an equal amount of new product. Sales to distributors are recognized upon shipment, less an allowance for estimated returns based on historical experience. Revenue from certain contractual product sales or license arrangements is deferred and recognized when earned in accordance with the arrangement. The reserve for warranties and sales returns was $716, $431 and $351 as of December 31, 2004, 2003 and 2002, respectively. The changes in the reserve for warranties and sales returns for the years ended December 31, 2004, 2003, and 2002 are as follows:

	December 31,		
	2004	2003	2002
Balance beginning of year	$ 431	$ 351	$ 365
Acquisition balance			133
Provision	1,626	1,055	1,295
Charge offs	(1,341)	(975)	(1,442)
Balance end of year	$ 716	$ 431	$ 351

(d) Cash Equivalents and Investments

APT classifies highly liquid investments purchased with an original maturity of three months or less as cash equivalents. Short-term investments consist of U.S. government debt securities and other highly liquid investments with original maturities in excess of three months, but less than one year as well as other securities available to be used in the normal operating cycle. Long-term investments consist of highly liquid debt securities with maturities greater than one year. Our investment policy establishes a maximum maturity of less than two years for any security in our portfolio. Investments are classified as available-for-sale in accordance with Statement of Financial Accounting Standards (SFAS) 115, Accounting for Certain Investments in Debt and Equity Securities. Investments are carried at fair market value with unrealized gains and losses reported in stockholders equity as a component of other comprehensive income. Total gross unrealized gains and losses as of December 31, 2004 were nil and $3, respectively. There were no unrealized gains and losses as of December 31, 2003. The following is a summary of cash, cash equivalents and investments.

	December 31,	
	2004	2003
Cash and cash equivalents:		
Money market fund	$ 2,988	$ 839
Cash	1,161	2,825
Total cash and cash equivalents	$ 4,149	$ 3,664
Short-term investments:		
Municipal bonds and notes	$ 10,875	$ 10,900
Commercial paper	800	1,000
Total short-term investments	$ 11,675	$ 11,900
Long-term investments:		
Municipal bonds and notes	$ 1,000	$ 1,000
Total long-term investments	$ 1,000	$ 1,000

(e) Trade Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is APT s best estimate of the amount of probable credit losses in the existing accounts receivable. APT determines the allowance based on historical write-off experience, evaluation of the customer credit condition and general economic data. The allowance for doubtful accounts is reviewed monthly. Past due balances over 60 days and other specified accounts as necessary are reviewed individually. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. APT does not have any off-balance sheet credit exposure with its customers. The following table presents a roll forward of the allowance for doubtful accounts for the indicated periods:

	December 31,		
	2004	2003	2002
Balance beginning of year	$ 213	$ 70	$ 59
Provision (reduction)	92	243	14
Charge offs	(113)	(100)	(3)
Balance end of year	$ 192	$ 213	$ 70

(f) Inventories

Inventories are stated at the lower of standard cost (approximates actual cost on a first-in, first-out basis) or market (net realizable value). The cost of certain inventories has been reduced by $1,923 and $2,036 as of December 31, 2004 and 2003, respectively.

(g) Property, Equipment, and Long-Lived Assets

Property and equipment are recorded at cost. Machinery and equipment under capital lease are stated at the lower of the present value of the minimum lease payments at the beginning of the lease term or the fair value of the leased assets at the inception of the lease.

Depreciation is provided using the straight-line method over estimated useful lives, five to seven years for machinery, furniture and equipment. Leased assets and leasehold improvements are amortized over the shorter of the estimated life of the asset or the term of the related lease, ranging from three to ten years. Depreciation begins on assets in process at the time the related assets are placed in service. Maintenance and repairs are expensed as incurred.

As required by SFAS 144, Accounting for the Impairment or Disposal of Long-Lived Assets, management reviews long-lived assets and intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of the assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows of the operation to which the assets relate, to the carrying amount including associated intangible assets of the operation. If the operation is determined to be unable to recover the carrying amount of its assets, then intangible assets are written down first, followed by the other long-lived assets of the operation, to fair value. Fair value is determined based on discounted cash flows or appraised values, depending on the nature of the assets. Long-lived assets considered held for sale are valued at the lower of historical cost or fair value less costs to sell. Such assets are not depreciated while so classified.

(h) Goodwill and Intangible Assets

APT values goodwill and intangible assets in accordance with SFAS 142, Goodwill and Other Intangible Assets. The costs of internally developed intangible assets are expensed as incurred. The costs of acquired intangible assets are recorded at fair value at acquisition. Intangible assets with finite lives are amortized using the straight-line method over their estimated useful lives, estimated at ten years, and evaluated for impairment in accordance with SFAS 144. Amortization of technology rights was $1,076, $1,077, and $875 for 2004, 2003, and 2002, respectively. Accumulated amortization of technology rights was $3,030 and $1,954 as of December 31, 2004 and 2003, respectively. Excluding the impact of any future acquisitions, amortization of technology rights will be $1,076 per year for each of the next five years through 2009.

Goodwill and intangible assets with indefinite lives are carried at fair value and reviewed at least annually for impairment, or more frequently if events and circumstances indicate that the asset might be impaired, in accordance with SFAS 142. An impairment loss is recognized to the extent that the carrying amount exceeds the asset s fair value. This determination is made at the reporting unit level and consists of two steps. APT is currently considered one reporting unit. First, the Company determines the fair value of the reporting unit and compares it to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit s goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation, in accordance with SFAS 141, Business Combinations. The residual fair value after this allocation is the implied fair value of the reporting unit goodwill.

(i) Income Taxes

Income taxes are accounted for under the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. 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 when necessary to reduce deferred tax assets to the amount expected to be realized. During 2003, the Company determined that a valuation allowance should be recorded against its net deferred tax assets. As of December 31, 2004, the Company maintains a full valuation allowanced against its net deferred tax assets.

(j) Research and Product Development Expenses

APT expenses the cost of research and development as incurred. Research and development expenses principally consist of payroll and related costs, facilities and equipment costs, and the costs of prototypes.

(k) Stock-Based Compensation

SFAS 123, Accounting for Stock-Based Compensation, as amended by SFAS 148, Accounting for Stock Based Compensation Transition and Disclosure an amendment of FASB Statement No. 123, defines a fair value based method of accounting for employee stock options or similar instruments. Under the fair value based method, compensation cost is measured at the grant date based on the value of the award and is recognized over the service period, which is usually the vesting period. However, SFAS 123 also allows an entity to continue to measure compensation cost using the intrinsic value based method of accounting prescribed by APB Opinion No. 25 (Opinion 25), Accounting for Stock Issued to Employees. Under the intrinsic value based method, compensation cost is the excess, if any, of the quoted market price of the stock at grant date or other measurement date over the amount an employee must pay to acquire the stock. Entities electing to remain with the accounting in Opinion 25 must make pro forma disclosures of net income (loss) and, if presented, earnings per share, as if the fair value based method had been applied.

APT has elected to continue to apply the prescribed accounting in Opinion 25 and provide the required disclosures per SFAS 123 and SFAS 148. APT accounts for equity instruments issued to non-employees in accordance with the provisions of SFAS 123 and Emerging Issues Task Force consensus on Issue No. 96-18, Accounting for Equity Instruments that are Issued to Other than Employees, for Acquiring or in Conjunction with Selling Goods or Services.

On December 16, 2004, the FASB finalized SFAS No. 123R Share Based Payment, which will be effective for interim or annual reporting periods beginning after June 15, 2005. The new standard will require us to expense stock options. We are currently evaluating the provisions of FAS 123R and expect that the adoption will have a material impact on the Company s consolidated results of operations.

APT applies Opinion 25 in accounting for its Plan. Had APT determined compensation cost based on the fair value at the grant date for its stock options under SFAS 123, APT s net income (loss) would have been the pro forma amounts indicated in the table below.

	Years Ended December 31,		
	2004	**2003**	**2002**
Net income (loss):			

As reported	$ 3,056	$ (3,330)	$ (3,687)
Add: Stock based compensation included in reported net income (loss)	27	150	498
Deduct: Stock based compensation determined under fair value based method for all awards	(1,170)	(1,822)	(2,469)
Pro forma net income (loss)	$ 1,913	$ (5,002)	$ (5,658)
Earnings (loss) per share:			
Basic as reported	$ 0.29	$ (0.32)	$ (0.36)
Basic pro forma	$ 0.18	$ (0.48)	$ (0.55)
Diluted as reported	$ 0.27	$ (0.32)	$ (0.36)
Diluted pro forma	$ 0.17	$ (0.48)	$ (0.55)

The effects of applying SFAS 123 in this pro forma disclosure are not indicative of future amounts and additional awards anticipated in future years. The fair value of compensation costs reflected in the above pro forma amounts were determined using the Black-Scholes option pricing model and the following weighted average assumptions:

	Years Ended December 31,		
	2004	2003	2002
Risk-free interest rate	3.0-3.7%	2.6-3.2%	3.8%
Expected dividend yield	0%	0%	0%
Expected life	5 years	5 years	5 years
Volatility	100%	100%	100%

(l) Foreign Currency

The local currency of APT s foreign subsidiary is the functional currency. Assets and liabilities of APT s foreign operation are translated into U.S. dollars using exchange rates in effect at the translation date, and revenue and expenses are translated into U.S. dollars using average exchange rates. The effects of foreign currency translation adjustments are included as a component of stockholders equity (deficit). Gains and losses from foreign currency transactions are included in the consolidated statements of operations in other income (expense).

(m) Net Income (Loss) per Share

Basic net income (loss) per share is computed using the weighted average number of shares of common stock outstanding for the period. Diluted net income per share is computed using the weighted average number of shares of common stock and dilutive potential common shares related to stock options and warrants outstanding during the period. Anti-dilutive potential common shares are excluded from the diluted net income share calculation. Dilutive net loss per share excludes all potential common shares from the calculation as the impact would be anti-dilutive.

Incremental dilutive shares included in the calculation of diluted net income (loss) per share and incremental anti-dilutive shares that were excluded from the calculation of diluted net income (loss) per share for years ended December 31, 2004, 2003 and 2002 are summarized below:

	Years ended December 31,		
	2004	2003	2002
Incremental dilutive shares included in diluted net income (loss) per share calculation	582,000		
Anti-dilutive shares excluded from diluted net income (loss) per share calculation	582,000	1,221,000	1,105,000

(n) Risk of Technological Change

The markets in which APT competes or seeks to compete are subject to rapid technological change, frequent new product introductions, changing customer requirements for new products and features, and evolving industry standards. The introduction of new technologies and the emergence of new industry standards could render APT s products less desirable or obsolete, which could harm its business.

(o) Costs of Software Developed or Obtained for Internal Use

Internal use software development costs are accounted for in accordance with Statement of Position 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use. Costs incurred in the preliminary project stage are expensed as incurred and costs incurred in the application and development stage, which meet the capitalization criteria, are capitalized and amortized on a straight-line basis over five years, the estimated useful life of the asset.

(p) Management Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates and judgments made by management include those related to product returns and warranty obligations, allowance for doubtful accounts, excess and obsolete inventories, income taxes, valuation of intangible assets including goodwill, valuation of long-lived assets, contingencies and litigation, and excess component order cancellation costs.

(q) Fair Value of Financial Instruments

The carrying amount of cash and cash equivalents, short-term investments, accounts receivable and accounts payable approximate fair value due to the short-term nature of these instruments. The carrying amount of long-term investments approximates fair value based on quoted market rates. The carrying amount of amounts due under long-term obligations approximate fair value since the interest rates approximate current rates available to APT.

(r) Concentration of Suppliers

APT relies on external subcontractors for the manufacture of wafers and substantially all the assembly and packaging of certain products. The failure to perform by one of these suppliers could have a material impact on APT s growth and results of operations.

(s) Reclassifications

Certain reclassifications have been made to the prior year financial statements to conform to fiscal year 2004 presentation. These changes had no impact on previously reported results of operations or shareholders equity. The reclassification related to certain auction rate securities which are now classified as short-term investments in available-for-sale securities and which had previously been classified as cash and cash equivalents. The amounts for such auction rate securities as of December 31, 2004 and 2003 were $7,875 and $7,900, respectively.

(2) Balance Sheet Components

(a) Inventories

Inventories consist of the following:

	December 31, 2004	2003
Raw materials	$ 3,003	$ 2,796
Work in process	7,061	5,767
Finished goods	4,583	3,819
Inventories, net	$ 14,647	$ 12,382

(b) Property and Equipment

Property and equipment consist of the following:

	December 31, 2004	2003
Property, machinery, furniture and equipment	$ 23,947	$ 21,498
Leasehold improvements	1,219	1,213
Assets in process	3,185	2,708
	28,351	25,419
Less accumulated depreciation and amortization	(16,994)	(14,417)
Property and equipment, net	$ 11,357	$ 11,002

(c) Accrued Expenses

Accrued expenses consist of the following:

	December 31, 2004	2003
Payroll, commissions and related liabilities	$ 361	$ 653
Vacation accrual	693	553
Income and other taxes payable	144	360
Reserve for warranty and sales return	716	431
Other	279	698
	$ 2,193	$ 2,695

(3) Restructuring Charges

Restructuring costs are accounted for in accordance with SFAS 146, Accounting for Costs Associated with Exit or Disposal Activities. A liability for a cost associated with an exit or disposal activity is recognized and measured at fair value in the period the liability is incurred, except for liabilities related to ongoing service requirements which are recognized over the service period. All other restructuring charges are directly expensed in the period they are paid.

As part of management s strategic plans, the Company announced in November of 2003 restructuring actions intended to improve manufacturing efficiencies and lower administrative costs. The actions include consolidation of certain administrative functions, rationalization of internal and external assembly and test manufacturing, and the reduction of rent expense through the purchase and resale of one of the two buildings currently occupied by the Company s Santa Clara, California subsidiary. These announced actions were in addition to previously disclosed plans to consolidate our wafer fabrication plant in Montgomeryville, Pennsylvania to Bend, Oregon. Total restructuring related charges recognized in 2004 and 2003 were $558 and $645, respectively.

The total severance related charges recognized in 2004 and 2003 were $103 and $295, respectively. The severance charges related to already separated personnel and personnel costs associated with benefits expected to be paid upon completion of certain eligible transfer activities.

The building purchase is reported as an asset held for sale and is being marketed for sale as APT no longer requires the space. In accordance with SFAS 144, an asset held for sale is carried at estimated net fair value less selling costs. As such, APT recorded an impairment charge for the building of approximately $80 and $350 in 2004 and 2003, respectively. Fair value was estimated based on comparable sales data of similar commercial space in the area. The net carrying value of the building as of December 31, 2004 was approximately $930 and is included as a component of other current assets.

Additional restructuring costs of $375 associated with costs to exit certain production activities were also recognized in 2004. The charges relate to accelerated depreciation on certain production related equipment to be abandoned after shutdown and contractual closing costs. The changes in the reserve for restructuring balance for 2004 and 2003 are shown in the table below. Certain of the restructuring

charges were expensed as incurred and therefore are not included in the provision. There were no provisions or charges in 2002.

	December 31, 2004	2003
Balance beginning of year	$ 178	$
Provision	191	295
Payments	(309)	(117)
Balance end of year	$ 60	$ 178
Provision	$ 191	$ 295
Direct expenses	23	
Non-cash charges	344	350
Total restructuring charges	$ 558	$ 645

(4) Acquisitions

(a) Zeus Semiconductor, Inc.

During the third quarter of 2004, APT acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. The acquisition price was $175, paid in cash. The purchase price was allocated to in-process research and development (IPR&D) of $170 and fixed assets of $5. The value assigned to IPR&D related to research projects for which technological feasibility had not yet been established and for which there was no other feasible alternative use for the technology. The value of the IPR&D was determined based on the consideration paid as the most reliable measure. The acquisition was made to enhance APT s product development capability.

Reference is also made to our Subsequent Events Note 11, for information about an additional acquisition we made in January of 2005.

(b) GHz Technology, Inc.

On January 25, 2002, APT acquired all of the outstanding shares and stock options of GHz Technology, Inc. (GHz), in exchange for cash, APT common stock, and APT stock options. The company was re-named to Advanced Power Technology RF, Inc. (APTRF). The GHz assets acquired included approximately $205 in cash and $7,656 in marketable securities. The transaction was accounted for by the purchase method of accounting, in accordance with SFAS 141, Business Combinations and SFAS 142. APT obtained a third party valuation study to estimate the fair value of the acquired intangible assets. APT began to consolidate the financial results of GHz on January 25, 2002 and forward. The purchase price for accounting purposes was derived as follows:

	Shares	Fair Value
Cash		$ 13,453
Stock	1,522,976	16,220

Exchanged options	425,823		4,093
Direct costs			910
Total purchase price		$	34,676

APT common stock was valued at the average stock price at the time of the transaction. With respect to stock options exchanged as part of the merger consideration, all vested and unvested GHz options exchanged for APT options are included as part of the purchase price based on their fair value. The estimated fair value of the options to be assumed by APT is based upon the Black-Scholes model using the following assumptions: expected life of 5 years; expected volatility of 100%; risk-free interest rate of 4.3%; and expected dividend rate of 0%.

GHz s products complement APT s current portfolio of RF products that operate at frequencies ranging from 1 MHz to 100 MHz and are sold into applications such as semiconductor capital equipment, medical imaging, and industrial systems. The GHz products are capable of frequencies ranging from 10 MHz to 3.5 GHz and are primarily sold into applications such as avionics and radar as well as wireless communications and semiconductor capital equipment.

The allocation of purchase price was as follows:

Inventory	$	1,943
Property and equipment		2,029
Other tangible assets		8,653
Deferred compensation on unvested stock options assumed		497
Acquired in-process research and development		1,897
Acquired intangible technology rights		7,449
Goodwill		14,196
Net deferred tax liability		(1,988)
Allocated purchase price	$	34,676

In connection with this acquisition, the APT recorded a charge of $1,897 for the write-off of in-process research and development (IPR&D). The value assigned to IPR&D related to research projects for which technological feasibility had not yet been established and for which there was no other feasible alternative use for the technology. In addition, APT recorded an intangible asset for acquired current technology rights in the amount of $7,449, to be amortized over ten years, the expected life of the technologies. Total goodwill recorded was $14,196. The IPR&D, technology rights and goodwill amounts are not deductible for tax purposes.

The values of IPR&D and technology rights were determined by estimating the net cash flows from the sale of products from these technologies over a ten year period and discounting the net cash flows back to their present value using risk adjusted interest rates of 15-20% for current technologies and 25-40% for in-process technologies. The estimated net cash flows from these products were based on management s estimates of related revenue, costs of goods sold, operating expenses, income taxes, and additional costs to completion for in-process technologies.

The nature of the efforts to develop the in-process technology into commercially viable products principally relate to the completion of all designing, prototyping, verification and testing activities that are necessary to establish that the product can be produced to meet its design specifications, including function, features, and technical performance requirements. GHz had three main product groups under development at the acquisition date that met the minimum development requirements for IPR&D projects. Each contributed from 11% to 62% of the total IPR&D value. The projects included L Band and S Band radar as well as commercial LDMOS applications. The projects ranged from 65% to 75% complete. All projects had expected completion dates within 12 to 18 months and an estimated aggregate cost to complete of $1,200. As of December 31, 2003 the projects were complete and the related products were released to production.

(c) Microsemi RF Products, Inc.

On May 24, 2002, APT acquired the product lines and certain assets of Microsemi RF Products, Inc. (MSC RF), a wholly-owned subsidiary of Microsemi Corporation, for $12,200 in cash. The company was re-named to Advanced Power Technology RF Pennsylvania, Inc. (APTRF-PA). The transaction was accounted for by the purchase method of accounting, in accordance with SFAS 141 and SFAS 142. APT obtained a third party valuation study to estimate the fair value of the acquired intangible assets. APT began to consolidate the financial results of the acquired business on May 24, 2002 and forward. The purchase price for accounting purposes was $12,200 in cash and $260 in direct costs.

MSC RF produces and sells bipolar RF transistors that are used in a variety of radar, avionics, communications and general purpose applications. MSC RF s products complement GHz s technology as well as APT s current portfolio of RF products. The combination of the three companies RF products and technologies positions APT as an emerging dominant supplier in bipolar RF power transistors for avionics, radar and non-cellular communications applications.

The allocation of purchase price was as follows:

Inventory	$	3,068
Property and equipment		3,089
Other tangible assets		1,168
Acquired in-process research & development		211
Acquired intangible technology rights		3,314
Goodwill		1,610
Allocated purchase price	$	12,460

In connection with this acquisition, APT recorded a charge of $211 for the write-off of IPR&D. The value assigned to IPR&D related to research projects for which technological feasibility had not yet been established and for which there was no other feasible alternative use for the technology. In addition, APT recorded an intangible asset for acquired current technology rights in the amount of $3,314, to be amortized over ten years, the expected life of the technologies. Total goodwill recorded was $1,610. The IPR&D, technology rights and goodwill amounts are deductible for tax purposes.

The values of IPR&D and technology rights were determined by estimating the net cash flows from the sale of products from these technologies over a ten year period and discounting the net cash flows back to their present value using risk adjusted interest rates of 30% for current technologies and 35-40% for in-process technologies. The estimated net cash flows from these products were based on management s estimates of related revenue, costs of goods sold, operating expenses, income taxes, and additional costs to completion for in-process technologies.

The nature of the efforts to develop the in-process technology into commercially viable products principally related to the completion of all designing, prototyping, verification and testing activities that are necessary to establish that the product can be produced to meet its design specifications, including function, features, and technical performance requirements. MSC RF had two main product groups under development at the acquisition date that met the minimum development requirements for IPR&D projects. The two projects contributed 88% and 12% to the total IPR&D value. The projects consisted of Junction Field Effect Transistor and Powermite3 applications. Each project had expected completion dates within 12 to 18 months and an estimated aggregate cost to complete of $30. As of December 31, 2003 the projects were discontinued in order to pursue other opportunities.

(d) Pro Forma Condensed Consolidated Results

The following table reflects the unaudited combined results of APT, GHz, and MSC RF as if the acquisitions had taken place as of January 1, 2002. The pro forma information includes non-cash charges for amortization of technology rights, inventory fair value adjustments, depreciation and deferred compensation related to the acquisitions, consistent with generally accepted accounting principles. The period excludes a charge of $2,108 for in-process research and development expense. The pro forma information does not necessarily reflect the actual results that would have occurred if the companies had been combined during the period nor is it necessarily indicative of future results of operations for the combined companies.

		Year Ended December 31, 2002
Revenue, net	$	47,559
Net loss		(2,183)
Net loss per share:		
Basic	$	(0.21)
Diluted	$	(0.21)
Weighted average number of shares used in the computation of net loss per share:		
Basic		10,352
Diluted		10,352

(5) Leases

APT leases its facilities, except for the Montgomeryville, Pennsylvania site, and certain office equipment under non-cancelable operating leases, which expire over the next nine years. Rental expense was $1,154, $1,389, and $1,534, for the years ended December 31, 2004, 2003, and 2002, respectively.

Future minimum lease payments under non-cancelable operating leases (with initial or remaining lease terms in excess of one year) are as follows as of December 31, 2004:

Years ended December 31:		
2005	$	1,194
2006		1,241
2007		1,263
2008		1,158
2009		884
Thereafter		986
Total	$	6,726

During 1996, APT sold its fabrication facility in Bend, Oregon for $1,550 and leased it back under a fifteen-year operating lease agreement. The transaction produced a gain of approximately $259 that is being deferred and amortized over the fifteen-year lease period.

(6) Taxes

Domestic and foreign pre-tax income (loss) consists of the following:

	Years Ended December 31,		
	2004	**2003**	**2002**
Domestic	$ 4,048	$ (2,026)	$ (5,968)
Foreign	(910)	(683)	510
	$ 3,138	$ (2,709)	$ (5,458)

Income tax expense (benefit) consists of the following:

	Years Ended December 31,		
	2004	**2003**	**2002**
Current:			
Federal	$ 68	$ (186)	$ (46)

State	14	(39)	(9)
Foreign			
	82	(225)	(55)
Deferred:			
Federal		700	(1,455)
State		146	(261)
		846	(1,716)
Total	$ 82	$ 621	$ (1,771)

The actual income tax expense (benefit) differs from the expected tax expense (benefit) computed by applying the U.S. federal corporate income tax rate of 34% to income (loss) before income taxes as follows:

	Years Ended December 31,		
	2004	2003	2002
Expected income tax expense (benefit)	34%	(34)%	(34)%
Tax-exempt municipal interest	(2)	(2)	(2)
Change in valuation allowance	(32)	70	(4)
State income taxes, net of federal benefit	4	(4)	(3)
Non deductible IPR&D charges			12
Other	(1)	(7)	(1)
Actual income tax (benefit) expense	3%	23%	(32)%

The income tax effect of temporary differences and carry forwards which give rise to significant portions of deferred tax assets and liabilities are as follows:

	December 31,	
	2004	2003
Deferred tax assets:		
Reserves and allowances	$ 1,149	$ 1,106
Accrued vacation pay	177	139
Net operating loss carry forwards	3,230	3,208
R&E and other credit carry forwards	772	718
Other	107	62
Total gross deferred tax assets	5,435	5,233
Less valuation allowance	(3,020)	(2,838)
Net deferred tax asset	2,415	2,395
Deferred tax liabilities:		
Depreciation and amortization differences	(2,415)	(2,395)
Net deferred tax assets	$	$

The net changes in the valuation allowance for the years ended December 31, 2004, 2003, and 2002, were an increase of $182 and $1,998 and a decrease of $189, respectively. As of December 31, 2004 and 2003, deferred tax assets net of deferred tax liabilities have been offset by a full valuation allowance. The portion of the valuation allowance for deferred tax assets for which subsequently recognized tax benefits will be applied directly to contributed capital is $775. This amount is attributable to differences between financial and tax reporting of employee stock option transactions.

As of December 31, 2004, APT has federal and state net operating loss carry forwards of $3,018 and $4,397, respectively, which expire beginning in years 2020 through 2023. In addition, APT has federal and state research and experimentation credit carry forwards of $868 which expire beginning in years 2019 through 2023. APT also has foreign net operating loss carry forwards for tax purposes available to offset future income of APT Europe of approximately (Euros) EUR3,989 ($5,441) based on the exchange rate as of December 31, 2004; all of which are available indefinitely.

(7) Stockholders Equity

(a) Stock Option Plan

The 1995 Stock Option Plan (the Plan) provides for the granting of stock options to employees, directors and consultants to purchase up to 2,400,000 shares of common stock. Options granted under the Plan are generally granted with exercise prices equal to the stock market price on the date of grant, must generally be exercised while the individual is an employee and within ten years of the date of grant. Options granted typically vest at a rate of 20% per year for five years. As of December 31, 2004, options available for grant were 167,683.

The 1995 Stock Option Plan is due to expire in 2005. Management has proposed and the board of directors has approved, subject to shareholder approval, the adoption of the 2005 Stock Option Plan with a share reserve of 1,500,000 shares. The 2005 Stock Option Plan has essentially the same provisions as the 1995 Stock Option Plan: options are generally granted with exercise prices equal to the stock market price on the date of grant, must generally be exercised while the individual is an employee and within ten years of the date of grant. Options granted typically vest at a rate of 20% per year for five years.

Under the Black-Scholes option pricing model, the weighted average fair value of options granted during the year ended December 31, 2004 and 2003 were $7.19 and $5.11, respectively. All options issued in 2004 and 2003 had exercise prices equal to the market price of the stock on the date of grant. The weighted average fair value of options granted during the year ended December 31, 2002 was $8.65 for options with exercise prices that were less than market price of the stock on date of grant and $8.09 for all other options which had exercise prices equal to stock market price at the time of grant. During 2002, 425,823 options were issued with exercise prices that were less than the stock market price on the date of grant in connection with the acquisition of GHz Technology, Inc and exchange of outstanding GHz options. (See Note 4(b)).

Stock option activity was as follows:

	Number of Shares	Weighted Average Exercise Price
Options outstanding at December 31, 2001	894,871	$ 5.58
Granted	923,785	7.17
Exercised	(143,606)	2.62
Forfeited	(98,878)	8.42
Options outstanding at December 31, 2002	1,576,172	6.61
Granted	54,750	6.79
Exercised	(33,496)	2.26
Forfeited	(10,984)	8.63
Options outstanding at December 31, 2003	1,586,442	6.69
Granted	167,200	9.50
Exercised	(224,690)	2.26
Forfeited	(35,421)	8.61
Options outstanding at December 31, 2004	1,493,531	7.63

The following table summarizes information about stock options as of December 31, 2004:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices Per Share	Number of Options	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price Per Share	Number of Options	Weighted Average Exercise Price Per Share
$ 1.40-3.60	464,367	3.2	$ 1.48	438,157	$ 1.47
3.61-10.80	488,139	7.9	7.63	218,911	7.06
10.81 - 14.40	433,195	6.9	11.80	317,622	11.97
14.41 - 36.00	107,830	6.1	17.30	78,750	17.83
	1,493,531	6.0	7.63	1,053,440	7.02

As of the December 31, 2003 and 2002 there were 1,021,753 and 790,629 stock options exercisable with weighted average exercise price per share of $5.55 and $4.66, respectively.

(b) Warrants

On January 25, 2002, APT issued warrants to purchase 5,000 shares of common stock at $1.16 in exchange for an existing outstanding warrant for GHz shares in connection with the purchase of GHz by APT (See Note 4). The deemed fair value of the warrant issued was immaterial as determined by applying the Black-Scholes methodology, and was capitalized as part of the acquisition costs. The warrant is exercisable through July 31, 2006. As of December 31, 2004, this is the only warrant outstanding.

(8) Retirement Benefit Plan

APT has a defined contribution 401(k) plan (401k). Employees in the United States who are at least eighteen years old and have six months of service are eligible to participate in the 401k. Participants may defer up to 15% of eligible compensation. During 2004, 2003, and 2002, APT did not provide any matching contributions to the plan.

(9) Related Party Transactions

The chief executive officer of Advanced Energy Industries, Inc (Advanced Energy), who is a substantial shareholder of Advanced Energy, serves as a director of APT. For the years ended December 31, 2004, 2003, and 2002, revenue from Advanced Energy was approximately $6,560, $4,530, and $4,122, respectively. Accounts receivable from Advanced Energy were $138 and $321 at December 31, 2004 and 2003, respectively.

(10) Commitments and Contingencies

From time to time the Company is involved in various legal matters that arise out of the ordinary conduct of our business, including those related to litigation over intellectual property rights, commercial transactions, contracts, product liability, environmental, safety and health, and employment matters. The Company is not currently involved in any legal proceedings. The Company accrues loss contingencies in connection with its litigation when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated.

We have certain indemnification obligations to customers with respect to the infringement of third party intellectual rights by our products. No assurance can be provided that future assertions of infringement or misappropriation will not occur, or that claims for indemnification by customers of our products will not be made, or that assertions of infringement or misappropriation (especially if proven to be true) will not harm our business.

APT has agreements with foundry partners in Europe and Taiwan to process wafers. APT also has agreements with subcontractors in the Philippines and Malaysia for assembly and testing of most of its plastic encapsulated products. In addition, APT enters purchase order obligations in the normal course of business for the purchase of raw materials, capital equipment, and other supplies. At December 31, 2004, APT s total commitments under these purchase obligations was approximately $12,085.

(11) Subsequent Event: Acquisition of PowerSicel, Inc

On December 22, 2004 Advanced Power Technology Inc (APT) entered into a definitive agreement and plan of merger with PowerSicel, Inc. The agreement is among Advanced Power Technology, Inc., a Delaware corporation (Parent), PowerSicel Acquisition Corporation, a Colorado corporation that is a wholly owned subsidiary of Parent, PowerSicel, Inc., a Colorado corporation, and Paul Jacobi, as representative of the shareholders of PowerSicel, Inc. The acquisition was completed on January 7, 2005.

Under the terms of the agreement, APT issued approximately $5.4 million in cash from operations in exchange for all of the existing shares of PowerSicel, 63,525 APT stock options in exchange for the PowerSicel stock options and 19,402 APT stock options for the retention of key employees. We will begin to consolidate the financial results of PowerSicel on January 7, 2005 and forward. The purchase price allocation is expected to be completed in the first quarter of 2005 and may include a charge for in-process research and development.

PowerSicel s expertise in silicon carbide and other compound semiconductor technology and products complement APT s current portfolio of RF products which operate at frequencies ranging from 1 MHz to 4 GHz and are sold into applications such as semiconductor capital equipment, medical imaging, radar, avionics and wireless communications. The acquisition adds valuable development capability to APT s core capability in RF power transistors allowing APT to better serve its current markets and to expand into new markets. PowerSicel will be renamed Advanced Power Technology Colorado and will operate as the Advanced

Technology Center for the Company.

(12) Segment Information

APT operates in one segment and is engaged in the manufacture and marketing of high-performance power semiconductors and modules for switching and RF applications.

(a) Geographic Information

APT s geographic revenue, operating income (loss) and identifiable assets are summarized as follows:

	Years Ended December 31,		
	2004	**2003**	**2002**
Geographic revenue:			
United States	$ 44,319	$ 31,768	$ 27,831
China	9,205	4,144	2,293
Germany	3,959	2,517	2,828
United Kingdom	1,875	1,976	849
Austria	1,564	1,967	2,889
Other	6,915	6,520	6,735
	$ 67,837	$ 48,892	$ 43,425
Operating income (loss):			
United States	$ 4,027	$ (2,282)	$ (6,628)
France	(989)	(615)	586
	$ 3,038	$ (2,897)	$ (6,042)

	December 31,		
	2004	**2003**	**2002**
Identifiable assets:			
United States	$ 75,836	$ 72,008	$ 74,038
France	2,646	2,495	2,910
	$ 78,482	$ 74,503	$ 76,948

(b) Significant Customers

During 2004, the largest customer was our key distributor, Richardson Electronics Ltd., representing 21.9%, 15.8%, and 12.0%, of our revenue in 2004, 2003, and 2002, respectively.

(13) Quarterly Financial Data (Unaudited)

	Year Ended December 31, 2004 (In thousands, except per share data)			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Revenue, net	$ 15,093	$ 18,061	$ 18,660	$ 16,023
Gross profit (3)	5,452	6,872	6,312	5,789
Operating income (3)	249	844	1,344	601
Net income (3)	283	869	1,228	676
Basic and diluted net income per share	$ 0.03	$ 0.08	$ 0.11	$ 0.06

	Year Ended December 31, 2003 (In thousands, except per share data)			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Revenue, net	$ 11,159	$ 12,487	$ 12,708	$ 12,538
Gross profit (2)	3,123	4,430	4,067	3,892
Operating income (loss) (2)	(1,641)	59	(155)	(1,160)
Net loss (2)	(1,009)	(119)	(338)	(1,864)
Basic and diluted net loss per share	$ (0.10)	$ (0.01)	$ (0.03)	$ (0.18)

	Year Ended December 31, 2002 (In thousands, except per share data)			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Revenue, net	$ 8,239	$ 10,694	$ 13,052	$ 11,440
Gross profit (1)	2,235	3,055	3,908	3,039
Operating loss (1)	(3,193)	(1,139)	(446)	(1,264)
Net income (loss) (1)	(2,565)	(545)	64	(641)
Basic and diluted net income (loss) per share	$ (0.26)	$ (0.05)	$ 0.01	$ (0.06)

(1) In 2002, we acquired GHz Technology, Inc. (effective January 25) and the product lines and certain assets of Microsemi RF Products, Inc. (effective May 24). As a result of these transactions, during fiscal 2002 we recorded acquisition related charges for purchased in-process research and development (IPR&D), amortization of intangible assets, inventory fair value adjustments and deferred compensation amortization of $4,330, of which $1,974 was included in costs of good sold and $2,356 in operating expenses. The total amount net of taxes was $3,544. The total charges by quarter were pre-tax $2,353, $842, $603, $532 and after tax $2,178, $519, $483, $364 in the first, second, third and fourth quarters, respectively.

(2) As a result of the acquisitions made in 2002, during the year ended 2003 we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,168, of which $1,118 was included in costs of goods sold and $50 in operating expenses. Also recorded in 2003 was $645 of restructuring related charges included in operating expenses. During 2003 we acquired the administrative building we leased in Santa Clara, California in order to avoid future lease payments which were above market. The building is reported as assets held for sale, and accordingly we took a $350 impairment charge to adjust the carrying value to fair market value. Also included in restructuring charges is severance related to downsizing and organizational changes. During

2003 we recorded a tax expense for a valuation allowance against our net deferred tax assets for $846. The total amount for these items net of taxes was $2,659. The total charges by quarter were pre-tax $541, $294, $289, $689 and after tax $346, $191, $587, $1,535 in the first, second, third and fourth quarters, respectively. We recorded a tax benefit of $480 in the first and second quarter of 2003 which was reversed in the third quarter of 2003. The remaining deferred tax asset was fully reserved in the fourth quarter of 2003.

(3) As result of the prior acquisitions made, we recorded acquisition related charges for amortization of intangible assets and deferred compensation amortization of $1,098, of which $1,086 was included in costs of goods sold and $12 in operating expenses during 2004. In 2004, we acquired the assets, including prototype inventories, equipment, patents, and other intellectual property from a development stage business, Zeus Semiconductor, Inc. As a result of this transaction, during the third quarter of 2004 we recorded acquisition related charges for purchased IPR&D of $170. Also recorded in 2004 was $558 of restructuring related charges

included in operating expenses. These charges included severance related to downsizing and organizational changes we began in 2003. The charges also include an additional impairment charge on the administrative building we purchased in 2003 as explained in note (2) above, as well as costs to exit certain production activities. The latter charges relate to accelerated depreciation on certain production related equipment to be abandoned after shutdown and contractual closing costs. During the third and fourth quarters of 2004 we also incurred $225 of charges in connection with the filing and subsequent withdrawal of a registration statement. The total amount of these items net of taxes was $2,028. The total charges by quarter were pre-tax $486, $395, $658, $512 and after tax $486, $395, $645, $502, in the first, second, third, and fourth quarters, respectively.