

ADVANCED POWER TECHNOLOGY INC  
Form 10-K  
March 10, 2004

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

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

**For the fiscal year ended December 31, 2003**

**OR**

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**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**

(State or other jurisdiction of  
incorporation or organization)

**93-0875072**

(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)

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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**

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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 ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained to the best of 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. ☐

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of June 30, 2003, the last trade date for the end of our most recent fiscal second quarter, was \$47 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 March 1, 2004 was 10,509,632 shares.

## **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's proxy statement in connection with its 2004 Annual Meeting of Shareholders are incorporated by reference into Part III.

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ADVANCED POWER TECHNOLOGY, INC.

FORM 10-K

TABLE OF CONTENTS

**Part I**

<u>Item 1.</u>	<u>Business</u>
<u>Item 2.</u>	<u>Properties</u>
<u>Item 3.</u>	<u>Legal Proceedings</u>
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u>

**Part II**

<u>Item 5.</u>	<u>Market for Registrant's Common Equity and Related Stockholder Matters</u>
<u>Item 6.</u>	<u>Selected Financial Data</u>
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>
<u>Item 9.</u>	<u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>
<u>Item 9a.</u>	<u>Controls and Procedures</u>

**Part III**

<u>Item 10.</u>	<u>Directors and Executive Officers of the Registrant</u>
<u>Item 11.</u>	<u>Executive Compensation</u>
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management</u>
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions</u>
<u>Item 14.</u>	<u>Principal Accountant Fees and Services</u>

**Part IV**

<u>Item 15.</u>	<u>Exhibits, Financial Statement Schedules, and Reports on Form 8-K</u>
	<u>Signatures</u>
	Exhibits

## PART I

### ITEM 1. BUSINESS.

*Except as expressly indicated or unless the context otherwise requires, the Company, APT, we, our or us means Advanced Power Technology Inc., a Delaware corporation, and its subsidiaries. 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](http://www.advancedpower.com)*

Advanced Power Technology Inc. is a leading designer, manufacturer and marketer of high-performance power semiconductors and modules for Radio Frequency (RF), Linear, and Switchmode applications. Power semiconductors manage and regulate electrical power by converting electricity into a form required by electrical and electronic products. Our power semiconductors increase system efficiency, permit the design of more compact end products and improve features and functionality. We are primarily focused on the high power, high frequency segment of the power semiconductor market. High power refers to the ability to dissipate above one kilowatt, and high frequency refers to the ability to switch on and off at rates above 100 kilohertz. In addition we continue to strengthen our portfolio of RF products that operate at frequencies ranging from 1 megahertz to 100 megahertz. RF generally refers to the ability to operate at frequencies above 1 megahertz. We sell our products primarily in North America, Europe, and Asia, through a network of independent sales representatives and distributors.

The acquisition of GHz Technology, Inc. and the business of Microsemi RF Products, Inc. in 2002 helped us to further penetrate RF markets. We believe that these acquisitions serve to position APT as an emerging, dominant supplier in bipolar RF power transistors for avionics, radar and non-cellular communications applications operating at frequency ranges from 1 megahertz to multiple gigahertz and add valuable RF technology and substantial RF engineering, manufacturing and marketing capability to the Company. These acquisitions are part of the Company's ongoing strategy to expand its product and technology portfolio in the RF power arena through both internal development and acquisitions.

#### Industry and Market Overview

We believe there are two significant factors driving the general demand for high performance power semiconductors:

Rapid proliferation of sophisticated electronics; and

Increasing need for higher power and more precisely regulated power quality in electronic equipment.

The use of power semiconductors is becoming more pervasive in electronic devices to convert and control electricity that powers these devices. As a result, the power semiconductor market is a large and growing segment of the semiconductor industry. The proliferation of consumer

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electronic devices, wireless communication, and mobile computing is driving demand for new generations of power semiconductors that are smaller, lighter and more efficient. At the same time, we believe applications in the areas of medical and industrial products will create additional demand for more powerful and reliable power semiconductors. These applications include defibrillators, medical imaging, arc welding, and projection systems.

Power semiconductors address the growing demand for energy efficiency and are used to provide the precisely regulated power required by sophisticated electronic products and equipment. The more sophisticated the end product, the greater its need for specially formatted, finely regulated power. Power semiconductors are typically used to:

convert or rectify alternating current, or AC, power delivered by electrical utilities to direct current, or DC, power which is required by most electronic equipment;

convert DC power at a certain voltage level to DC power at a different voltage level to meet the specific voltage requirement of an application

invert DC power to high frequency AC power to permit the processing of power using substantially smaller electronic components; or

rectify high frequency AC power from switch-mode power supplies to meet the specific DC voltage required by an application.

The demand for power semiconductors is also expanding as a result of the proliferation of new technologies that require electricity and the increasing use of electrical processes and automation in industry to increase productivity. Sophisticated electronics are

increasing their share of total electrical consumption. The increasing complexity and power requirements of electronic products, and the continued increase in electronic features in communications equipment, consumer electronics and industrial processes all require more efficient power management.

RF and microwave semiconductors are typically used as electronic switches or to amplify electrical signals. The Company's RF technology allows it to serve a wide range of RF applications, such as radar, avionics, medical imaging, semiconductor capital equipment, and non-cellular communications systems.

### Market Size and Trends

The principal end-user markets for our products are communications and data processing, semiconductor capital equipment, industrial/medical, and military/aerospace. The following data has been gathered from published sources that were not specifically prepared or approved for use in this report. Statistics published by the Semiconductor Industry Association (SIA) report in November of 2003 forecasted that the worldwide market for all power semiconductors was projected to increase by 8% in 2003 to \$9.0 billion from \$8.3 billion in 2002. The projected market is \$11.6 billion in 2006, representing a compound annual growth rate of 9% from 2003. Based on data from the SIA, the worldwide markets in which we participate (radio frequency, or RF transistors, Power MOSFETs, Insulated Gate Bipolar Transistors, or IGBTs and high power rectifiers), increased by approximately 11% in 2003 to \$6.4 billion compared to \$5.8 billion in 2002. The SIA forecast projects that the worldwide markets in which we participate will be \$8.4 billion in 2006, representing a compound growth rate of 9% from 2003. APT's product lines serve a collection of niche markets which make up a subset of the overall power semiconductor markets listed above, focusing on high power and high frequency applications. Industry statistics related to APT's specific markets are not generally available and cannot be reasonably estimated.

The primary markets we serve are characterized by rapid technological development and increasing complexity. In addition to more overall power, we believe these markets will require more reliable and precisely regulated forms of power. The following key trends are significant factors driving the demand for high power, high frequency semiconductors in our primary markets:

**Convergence of Voice, Video and Data Transmission and Proliferation of Wireless Systems.** As voice, video and data converge into one digital stream, the power demands of traditional and emerging transmission systems are changing. Service providers and equipment manufacturers are looking to modify and supplement existing infrastructures to address these new demands for data transmission, data storage, and high power servers. Power semiconductors with higher power levels and faster switching speeds give providers and manufacturers much more flexibility in addressing these demands, in particular in building base stations for wireless applications and servers.

**Demand for Semiconductor Capital Equipment.** According to the SIA, the worldwide semiconductor market, which grew by 16% in 2003, is forecasted to grow from \$163 billion in 2003 to \$220 billion in 2006, representing a compound annual growth rate of 10%. According to Dataquest research, sales of semiconductor capital equipment to produce these semiconductor devices are expected to grow by 88% from 2003 to 2005, followed by a 14% decline in 2006. This represents an average growth rate of 17% from 2003 through 2006. As semiconductor capital equipment becomes more sophisticated in areas such as thin film deposition and plasma etching, there is an increasing need for high power, high frequency semiconductors. However, the semiconductor industry has from time to time experienced

depressed business conditions and has rapidly changed from periods of strong demand to periods of weak demand.

Emergence of New Applications for High Power, High Frequency Semiconductors. Continuing demands for higher power, higher voltages and higher frequencies are expanding the range of applications for which sophisticated power semiconductor products are suitable. For example, the use of RF power semiconductors presents opportunities to enter new markets. The same power delivery systems used for plasma generation in semiconductor processing equipment are now finding new applications in the industrial market (such as flat panel displays, optical and glass coatings and tool-hard coatings) and the data storage market (such as data recording heads as well as hard and compact disc technologies). In addition, RF MOSFETs are being used in magnetic resonance imaging equipment in place of vacuum tubes, enhancing the performance and reducing the size of those systems. In addition, the acquisitions we made in 2002 provide us with the products and technology to sell into additional applications such as radar, avionics and non-cellular communications.

## **Products**

Our 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: Switching Power Semiconductors and RF and Microwave Semiconductors.



Switching Power Semiconductors are typically used as electronic switches in power supplies for highly efficient and precise control of electrical power. These power supplies are often referred to as switching or switch-mode power supplies and are the dominant type of power supply used for high power applications. The switches in most of these power supplies turn on and off from 20,000 to 1,000,000 times per second or operate in the 20 kHz to 1 MHz frequency range.

RF and Microwave Semiconductors are typically used as electronic switches or to amplify electrical signals. These semiconductor devices are generally used in RF amplifiers that operate at frequencies ranging from 1 million to several billion cycles per second (1 MHz to several GHz). These devices range from low to very high power over this frequency range.

Switching Power Semiconductors are used in virtually all of our end markets and are composed of the following product types:

Discrete Power Semiconductors - power transistors (MOSFETs, IGBTs) and diodes (Fast Recovery Epitaxial Diodes or FREDs and Schottky Barrier Diodes). These transistors are most often used as the switches in switching power supplies. 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. Many of our IGBTs are based on our core MOSFET technologies and are used as lower cost alternatives to MOSFETs in many applications. The diodes are a complimentary product line to the transistors since most applications require both transistors and diodes in the design. The diodes control current flow in circuits by allowing current to pass in one direction but not in the other. The 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. Our discrete power semiconductors are optimized for high voltage applications between 100 and 1400 volts. Our discrete power semiconductors are packaged either in plastic molded packages or hermetically sealed metal cans. Our plastic packaged products represent the majority of our unit volumes. Our hermetic products are typically used in high reliability applications, serving the military and aerospace markets, although there is a trend in these markets toward using plastic products that are more cost effective. As a result, some of our plastic products have been successfully used in aerospace applications including the International Space Station.

Power Modules provide integrated solutions that combine many single components together to provide a power function or power supply sub-system. These 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 can be the preferred choice over discrete power semiconductors because of one or all of the following reasons: improved performance, reduced size, reduced overall cost, limited engineering resources available to our customers, reduced time to market, or as barriers to competition. The Company offers modules that are customer dedicated custom designs for a specific application. They are often referred to as Application Specific Power Modules or ASPM®. In addition we recently introduced a line of standard modules that offer industry standard package outlines and footprints, and incorporate common circuit configuration. We believe the line of standard modules will allow us to expand our overall market penetration. We produce most of the power semiconductors used in our power modules. However, we do purchase specific components from other parties which complement our overall designs or which provide capabilities outside our semiconductor product range. Many of our

module customers also buy our discrete power semiconductors.

RF and Microwave Semiconductors are used in virtually all of our end markets and share some of the same customer base as our Switching Power Semiconductors. In 1996 we introduced our first RF MOSFETs for applications with frequencies up to 100 megahertz. These were derived from our proprietary MOSFET technology used for switching power applications. The technology is referred to as VDMOS which stands for vertically diffused MOSFET. Vertical refers to current flowing vertically through the chip. These RF transistors provided higher operating voltages (up to 250 volts) than any RF transistors available in the market. This higher voltage offered many advantages for high power applications such as plasma generation for semiconductor capital equipment and medical imaging equipment. In 2002 Advanced Power Technology acquired two leading suppliers of silicon based radio frequency (RF) power transistors - GHz Technology, Inc. and the business of Microsemi RF Products, Inc. a wholly owned subsidiary of Microsemi Corporation. APT is now a significant provider of RF and microwave silicon based transistors with approximately half of Company revenues provided by these products. We offer RF products which serve our customer requirements for both previous generation design production as well as new designs. Our technology base to includes LDMOS (lateral diffused MOSFET where current flows laterally along the surface of the chip) and BJT (Bipolar Junction Transistors). All RF and microwave products are based on silicon and span the frequency range from 1MHz to several GHz with operating voltages from as low as a few volts to as high as 250V. With these acquisitions we are positioned to serve applications which include communication radios, non-cellular base stations, broadcast, radar, avionics, and military communications.

## Research and Development

Our research and development efforts focus on improving and developing new core technologies and the products derived from them. For both Switching Power Semiconductors and RF and Microwave Semiconductors our existing and planned future technologies are designed to allow our customers to mix and match technologies to provide the optimum product solutions for their applications. For switching applications this is the choice between MOSFET and IGBT transistors, while for RF applications this is the choice between BJT and newer MOSFET technologies.

Our research and development engineers work closely with our product and manufacturing engineers to continually improve our products and our core technology. We 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 modifying our core products in order to address specific customers or market needs. Our discrete semiconductor research and development activities take place at our Bend, Oregon facility. Power Module research and development activity takes place at our Bordeaux, France facility. Our RF research and development activity takes place at our Bend, Oregon, Santa Clara, California, and Montgomeryville, Pennsylvania facilities.

## Customers

In 2003, we sold our products to over 2,000 customers worldwide through a network of independent sales representatives and distributors, managed by our sales staff. We sell our products primarily in North America, Europe, and Asia. In 2003, approximately 65% of our revenues were from customers in the United States, 19% from customers in Europe, and 16% from customers in Asia and the rest of the world.

We sell our products both to original equipment manufacturers, or OEMs, and through distributors. Revenues to our five largest customers accounted for 38%, 37%, and 38%, of our total revenues in 2003, 2002, and 2001, respectively. Advanced Energy Industries, Inc. accounted for approximately 9.3% of our revenues in 2003, 9.5% of our revenues in 2002, and 10.8% of our revenues in 2001. Richardson Electronics Ltd. accounted for 15.8% of our revenues in 2003, 12.0% of our revenues in 2002 and accounted for less than 10% of our revenues in 2001. No other customer exceeded 10% of our revenues during these periods. We provide our customers a 12-month repair or replacement warranty.

## Sales, Marketing and Distribution

The principal end-user markets for our products are communications and data processing, semiconductor capital equipment, industrial/medical, and military/aerospace. Our largest volume OEM customers include Advanced Energy Industries, Inc., MKS Instruments, Inc., Raytheon Systems, Rockwell Collins and Fronius International GmbH. Power semiconductors are typically critical to the performance of our customers end products, and we therefore work closely with a number of our large OEM customers in the design phase of their products to ensure that we can meet their performance requirements. Once our products have been designed into end products, they tend to be used through the lifecycle of these end products.

Our internal sales organization consists of two worldwide sales directors, one each for Power Products and RF products and four regional sales managers, who all work under the supervision of the vice president of sales. There is one sales manager for each of Europe and Asia and two for

## Products

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North America. Each regional sales manager directs the sales efforts of the independent manufacturers' representatives and independent distributors in his or her region. We currently have 37 independent manufacturers' representatives, whose primary focus is developing and servicing major OEM accounts. In addition we have a vice president in charge of worldwide distribution sales.

We use independent distributors to develop and service our smaller volume accounts worldwide. We have six national distributors in North America, and 18 single country distributors who cover Western Europe and Asia. In 1998, we entered into a strategic agreement with Richardson Electronics Ltd., a worldwide distributor, under which they stock a broad selection of our products on a worldwide basis. Currently, Richardson is our leading distributor based on revenues. In 2003, we entered into a similar strategic agreement with Future Electronics as a worldwide distributor. These arrangements have enhanced our ability to meet the needs of our smaller volume customers and permitted increased revenues to large manufacturing customers by freeing up sales and support resources. Distributors can return up to 5% of the dollar value of products purchased during the prior six months upon 30 days notice. We closely monitor inventory levels at our key distributors on a monthly basis.

Our application engineering, product engineering and product marketing organizations provide technical support for the sales force. We employ 29 engineers in these organizations, as well as support staff. Customer service for all of our accounts is handled by our customer service organizations in Bend, Oregon, Santa Clara, California, Montgomeryville, Pennsylvania and Bordeaux, France. 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.

## **Manufacturing and Facilities**

### **RF and Microwave Semiconductors:**

Wafer fabrication for our RF and Microwave semiconductor products is performed in our internal wafer fabrication sites located in Bend, Oregon, Santa Clara, California and Montgomeryville, Pennsylvania. Package assembly and test of these products is performed in our own domestic facilities located in Santa Clara, California and Montgomeryville, Pennsylvania, in addition to subcontractors in Mexico and Malaysia. Over time, we plan to move more assembly and test of commercial communication products to our subcontractor in Malaysia, 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. 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. We expect to complete the transfer in 2004.

### **Switching Power Semiconductors:**

The wafer fabrication for our switching power semiconductor products is performed in our internal wafer fabrication site located in Bend, Oregon facility and by our manufacturing partners, Infineon Technologies in Austria and Episil Technologies in Taiwan under wafer foundry agreements. We use two subcontractors in the Philippines, Team Pacific and PSI Technologies to package and test our plastic discrete products under subcontract agreements. We manufacture and assemble all of our discrete Hermetic packages in our facility located in Bend. Our Power 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. The decision of where to manufacture our Power Modules is based on the complexity of the product, the geographic location of the customer, and other factors. During 2004 we will transfer more assembly and test manufacturing of our Power Modules currently manufactured in both our Bend and Bordeaux facilities to our captive line in the Philippines, which we expect to result in lower production costs.

Our current manufacturing strategy is to expand our use of external subcontractors to provide for the manufacturing needs to support our growth. We selected Infineon Technologies as our foundry partner for its ability to process more cost effective large diameter wafers in its state-of-the-art manufacturing facility and for their familiarity with power semiconductors in general. Our agreement with Infineon extends indefinitely and requires a two year notice of termination. In addition, in 2001, in order to provide for additional capacity and capability for wafer fabrication we entered into a foundry agreement with a foundry located in Taiwan, Episil Technologies. Episil, a pure-play foundry service provider, offers cost effective state-of-the-art manufacturing services as well as silicon starting material for our products, while being 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.

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During 2003, equipment utilization at our internal wafer fabrication facility in Bend was approximately one third. The Company implemented two permanent reductions in force during 2001 and 2002. As a result of this downsizing the Company's internal wafer fabrication facility has been staffed to support technologies not conducive to outside foundries, custom proprietary products, quick turns, and research and development efforts. The Company plans to predominantly rely on cost-effective wafer processing subcontractors, known as foundries, to support future growth.

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 agreements extend through January 26, 2006 and December 31, 2004 with Team Pacific and PSI Technologies, respectively. Our subcontractors currently electrically test the majority of the products that they manufacture for us. During 2003 we set up a permanent finished goods warehouse in Manila where the product from our subcontractors is collected and shipped directly to our customers. This substantially reduced the amount of product having to be returned to our Bend facility prior to shipment to customers resulting in lower costs and faster cycle times.

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

## **Competition**

We encounter varying degrees of competition for our products, depending on the nature of the product and the particular market served. Generally, 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. Our principal competitors include Fairchild Semiconductor, International Rectifier, IXYS, MA/Com, Motorola, Philips and ST Microelectronics.

We believe that the primary elements of competition in our markets are product features and performance, quality, reliability, technical support, breadth of product line, competitive pricing and customer service and support. We believe that our proprietary design makes our products more efficient and allows them to operate at higher powers and frequencies than those of our competitors, allowing us to compete effectively in our markets.

## **Intellectual Property Matters**

We have received 18 U.S. patents and 25 foreign patents and have applications pending for 14 additional U.S. and foreign patents on different aspects of our core technology. We rely on these patents, trade secret and other intellectual property laws, as well as confidentiality and intellectual property assignment agreements with our employees to protect our proprietary rights. 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 portions 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 only. 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**

At December 31, 2003, we had 276 employees. Of these, 146 were at our facilities in Bend, Oregon, 35 were at our facility in Bordeaux, France, 59 at our facility in Santa Clara, California, 36 at our facility in Montgomeryville, Pennsylvania and one was located in Boston, Massachusetts. 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.

## **Environmental Regulation**

## **Products**

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While we believe we have the environmental permits necessary to conduct our business and that our operations conform to 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 federal, state and local 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.

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, and 4,125 square feet in an additional building in Bend, 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. During 2003, APT renewed leases for the 18,000 square foot and 4,125 square foot facilities in Bend, Oregon for a total commitment of \$1.4 million over the five year renewal periods.

In connection with our acquisition of GHz Technology, Inc. in January 2002, we assumed leases for a 9,850 square foot building for semiconductor manufacturing, shipping and warehousing, and research and development, and a 5,000 square foot building for administrative functions. Both buildings are located in Santa Clara, California. In November of 2003, APT purchased the 5,000 square foot building 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, an asset held for sale is carried at estimated fair value. As such, APT recorded a write down from the purchase price paid for the building in the fourth quarter of 2003 of approximately \$350,000.

In connection with our acquisition in May 2002 of the product lines and certain assets of Microsemi RF Products, Inc, a wholly owned subsidiary of Microsemi Corporation, we purchased a 20,600 square foot building in Montgomeryville, Pennsylvania. The facility houses semiconductor manufacturing, shipping, warehousing, research and development, and administrative functions for the operation.

## 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 currently involved in various legal proceedings. The Company does not believe that the ultimate resolution of such litigation will have a material adverse effect on the Company's financial position, results of operations or cash flows. 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. The claim filed by IXYS alleges that APT infringes on their United States Patent No. 5,486,715 and 5,801,419. The IXYS claim also requested that damages be determined at trial and that such damages be trebled. On October 1, 2002, APT filed its answer to the IXYS complaint, denying the allegations of patent infringement. In addition, APT filed a patent infringement counterclaim against IXYS, alleging that IXYS infringes on APT United States Patent No. 5,283,202, entitled "IGBT Device With Platinum Lifetime Control Having Gradient Or Profile Tailored Platinum Diffusion Regions." APT has filed with the court several affirmative defenses related to the validity of the IXYS patents. Trial is scheduled to commence in July of 2004. As stated above, APT does not believe that it infringes upon the IXYS patents cited in the claim and intends to vigorously defend itself in this lawsuit. The length of time and legal fees associated with the patent infringement litigation with IXYS may be significant.

**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, 2003.

## PART II

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

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, 2002 and December 31, 2003 were as follows:

	High	Low
<b>Fiscal year 2003</b>		
Quarter 4	\$ 9.04	\$ 6.78
Quarter 3	9.70	6.80
Quarter 2	8.28	3.00
Quarter 1	4.99	3.01
<b>Fiscal year 2002</b>		
Quarter 4	\$ 4.92	\$ 2.30
Quarter 3	15.15	3.65
Quarter 2	15.13	11.60
Quarter 1	12.60	10.40

As of March 1, 2004, the last reported sale price of our common stock on the Nasdaq National Market was \$10.36 per share, there were approximately 92 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.

## ITEM 6. SELECTED FINANCIAL DATA.

	Years Ended December 31,					
	2003 (2)	2002 (1)	2001	2000	1999	
	(In thousands, except per share data)					
Consolidated Statement of Operations Data:						
Revenues, net	\$ 48,892	\$ 43,425	\$ 36,855	\$ 44,168	\$ 27,461	
Gross profit	15,512	12,237	11,832	17,455	9,461	
Net income (loss)	(3,330)	(3,687)	1,796	3,759	(175)	
Basic net income (loss) per share	(0.32)	(0.36)	0.21	0.59	(0.04)	
Diluted net income (loss) per share	(0.32)	(0.36)	0.19	0.50	(0.04)	
Consolidated Statement of Cash Flows Data:						
Cash flow from operations	2,261	5,074	1,067	4,986	1,654	
Capital expenditures (3)	4,828	2,649	2,335	2,957	599	
Consolidated Balance Sheet Data:						
Working capital (deficit)	\$ 31,780	\$ 33,181	\$ 45,508	\$ 42,945	\$ (1,803)	
Total assets	74,503	76,948	58,075	57,313	14,184	
Long-term obligations, less current portion				130	3,525	
Stockholders equity (deficit)	68,210	71,172	53,948	51,118	(2,475)	

(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 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 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.



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

***Business Overview***

Advanced Power Technology, Inc. is a leading designer, manufacturer and marketer of high-performance power semiconductors and modules for Radio Frequency (RF), Linear, and Switchmode applications. Power semiconductors manage and regulate electrical power by converting electricity into a form required by electrical and electronic products. Our power semiconductors increase system efficiency, permit the design of more compact end products and improve features and functionality. We are primarily focused on the high power, high frequency segment of the power semiconductor market. High power refers to the ability to dissipate above one kilowatt, and high frequency refers to the ability to switch on and off at rates above 100 kilohertz. In addition, we continue to strengthen our portfolio of RF products that operate at frequencies ranging from 1 megahertz to 100 megahertz. RF generally refers to the ability to operate at frequencies above 1 megahertz. We sell our products primarily in North America, Europe, and Asia, through a network of independent sales representatives and distributors.

The acquisition of GHz Technology, Inc. and the business of Microsemi RF Products, Inc. in 2002 helped us to further penetrate RF markets. We believe that these acquisitions serve to position APT as an emerging, dominant supplier in bipolar RF power transistors for avionics, radar and non-cellular communications applications operating at frequency ranges from 1 megahertz to multiple gigahertz and add valuable RF technology and substantial RF engineering, manufacturing and marketing capability to the Company. These acquisitions are part of the Company's ongoing strategy to expand its product and technology portfolio in the RF power arena through both internal development and acquisitions.

APT has 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. Our operation locations are more fully described in Item 1 of this report.

***Business Environment***

APT operates on a worldwide basis. As such, our operations are affected by global, regional, and industry economic and political factors. However, the Company's geographic and market segment diversity serves to limit the impact of any one industry or the economy of any single country on the consolidated operating results.

In 2003, approximately 65% of our revenues were from customers in the United States, 19% from customers in Europe, and 16% from customers in Asia and the rest of the world. The principal end-user markets for our products are communications and data processing, semiconductor capital equipment, industrial/medical, and military/aerospace. Our revenues are impacted by the overall semiconductor market and the resulting demand for semiconductor capital equipment, capital spending in the communications industry, government and corporate spending on military and aerospace programs, and the overall general economic and political conditions.

We believe there are two significant factors driving the general demand for high performance power semiconductors: rapid proliferation of sophisticated electronics; and the increasing need for higher power and more precisely regulated power quality in electronic equipment. We plan

to utilize and further develop our technology in order to supply high performance power semiconductors designed to meet these demands.

The use of power semiconductors is becoming more pervasive in electronic devices to convert and control electricity that powers these devices. As a result, the power semiconductor market is a large and growing segment of the semiconductor industry. The proliferation of consumer electronic devices, wireless communication, and mobile computing is driving demand for new generations of power semiconductors that are smaller, lighter and more efficient. At the same time, we believe applications in the areas of medical and industrial products will create additional demand for more powerful and reliable power semiconductors. These applications include military and aerospace systems, defibrillators, medical imaging, arc welding, and projection systems.

### ***Business Strategies***

We believe that the key success factors for APT over the near term horizon are: to increase the RF power products share of our total revenues; to improve the balance between our diversified markets; focus on new product opportunities for our power products; to further reduce production costs and operating expenses through the consolidation of our manufacturing operations and administrative functions; and continue to further leverage our lower cost subcontract manufacturers. On average, RF power products provide higher gross margins than switching products, but also require a higher level of engineering support. APT plans to continue its strategy to increase RF power revenues through internal development or acquisition. The implosion of the Internet bubble in 2001

demonstrated clearly that over reliance on specific markets can lead to rapid growth followed by rapid decline. Achieving satisfactory financial performance in the face of significant cyclical swings is extremely difficult. Our product and market strategies are aimed at achieving a relatively equal balance between the markets we serve. Our power products business has been historically weighted towards semiconductor capital equipment and communications markets. Our strategy is to find new opportunities in the power products business in industrial and medical applications. We plan to continue to rationalize and consolidate our internal manufacturing operations, in light of past acquisitions and possibly for any future acquisitions we might make, and to continue increased utilization of lower cost offshore subcontractors in order to lower our overall manufacturing costs.

APT's financial performance and ability to successfully execute these plans are subject to a number of risks, and actual results may differ materially. Factors that could affect the Company's actual results include the ability of subcontractors to meet their delivery commitments; unfavorable changes in industry and competitive conditions; the Company's mix of product shipments; the accuracy of customers forecasts; the effectiveness of the Company's efforts to control and reduce costs; the cost and liability associated with patent infringement litigation; and other uncertainties more further disclosed later in this section of this report.

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

Advanced Power Technology's discussion and analysis of its financial condition and results of operations are based upon consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires APT to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities. On an on-going basis, APT evaluates its estimates, including 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. APT bases its 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 that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

APT believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

### ***Product Returns and Warranty Obligations***

Product revenue is recognized upon shipment of product. In general, APT provides for a one-year repair or replacement warranty on its products. Upon shipment, APT provides for the estimated cost that may be incurred for product warranty and sales returns based on historical experience. APT uses independent distributors to sell some of its products. Distributors can return a contractually agreed upon percentage of the dollar value of products purchased during the prior six months and receive certain price protections on purchased products. Sales to distributors are recognized upon shipment, less an allowance for estimated returns based on historical experience.

While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, APT's 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 APT's estimates, revisions to the estimated warranty liability would be required.

*Allowance for Doubtful Accounts*

APT maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. Management regularly reviews 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. Management reviews 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). APT establishes reserves for estimated unmarketable (excess) or obsolete inventory equal to the difference between the cost of inventory and the estimated net realizable value based upon assumptions about future demand and market conditions. APT establishes reserves for excess component order cancellation costs based on estimated net realizable value of the components purchased and any

additional cancellation charges. APT evaluates 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 reserves may be required.

### ***Income Taxes***

APT records a valuation allowance to reduce its deferred tax assets to the amount that is more likely than not to be realized. APT considers future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance. In the event APT were to determine that it would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to decrease the valuation allowance would increase income in the period such determination was made. Should APT determine that it would not be able to realize all or part of its 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. During 2003, the Company determined that a full valuation allowance should be recorded against its net deferred tax assets.

### ***Valuation of Goodwill and Intangible Assets with Indefinite Lives***

APT values goodwill and intangible assets with indefinite lives in accordance with Statement of Financial Accounting Standards No. (SFAS) 142 Goodwill and Other Intangible Assets. Currently APT carries a goodwill balance in connection with previous acquisitions, but has 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 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 goodwill.

### ***Valuation of Long-Lived Assets***

APT values 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 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.

### ***Contingencies and Litigation***

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APT is 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. (Refer to Part I, Item III Legal Proceedings of this filing).

**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,		
	2003	2002	2001
Revenues, net	100.0%	100.0%	100.0%
Cost of goods sold	66.0	67.3	67.9
Amortization of technology rights and other charges	2.3	4.5	
Total cost of goods sold	68.3	71.8	67.9
Gross profit	31.7	28.2	32.1
Operating expenses:			
Research and development	6.1	8.9	4.9
Selling, general and administrative	30.2	28.4	25.1
Restructuring charges	1.3		
In-process research & development		4.9	
Total operating expenses	37.6	42.2	30.0
Income from operations	(5.9)	(14.0)	2.1
Other income (expense):			
Interest income, net	0.4	1.4	4.3
Other, net			
Income (loss) before income taxes	(5.5)	(12.6)	6.4
Income tax (benefit) expense	1.3	(4.1)	1.5
Net income (loss)	(6.8)%	(8.5)%	4.9%

**Years Ended December 31, 2003 and 2002**

*Revenues.* Our revenues for 2003 were \$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.

Although we saw strengthening in the communications and data processing market, there had not yet been a substantial and sustained increase in infrastructure spending which is necessary for APT to significantly expand revenues within this market. Based on the strength in the semiconductor capital equipment market we saw in 2003 over 2002, it now appears that we have firmly entered a period of sustained growth for this segment. However, this does not preclude quarterly variability. APT's customers in the semiconductor capital equipment market have designed our products into a broad array of both their current and emerging technologies which positions us well for future growth. In the industrial/medical market our designs into medical imaging and defibrillator applications continue to drive the growth in this segment. As expected, revenues in the fourth quarter of 2003 in the military and aerospace market decreased sequentially from the third quarter of 2003, tempering the overall year over year gain. Order activity was strong in the fourth quarter of 2003. We expect to benefit from increased spending on military programs as well as from designs we have won in aviation and radar systems in foreign market places.

Overall, our revenues 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. We expect to see Asia contribute more to revenue growth in 2004.

*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. We expect to see production volume for the products from both our Bend, Oregon facility and our Santa Clara facility to increase resulting in further margin enhancement during 2004. 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 has taken actions to reduce production personnel by 23% at the Bordeaux facility and shift production to our lower cost offshore subcontractors. We expect this process to be completed in the second half of 2004. 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. We expect to complete the transfer in 2004.

*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 revenues, 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. During 2003 we also had lower payroll by \$150,000 due to the transfer of engineers to product application functions. The decrease in the research and development expense as a percentage of revenue is also due to our higher revenue levels in 2003. 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% over sustained periods of time.

*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 revenues 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 ongoing patent litigation, as more fully explained in Part I, Item 3 to this report. We have denied infringement of the IXYS patents and have asserted affirmative defenses and counterclaims. However, the length of time and legal fees associated with patent litigation with IXYS may be significant.

*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. We expect to record stock compensation expense of approximately \$21,000 in 2004.

*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. Not all restructuring activities were completed as of December 31, 2003. As such, management expects that additional restructuring charges of approximately \$120,000 will be incurred in 2004.

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. 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 fair value. As such, APT recorded an impairment charge for the building in the fourth quarter of 2003 of approximately \$350,000. The net carrying value of the building as of December 31, 2003 was approximately \$1 million and is included as a component of other current assets.

*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. 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. As of December 31, 2003, APT has federal and state net operating loss carry forwards of \$5.4 million and \$5.6 million, respectively, which expire beginning in years 2020 through 2023.

#### **Years Ended December 31, 2002 and 2001**

*Revenues.* Our revenues for 2002 were \$43.4 million, including \$15.1 million from GHz Technology, Inc. (GHz) and the business of Microsemi RF Products, Inc (MSC RF), a wholly owned subsidiary of Microsemi Corporation, which APT acquired effective January 25, 2002 and May 24, 2002, respectively. This represents an increase of 17.8% compared to the revenues of \$36.9 million in 2001. Without the additional revenues from our acquisitions, revenues were \$28.3 million in 2002, representing a decline of 23.0% over the prior year.

The semiconductor market experienced record growth up to October 2000, followed by record declines in 2001. As APT typically lags the overall semiconductor industry, our revenues peaked in the first quarter of 2001 and then we experienced sequentially declining revenues through the fourth quarter of 2001. Our 2002 revenues had quarterly increases from the low levels of the second half of 2001, but still remain below the levels achieved in 2001 on a year to date basis excluding the impact of acquisitions. We experienced sequential revenue growth of 16% in each of the first and second quarters of 2002, 6% in the third quarter of 2002, followed by a 15% decline in the fourth quarter of 2002, when excluding revenues from both of our acquisitions. The year over year decline is mainly due to continued weakness of our revenues into the communications and data processing market, which remains well below 2001 levels.

Including the impact of the companies acquired, the 17.8% increase in revenues is largely attributable to increased revenues in the military and aerospace market. The additional revenues contributed by our acquisitions are heavily weighted towards the military and aerospace market and the communications and data processing market, and therefore serve to more evenly diversify our overall revenues from the various markets that we participate in. In addition, the revenues from the acquired companies significantly increase our position in the RF power market, consistent with our long established strategy.



During 2000, we entered into a joint venture agreement in China, which included a license and technology transfer agreement for certain of our technologies, in exchange for cash payments totaling \$1.5 million over two to three years. There were no revenues recognized from the agreement during 2002 and 2001. APT terminated this agreement in February of 2003 in accordance with the terms of the agreement. As a result, APT will not receive any future payments relative to this agreement.

*Gross Profit.* Our gross profit margin was 28.2% in 2002 compared to 32.1% in 2001. 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 32.7% compared to 32.1% in 2002, which had no purchase accounting charges. As described above, our revenues peaked in the first quarter of 2001 and then subsequently declined through the fourth quarter of 2001. Accordingly, our gross profit margin in the first half of 2001 was 38.3% followed by 19.4% in the second half of 2001 due to the much lower levels of production and under utilization of our internal manufacturing facilities. During 2002, we experienced quarterly increases in revenues and production volumes, leading to improved utilization of our internal manufacturing facilities. We also began to benefit from the cost reduction actions taken in the second half of 2001, as more fully described in the 2001 versus 2000 gross profit section below, such as reducing our overall production personnel levels by approximately 35% or about 35 employees. Also contributing to our improved gross margins in 2002 is the higher content of our RF power business due to the acquisitions made during the year, which carry a higher overall gross profit rate. Our RF revenues were approximately 46.3% of total revenue in 2002 compared to 14.5% in 2001.

*Research and Development Expense.* Our research and development expenses were \$3.9 million in 2002 compared to \$1.8 million in 2001, or approximately 8.9% and 4.9% of revenues in 2002 and 2001, respectively. The increased spending over the prior year

is primarily due to the additions of GHZ and MSC RF, which contributed \$2.0 million in 2002, consisting mainly of payroll, supplies, facilities and depreciation charges. Excluding the impact of GHZ and MSC RF, research and development charges remained flat over the prior year.

*Selling, General and Administrative Expense.* Our selling, general and administrative expenses totaled \$12.3 million in 2002 compared to \$9.3 million in 2001, or approximately 28.4% and 25.1% of revenues in 2002 and 2001, respectively. The increased spending over the prior year is primarily due to the additions of GHZ and MSC RF, which contributed \$3.0 million in 2002, consisting mainly of payroll, commissions, facilities, and depreciation charges. Excluding the impact of GHZ and MSC RF, selling, general and administrative expenses remained flat over the prior year. The graduated pay reductions implemented in 2001 were discontinued in the third quarter of 2002. We did experience increased legal expenses over 2001 in connection with ongoing patent litigation, as more fully explained in Part I, Item 3 of 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 \$498,000 was recorded in 2002 versus \$203,000 in 2001. Of this amount, \$187,000 was recorded in cost of goods sold, \$73,000 was recorded in research and development expense and \$238,000 was recorded in selling, general and administrative expense.

*Interest Income (Expense).* Interest income in 2002 was \$630,000 compared to \$1.7 million in 2001. The decline in interest income was due to the use of cash and investments to acquire GHZ and MSC RF and also due to lower interest rates available in the current market environment. Interest expense was \$60,000 in 2002 compared to \$55,000 in 2001.

*Income Taxes.* We recorded a tax benefit for 2002 at an effective tax rate of approximately 32.4% compared to a tax expense of 24.0% in 2001. The effective tax rate benefit in 2002 was lower than the federal statutory rate primarily due to the in process research and development charges recorded for financial statement purposes in the GHZ acquisition under GAAP which are not deductible for tax purposes. This was partially offset by the benefit of a reduction in the valuation allowance due to the realization of foreign net operating loss carry forwards and non taxable municipal interest income. The effective tax rate expense in 2001 was lower than the federal statutory rate primarily due to a reduction in the valuation allowance due to the realization of foreign net operating loss carry forwards and non taxable municipal interest income.

*Net Loss.* Although our revenues increased in 2002 over 2001, we experienced a net loss of \$3,687 versus net income of \$1,796 in 2001. As a result of our acquisitions 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. Without these purchase related charges

our net loss in 2002 would have been \$143. This decline in profit is primarily due to a 23% decline in revenues on our existing business before acquisitions, resulting in lower gross profit while our operating expenses remained relatively flat on a before acquisition basis. This resulted in an operating loss on our existing business, which was partially offset by an operating profit on our acquired business.

### **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 2003, we generated approximately \$2.3 million from operating activities. This resulted from our net loss of \$3.3 million offset by non-cash charges for depreciation, amortization, asset impairment of \$4.5 million, deferred tax valuation allowance of \$846,000, inventory provisions of \$454,000, and deferred compensation amortization of \$150,000. Our collections from customers were approximately \$48.2 million in 2003 compared to \$40.0 million in 2002. The net change in working capital accounts resulted in a use of cash of \$366,000. As revenues increased over the prior year, we increased investment in inventory and accounts receivable offset by larger accounts payable balances.

*Investing Cash Flows:* In 2003, we generated approximately \$2.6 million in investing activities, which consisted mainly of purchases of plant and equipment for \$4.8 million, including \$1.3 million to purchase an administrative building and buyout an above market lease (see Restructuring Charges above), offset by the net proceeds from the sale of available-for-sale securities of \$7.4 million.

*Financing Cash Flows:* In 2003, we generated approximately \$12,000 from financing activities, which consisted of net proceeds of \$75,000 from the exercise of stock options offset by payments on lease obligations.

As of December 31, 2003, APT had \$31.8 million in working capital. Our trade accounts receivable balance was \$7.6 million reflecting a days sales outstanding ratio of 52 days, compared to trade accounts receivable of \$6.9 million at December 31, 2002, 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 \$12.4 million reflecting inventory turns of 2.7 times per year, compared to an inventory balance of \$11.9 million at December 31, 2002, reflecting inventory turns of 2.2 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, adjusted to include the related opening balances from our acquisitions.

APT currently expects to fund expenditures for capital requirements as well as liquidity needs from a combination of available cash balances, internally generated funds and financing arrangements if needed. As of December 31, 2003, APT had \$16.6 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. 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, 2003 and 2002 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, 2003 is presented in the table below. Purchase obligations include amounts committed under legally enforceable contracts or purchase orders.

	Total	Payments due by period			
		Less than one year	1-3 Years	3-5 years	More than 5 years
Long term debt	\$	\$	\$	\$	\$
Operating leases	7,751	1,151	2,366	2,326	1,908
Capital leases					
Purchase obligations	\$ 5,170	\$ 5,170			
Other long term liabilities					
Total contractual obligations	\$ 12,921	\$ 6,321	\$ 2,366	\$ 2,326	\$ 1,908

#### Recent Accounting Pronouncements

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In December 2003, FASB Interpretation No. 46R (FIN No. 46R) was issued, which replaces FIN No. 46, Consolidation of Variable Interest Entities. The interpretation requires variable interest entities to be consolidated if the equity investment at risk is not sufficient to permit an entity to finance its activities without support from other parties or the equity investors lack certain specified characteristics of a controlling financial interest. The guidelines of the interpretation will become applicable for the Company in its first quarter 2004 financial statements. The Company currently has no equity investments that fall within the scope of FIN No. 46R, and therefore does not currently anticipate any material accounting or disclosure requirement under the provisions of the interpretation.

## **Risk Factors Affecting Business and Results of Operations**

This report contains statements which, to the extent that they do not recite historical fact, constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words believe, expect, estimate, may, will, could, plan or continue and similar expressions are intended to identify forward-looking statements. Such forward-looking information involves important risks and uncertainties that could materially alter results in the future from those expressed in any forward-looking statements made by, or on behalf of, us. These risks and uncertainties include, but are not limited to those listed in this report.

We caution you that such forward-looking statements are only predictions and actual events or results may differ materially. In evaluating such statements, you should specifically consider the various factors which could cause actual events or results to differ materially from those indicated by such forward-looking statements, including the factors that we discuss below. We are under no duty to update any of the forward-looking statements after the date of this report, to conform them to actual results or to changes in our expectations.

**The semiconductor industry is very cyclical, and an industry downturn would reduce our revenues.**

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. 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.

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

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Our quarterly and annual operating results are affected by a wide variety of factors that could materially and adversely affect our revenues, gross margins 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 timing and extent of our research and development expenses; and

fluctuations in manufacturing yields.

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 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 fixed costs in the semiconductor industry, we are limited in our ability to reduce costs quickly in response to any revenue shortfalls. As a result of the foregoing factors, 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.

**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. 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;

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.

Our results of operations are also dependent on our ability to optimize the mix between sales of relatively higher margin but lower volume products and relatively higher volume but lower margin products. In order to improve our margins, sales of higher margin products must in the future represent a greater percentage of our revenues, 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.

**Disruption, termination or reduction in the functions performed by our key subcontractors could reduce our revenues.**

We are increasingly more reliant on third party subcontractors in Europe and Asia for manufacturing, assembly and packaging of most of our products. We have entered into a wafer foundry agreement with Infineon Technologies, an outside foundry located in Europe, which currently provides a significant percentage of our wafers. In addition, during 2001 we signed a wafer foundry agreement with Episil Technologies, located in Taiwan. Our agreement with Infineon extends indefinitely and requires a two-year notice of termination. Our agreement with Episil Technologies extends indefinitely and requires a one-year notice of termination. We also rely on agreements with Team Pacific and PSI Technologies, subcontractors in the Philippines, for assembly and packaging of most of our switching power semiconductor products. Our agreement with Team Pacific extends through January 26, 2006 and requires Team Pacific to assemble all products we send them, based on rolling periodic forecasts. Our agreement with PSI Technologies extends through December 31, 2004. In addition, we rely on subcontractor services from VERTEK International, Inc. in Mexico and Semiconductor Assembler & Manufacturer, Sdn. Bhd. (SAM) in Malaysia for assembly and packaging of our RF and microwave products. The agreements with VERTEK and SAM are governed by purchase orders which are periodically renewed.

Disruption or termination of these arrangements could harm our business and operating results. Political instability, labor disputes or natural disasters could disrupt the operations of our subcontractors. If any of our subcontractors experience financial, operational, production or quality



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assurance difficulties resulting in a reduction or interruption in supply to us, our operating results would suffer until alternate subcontractors, if any, become available. Our subcontractors may not be able to maintain the technological capability to meet our future needs. 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.

**If our manufacturing processes become obsolete, our margins and profitability will 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. We cannot assure you that our current process technology will not become obsolete. If we are unable to develop or obtain access to advanced silicon wafer processing technologies as they become needed, our future operating results will suffer.

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

Our success depends on our ability to obtain or maintain protection of certain proprietary technologies used in our principal products. We rely on a combination of patents, trademarks, trade secret laws and contractual provisions to protect our proprietary rights. Our competitors may, however, misappropriate our technology or independently develop technologies that are as good as or better than ours. We cannot assure you that any patent owned by us will not be invalidated, circumvented or challenged. Moreover, 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. We may also become subject to or initiate interference proceedings in the U.S. Patent and Trademark office, which can demand significant financial and management resources and could harm our financial results.

In addition, we have licensed a portion of our intellectual property rights to European and Japanese entities and entered into a joint venture and licensing and technology transfer agreement in China. The China agreement was subsequently terminated effective in February of 2003. Intellectual property law and practice differs in foreign jurisdictions, and it may prove difficult for us to protect our rights in certain foreign countries. We cannot assure you that our licensing and other arrangements with foreign entities will not result in infringements on our proprietary rights. If we are unable to protect our intellectual property rights, either in the U.S. or abroad, we could face increased competition in the market for our products and technologies, which could negatively affect our revenues and ability to expand our business.

**We may become involved in costly and lengthy patent infringement or intellectual property litigation, which could harm our business.**

The semiconductor industry in general is characterized by frequent litigation regarding patent and other intellectual property rights. Protecting our proprietary rights may require us to defend claims of intellectual property infringement by our competitors. If any such infringements arise or are claimed in the future, we may be exposed to substantial liability for damages and may need to obtain licenses from the patent owners, discontinue or change our processes or products or expend significant resources to develop or acquire non-infringing technologies. We cannot be certain that licenses would be available under reasonable terms or that we could successfully develop or acquire non-infringing technologies. Moreover, such efforts would likely be time-consuming and divert management attention and resources. Our future involvement in patent infringement or intellectual property litigation could harm our operating results and financial condition.

Although none of our patents or intellectual property rights has been successfully challenged to date, we have been sued by IXYS Corporation for purportedly infringing two of its patents covering power MOSFETs. We have denied infringement of the IXYS patents and have asserted affirmative defenses to our claims. Trial is tentatively scheduled to commence in July of 2004. We intend to contest IXYS's claims vigorously but the outcome of this litigation remains uncertain. No assurance can be provided that a court ruling unfavorable to APT would not materially harm our business. In addition, the length of time and legal fees associated with the patent litigation with IXYS may be significant.

Additionally, in the future we could be accused of infringing the intellectual property rights of other third parties. 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 any future infringement claims by third parties or claims for indemnification by customers or end users of our products resulting from infringement claims will not be asserted or that assertions of infringement if proven to be true will not harm our business.

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

The power semiconductor industry is highly competitive and subject to rapid technological change. 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, International Rectifier, IXYS, MA/Com, Motorola, Philips and ST Microelectronics. Many of our competitors have substantially greater technical, financial and marketing resources and greater name recognition than we do. 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 would 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 revenues each year. During 2003, our top five customers accounted for approximately 38.0% of our revenues, and one distributor, Richardson Electronics Ltd, accounted for 15.8% of our revenues. Revenues from Advanced Energy Industries, Inc represented 9.3% of revenues in 2003. If we lost Richardson Electronics Ltd 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. Richardson Electronics Ltd serves as a significant distributor of our products. If this relationship were discontinued, or if Richardson Electronics Ltd should fail to provide adequate service to our customers, we could lose revenues and our operating results would suffer.

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

We have at times experienced periods of 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 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 would harm our operating results.

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

We have made two acquisitions since we became a public company in August of 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.

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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 the acquisition or joint venture;

adverse effects on existing business relationships with customers; and

potential loss of key employees of acquired organizations.

Our ability to successfully manage these risks would be limited by the small size of our management team.

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

In 2003, approximately 35% of our revenues were to customers located outside of the U.S. We are vulnerable to risks associated with doing business in foreign countries, including tariffs, quotas, taxes and other market barriers, political and economic instability, currency fluctuations, credit risk and difficulties in staffing and management of overseas operations. In addition, we have supply agreements, assembly agreements, and other relationships with foreign companies that are subject to similar risks.

### **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, systems applications engineers and sales managers. There is intense competition for the services of

development engineers in our industry. The loss of the services of one or more of our development engineers, executive officers 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 APT with respect to any of our employees.

**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 delay in recognition or loss of revenues, 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. Even an unsuccessful product liability claim would likely be time-consuming and costly to defend.

**Interruptions in wafer production may harm our operating results.**

Any prolonged inability to utilize our Bend, Oregon foundry or third party foundries as a result of fire, natural disaster or otherwise would harm our financial condition and cause our operating results to suffer. If we are not able to obtain additional foundry capacity as required, our relationships with our customers would be harmed and our revenues would likely be reduced. 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. 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.

**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 some packages 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 some packages may harm our gross margins and our ability to deliver our products on a timely basis, if at all.

**Our business may be adversely effected by acts of terrorism.**

Acts of terrorism could interrupt or restrict our business in several ways. 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 would be adversely effected.

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 would also be adversely effected.

**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 and local 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.

**An accident at our manufacturing facility 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 facility could result in serious personal injury or property damage for which we could be held financially responsible. Any financial obligation in excess of available insurance could harm our financial results.

**Our charter contains 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 change control of APT. These and other provisions in our charter may defer hostile takeovers or delay changes in control or management, which could reduce our stock price. Also, there are provisions of Delaware law that may have similar effects.

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

Six members of our senior management own approximately 40% of our outstanding shares of common stock, after the issuance of 1.5 million shares for the acquisition of GHz Technology Inc. As a result, these members of management exercise significant control over all matters requiring stockholder approval. The concentrated holdings of management may result in a delay of, or serve as a deterrent to, possible changes in control of APT, which may reduce the market price of our common stock.



**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 revenues are 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 revenues and revenues by APT Europe are in U.S. dollars, and most of our foreign currency revenues are 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 11 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**

*(a) 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. In connection with the new rules, we currently are in the process of further reviewing and documenting our disclosure controls and procedures, including our internal controls over financial reporting, and may from time to time make changes aimed at enhancing their effectiveness and to ensure that our systems evolve with our business.

Based on our most recent evaluation of the effectiveness of the design and operation of the Company's disclosure controls and procedures, the Company did not discover:

(i) Any significant deficiencies or material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information;

(ii) Any instances of fraud, whether or not material, that involved management or other employees who have a significant role in the registrant's internal control over financial reporting.

*(b) Changes in internal controls over financial reporting*

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 2004 annual meeting of shareholders.

**ITEM 11. EXECUTIVE COMPENSATION.**

The information required by this item is included in our Proxy Statement for our 2004 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 2004 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 2004 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 2004 annual meeting of shareholders.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K**

(a) 1. Index to Financial Statements

Report of KPMG LLP

Consolidated Balance Sheets as of December 31, 2003 and 2002

Consolidated Statements of Operations for the years ended December 31, 2003, 2002, and 2001

Consolidated Statements of Stockholders' Equity and Comprehensive Income (Loss) for the years ended December 31, 2003, 2002, and 2001

Consolidated Statements of Cash Flows for the years ended December 31, 2003, 2002, and 2001

Notes to Consolidated Financial Statements

(a) 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.

(a) 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 dated 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.

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- 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 6, 1996, 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.
- 10.10 North America Distributor Agreement between Richardson Electronics, Ltd. and Advanced Power Technology, Inc. dated as of April 1, 1997, 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.
- 10.13 Document of Understanding between Advanced Energy Industries, Inc. and Advanced Power Technology, Inc. dated August 14, 1998, as amended, incorporated by reference to Exhibits to the S-1.
- 10.14 Supply Contract between Wacker Siltronic Corporation and Advanced Power Technology, Inc. dated December 17, 1998, incorporated by reference to Exhibits to the S-1.
- 10.15 Master Agreement by and between Liaoning Heahai Power Electronics Co. Ltd., Advanced Power Technology, Inc. and Advanced Power Technology Europe SA dated as of October 15, 1999, incorporated by reference to Exhibits to the S-1.
- 10.16 Subcontract Agreement between Team Pacific Corporation and Advanced Power Technology, Inc. dated January 26, 2000, incorporated by reference to Exhibits to the S-1.
- 10.17 Leases: Bordeaux, France, 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.
- 21.1\*\* Subsidiaries of Advanced Power Technology, Inc.
- 23.1\*\* Consent of KPMG LLP.
- 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.

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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

(b) Reports on Form 8-K

Filed:

There were no reports filed on Form 8-K during the quarter.

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Furnished:

Date of Report	Date Furnished	Description
October 23, 2003	October 24, 2003	Earnings release for third quarter 2003 financial results.
November 6, 2003	November 7, 2003	Financial release regarding restructuring actions and charges for the fourth quarter of 2003.

Such press releases are not incorporated by reference herein or deemed filed within the meaning of Section 18 of the Securities Act.

# 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 10, 2004.

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 10, 2004 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



**INDEPENDENT AUDITORS' REPORT**

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, 2003 and 2002, 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, 2003. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. 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, 2003 and 2002 and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America.

**/s/ KPMG LLP**

Portland, Oregon  
January 30, 2004

F-1

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## ADVANCED POWER TECHNOLOGY, INC.

## CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	December 31,	
	2003	2002
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 11,564	\$ 6,708
Short-term investments in available-for-sale securities	4,000	10,452
Accounts receivable, net	7,564	6,899
Inventories, net	12,382	11,949
Prepaid expenses and other current assets	2,436	2,521
Total current assets	37,946	38,529
Property and equipment, net	11,002	10,617
Long-term investments in available-for-sale securities	1,000	2,000
Other assets	174	109
Intangible assets, net	8,811	9,887
Goodwill	15,570	15,806
Total assets	\$ 74,503	\$ 76,948
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$ 3,471	\$ 2,873
Accrued expenses	2,695	2,475
Total current liabilities	6,166	5,348
Other long term liabilities	127	428
Total liabilities	6,293	5,776
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; 10,579,930 shares issued and 10,463,080 outstanding in 2003, 10,503,219 shares issued and 10,394,362 outstanding in 2002	106	105
Additional paid-in capital	88,625	88,490
Treasury stock, at cost, 116,850 and 108,857 shares in 2003 and 2002, respectively	(1,761)	(1,700)
Deferred stock compensation	(21)	(171)
Accumulated other comprehensive income	309	166
Accumulated deficit	(19,048)	(15,718)
Total stockholders' equity	68,210	71,172
Total liabilities and stockholders' equity	\$ 74,503	\$ 76,948

See accompanying notes to consolidated financial statements.

F-2

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**ADVANCED POWER TECHNOLOGY, INC.**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(In thousands, except per share amounts)

	Years Ended December 31,		
	2003	2002	2001
Revenues, net	\$ 48,892	\$ 43,425	\$ 36,855
Cost of goods sold	32,262	29,214	25,023
Amortization of technology rights and other charges	1,118	1,974	
Total cost of goods sold	33,380	31,188	25,023
Gross profit	15,512	12,237	11,832
Operating expenses:			
Research and development	3,001	3,858	1,810
Selling, general and administrative	14,763	12,313	9,268
Restructuring charges	645		
In-process research and development charges		2,108	
Total operating expenses	18,409	18,279	11,078
Income (loss) from operations	(2,897)	(6,042)	754
Other income (expense), net:			
Interest income, net	217	570	1,595
Other, net	(29)	14	14
Total other income	188	584	1,609
Income (loss) before income taxes	(2,709)	(5,458)	2,363
Income tax expense (benefit)	621	(1,771)	567
Net income (loss)	\$ (3,330)	\$ (3,687)	\$ 1,796
Net income (loss) per share:			
Basic	\$ (0.32)	\$ (0.36)	\$ 0.21
Diluted	(0.32)	(0.36)	0.19
Weighted average number of shares used in the computation of net income (loss) per share:			
Basic	10,410	10,248	8,737
Diluted	10,410	10,248	9,368

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 Income	Comprehensive Income	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Capital	Compensation	Income	(Loss)		
Balance, December 31, 2000	8,515,818	\$ 85	(108,857)	\$ (1,700)	\$		\$ (13,827)		\$ (13,827)	\$ 51,118
Exercise of stock options	320,819	3			471					474
Tax benefit from exercise of options					304					304
Stock compensation					39					39
Amortization of deferred stock compensation						164				164
Net income								\$ 1,796	1,796	1,796
Unrealized gain on investments							61	61		61
Foreign currency translation							(8)	(8)		(8)
Comprehensive income							\$ 1,849			
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)	\$ 88,025	(21)	309		\$ (19,048)	\$ 68,210

See accompanying notes to consolidated financial statements.

F-4

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**ADVANCED POWER TECHNOLOGY, INC.**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**(In thousands)**

	Years Ended December 31,		
	2003	2002	2001
Cash flows from operating activities:			
Net income (loss)	\$ (3,330)	\$ (3,687)	\$ 1,796
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	4,156	3,498	1,156
Inventory provision	454	893	582
In-process research and development charges		2,108	
Net loss on disposal of property and equipment	4		
Tax benefit from exercise of warrants and options		180	304
Deferred taxes	846	(1,716)	298
Deferred gain on sale-leaseback	(17)	(18)	(17)
Building impairment charge	350		
Amortization of deferred stock based compensation	150	498	203
Amortization of investment discount	14	154	62
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(526)	(835)	3,214
Inventories	(726)	1,626	(3,129)
Prepaid expenses and other assets	178	2,718	(1,660)
Accounts payable and accrued expenses	708	(345)	(1,742)
Net cash provided by operating activities	2,261	5,074	1,067
Cash flows from investing activities:			
Purchases of available-for-sale securities	(2,000)	(10,333)	(21,918)
Proceeds from available-for-sale securities	9,433	24,838	13,529
Acquisitions, net of cash acquired		(26,632)	
Purchase of property and equipment	(4,828)	(2,649)	(2,335)
Proceeds from sale of property and equipment		72	
Net cash provided by (used in) investing activities	2,605	(14,704)	(10,724)
Cash flows from financing activities:			
Payments on capital lease obligations	(63)	(78)	(79)
Proceeds from issuance of long-term debt			
Principal payments on long-term debt			(20)
Exercise of stock options	75	367	474
Net cash provided by financing activities	12	289	375
Effects of exchange rate changes on cash	(22)	(53)	58
Net change in cash and cash equivalents	4,856	(9,394)	(9,224)
Cash and cash equivalents at beginning of year	6,708	16,102	25,326
Cash and cash equivalents at end of year	\$ 11,564	\$ 6,708	\$ 16,102

Supplemental disclosure of cash flow information:

Cash (paid) received during the year for: Interest	\$	(32)	\$	(28)	\$	(55)
Income taxes		197		2,098		(1,223)
Supplemental disclosure of non-cash activities:						
Issuance of stock and options for acquisitions				20,313		
Unrealized gain (loss) on short-term and long-term investments		(3)		(68)		61

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***

Advanced Power Technology Inc. is a leading designer, manufacturer and marketer of high-performance power semiconductors and modules for Radio Frequency (RF), Linear, and Switchmode applications. Power semiconductors manage and regulate electrical power by converting electricity into a form required by electrical and electronic products. Our power semiconductors increase system efficiency, permit the design of more compact end products and improve features and functionality. We are primarily focused on the high power, high frequency segment of the power semiconductor market. High power refers to the ability to dissipate above one kilowatt, and high frequency refers to the ability to switch on and off at rates above 100 kilohertz. In addition we continue to strengthen our portfolio of RF products that operate at frequencies ranging from 1 megahertz to 100 megahertz. RF generally refers to the ability to operate at frequencies above 1 megahertz. We sell our products primarily in North America, Europe, and Asia, through a network of independent sales representatives and distributors.

The acquisition of GHz Technology, Inc. and the business of Microsemi RF Products, Inc. in 2002 helped us to further penetrate RF markets. We believe that these acquisitions serve to position APT as an emerging, dominant supplier in bipolar RF power transistors for avionics, radar and non-cellular communications applications operating at frequency ranges from 1 megahertz to multiple gigahertz and add valuable RF technology and substantial RF engineering, manufacturing and marketing capability to the Company. These acquisitions are part of the Company's ongoing strategy to expand its product and technology portfolio in the RF power arena through both internal development and acquisitions.

***(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

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products. Upon shipment, APT also provides for the estimated cost that may be incurred for product warranty and sales returns based on historical experience. APT uses independent distributors to sell its products. Distributors can return up to 5% of the dollar value of products purchased during the prior six months upon a 30 days notice. 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 \$431, \$351 and \$365 as of December 31, 2003, 2002 and 2001, respectively. The changes in the reserve for warranties and sales returns for the years ended December 31, 2003 and 2002 are as follows:

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

F-6

***(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. Long-term investments consist of highly liquid debt securities with maturities greater than one year. 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. The following is a summary of cash, cash equivalents and investments.

	December 31,	
	2003	2002
Cash and cash equivalents:		
Municipal bonds and notes	\$ 7,900	\$ 1,950
Money market fund	839	1,653
Total cash equivalents	8,739	3,603
Cash	2,825	3,105
Total cash and cash equivalents	\$ 11,564	\$ 6,708
Short-term investments:		
Municipal bonds and notes	\$ 3,000	\$ 9,952
Commercial paper	1,000	
Certificates of deposit		500
Total short-term investments	\$ 4,000	\$ 10,452
Long-term investments:		
Municipal bonds and notes	\$ 1,000	\$ 1,000
Commercial paper		1,000
U.S. government debt securities		
Total long-term investments	\$ 1,000	\$ 2,000

***(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,		
	2003	2002	2001
Balance beginning of year	\$ 70	\$ 59	\$ 120
Provision (reduction)	243	14	(34)
Charge offs	(100)	(3)	(27)
Balance end of year	\$ 213	\$ 70	\$ 59

F-7

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***(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 \$2,036 and \$1,690, as of December 31, 2003 and 2002, 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 will be \$1,076 for the years ending December 31, 2004, 2005, 2006, 2007 and 2008.

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 report 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

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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.

### ***(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.

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,		
	2003	2002	2001
Net income (loss):			
As reported	\$ (3,330)	\$ (3,687)	\$ 1,796
Add: Stock based compensation included in reported net income (loss)	150	498	203
Deduct: Stock based compensation determined under fair value based method for all awards	(1,822)	(2,469)	(1,639)
Pro forma net income (loss)	\$ (5,002)	\$ (5,658)	\$ 360
Earnings (loss) per share:			
Basic as reported	\$ (0.32)	\$ (0.36)	\$ 0.21
Basic pro forma	\$ (0.48)	\$ (0.55)	\$ 0.04
Diluted as reported	\$ (0.32)	\$ (0.36)	\$ 0.19
Diluted pro forma	\$ (0.48)	\$ (0.56)	\$ 0.04

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,		
	2003	2002	2001
Risk-free interest rate	2.6-3.2%	3.8%	4.6%
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, 2003, 2002 and 2001 are summarized below:

	Years ended December 31,		
	2003	2002	2001
Incremental dilutive shares included in diluted net income (loss) per share calculation			631,000
Anti-dilutive shares excluded from diluted net income (loss) per share calculation	1,221,000	1,105,000	241,000

**(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 revenues 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.

F-10

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**(2) Balance Sheet Components*****(a) Inventories***

Inventories consist of the following:

	December 31,	
	2003	2002
Raw materials	\$ 3,005	\$ 2,806
Work in process	6,796	6,705
Finished goods	4,617	4,128
Valuation reserve	(2,036)	(1,690)
Inventories, net	\$ 12,382	\$ 11,949

The following table presents a roll forward of the inventory valuation reserve:

	Years ended December 31,		
	2003	2002	2001
Balance beginning of year	\$ 1,690	\$ 941	\$ 675
Provision	454	893	582
Write offs	(108)	(144)	(316)
Balance end of year	\$ 2,036	\$ 1,690	\$ 941

***(b) Property and Equipment***

Property and equipment consist of the following:

	December 31,	
	2003	2002
Machinery, furniture and equipment	\$ 21,498	\$ 19,963
Leasehold improvements	1,213	1,217
Assets in process	2,708	847

	25,419	22,027
Less accumulated depreciation and amortization	(14,417)	(11,410)
	\$ 11,002	\$ 10,617

*(c) Accrued Expenses*

Accrued expenses consist of the following:

	December 31,	
	2003	2002
Payroll, commissions and related liabilities	\$ 653	\$ 431
Vacation accrual	553	443
Income and other taxes payable	360	562
Reserve for warranty and sales return	431	351
Other	698	688
	\$ 2,695	\$ 2,475

**(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.

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. Not all restructuring activities were completed as of December 31, 2003. As such, management expects that additional restructuring charges of approximately \$120 will be incurred in 2004.

The total severance related charges recognized in 2003 was \$295. The severance charges relate 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 fair value. As such, APT recorded an impairment charge for the building in the fourth quarter of 2003 of approximately \$350. 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, 2003 was approximately \$1 million and is included as a component of other current assets. The changes in the reserve for restructuring balance for the year ended December 31, 2003 is shown in the table below. There were no provisions or charges in 2002 or 2001.

	December 31, 2003
Balance beginning of year	\$
Provision	295
Charge offs	(117)
Balance end of year	\$ 178

**(4) Acquisitions****(a) 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

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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 revenues, 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.

***(b) 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 revenues, 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.

### (c) 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, 2001 and 2002, respectively. 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. Both periods exclude a charge of \$2,108 for in-process research and development expense. Both periods include the results of GHZ and the acquired business of MSC RF beginning on January 1, 2002 and 2001, respectively, including an after-tax charge of \$1,077 for impairment of fixed assets recorded by GHZ in the third quarter of 2001. The pro forma information does not necessarily reflect the actual results that would have occurred if the companies had been combined during the periods nor is it necessarily indicative of future results of operations for the combined companies.

	Years Ended December 31,	
	2002	2001
Revenues, net	\$ 47,559	\$ 58,546
Net loss	(2,183)	(2,193)
Net loss per share:		
Basic	\$ (0.21)	\$ (0.21)
Diluted	\$ (0.21)	(0.21)
Weighted average number of shares used in the computation of net loss per share:		
Basic	10,352	10,260
Diluted	10,352	10,260

**(5) Leases**

APT leases its facilities and certain office equipment under non-cancelable operating leases, which expire over the next nine years. Rental expense was \$1,389, \$1,534, and \$526, for the years ended December 31, 2003, 2002, and 2001, 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, 2003:

**Years ended December 31:**

2004	\$	1,151
2005		1,156
2006		1,210
2007		1,230
2008		1,096
Total	\$	5,843

F-14

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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,		
	2003	2002	2001
Domestic	\$ (2,026)	\$ (5,968)	\$ 1,599
Foreign	(683)	510	764
	\$ (2,709)	\$ (5,458)	\$ 2,363

Income tax expense (benefit) consists of the following:

	Years Ended December 31,		
	2003	2002	2001
Current:			
Federal	\$ (186)	\$ (46)	\$ 226
State	(39)	(9)	43
Foreign	(225)	(55)	269
Deferred:			
Federal	700	(1,455)	223
State	146	(261)	75
	846	(1,716)	298
Total	\$ 621	\$ (1,771)	\$ 567

The actual income tax (benefit) expense differs from the expected tax (benefit) expense 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,		
	2003	2002	2001
Expected income tax (benefit) expense	(34)%	(34)%	34%

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Tax exempt municipal interest	(2)	(2)	(6)
Change in valuation allowance	70	(4)	(11)
State income taxes, net of federal benefit	(4)	(3)	4
Non deductible IPR&D charges		12	
Other	(7)	(1)	3
Actual income tax (benefit) expense	23%	(32)%	24%

F-15

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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,	
	2003	2002
Deferred tax assets:		
Reserves and allowances	\$ 1,106	\$ 965
Accrued vacation pay	139	102
Net operating loss carry forwards	3,208	2,503
R&E Credit carry forwards	718	629
Other	62	57
Total gross deferred tax assets	5,233	4,256
Less valuation allowance	(2,838)	(840)
Net deferred tax asset	2,395	3,416
Deferred tax liabilities:		
Depreciation and amortization differences	(2,395)	(2,570)
Net deferred tax assets	\$	\$ 846

The Company recorded a tax provision of \$621 for the year ended December 31, 2003 reflecting a full valuation allowance against its net deferred tax assets. In assessing the valuation of deferred tax assets, SFAS No. 109 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. 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.

The net changes in the valuation allowance for the years ended December 31, 2003, 2002, and 2001, were an increase of \$1,998 and decreases of \$189, and \$282, respectively. As of December 31, 2003, the net deferred tax asset was offset by a full valuation allowance. As of December 31, 2002, the net deferred tax asset of \$846 is recorded on the balance sheet as \$1,124 in other current assets and \$278 in other long term liabilities. During the year ended December 31, 2002, APT acquired a net deferred tax liability of \$1,988 in connection with the acquisition of GHz Technology, Inc.

As of December 31, 2003, APT has federal and state net operating loss carry forwards of \$5,431 and \$5,563, respectively, which expire beginning in years 2020 through 2023. In addition, APT has federal and state research and experimentation credit carry forwards of \$801 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) EUR3,247 (\$2,585) based on the exchange rate as of December 31, 2003; all of which are available indefinitely. The portion of the valuation allowance for deferred tax assets for which subsequently recognized tax benefits will be applied directly to contributed capital is \$124. This amount is attributable to differences between financial and tax reporting of employee stock option transactions.

## (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 2,250,000 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, 2003, options available for grant were 149,462.

Under the Black-Scholes option pricing model, the weighted average fair value of options granted during the year ended December 31, 2003 was \$5.11. 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 3(a)). For the year ended December 31, 2001, the weighted average fair value of options granted was approximately \$9.82. All options issued in 2003 and 2001 had exercise prices equal to market price of the stock on date of grant.

APT has recorded cumulative deferred stock compensation of \$1,094 through December 31, 2003. This deferred stock compensation is based on the difference between the deemed fair market value of common stock and the exercise price of the option or stock on the grant date. Deferred stock compensation is being amortized on an accelerated basis over the vesting period, generally five years, approximately 45%, 26%, 16%, 9% and 4% in years one through five, respectively, consistent with the method described in FASB Interpretation No. 28, Accounting for Stock Appreciation Rights and Other Variable Stock Options or Award Plans, or FIN 28. APT recognized compensation expense of \$150, \$485, and \$164, during the years ended December 31, 2003, 2002, and 2001, respectively, related to these grants.

Deferred stock compensation was \$21 as of December 31, 2003 and future amortization expense will be approximately \$21 for the year ending December 31, 2004.

Stock option activity was as follows:

	Number of Shares	Weighted Average Exercise Price
Options outstanding at December 31, 2000	1,057,032	3.06
Granted	174,087	13.29
Exercised	(320,819)	1.50
Forfeited	(15,429)	4.63
Options outstanding at December 31, 2001	894,871	5.58
Granted	923,875	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

The following table summarizes information about stock options as of December 31, 2003:

Range of Exercise Prices Per Share	Options Outstanding			Options Exercisable	
	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	669,801	4.2	\$ 1.53	598,098	\$ 1.53
3.61-10.80	363,727	8.1	6.79	163,347	7.06
10.81 - 14.40	442,364	7.8	11.78	195,868	12.42
14.41 - 36.00	110,550	7.1	17.25	64,440	18.13
	1,586,442	6.3	6.69	1,021,753	5.55

As of the December 31, 2002 and 2001 there were 790,629 and 404,470 stock options exercisable with weighted average exercise price per share of \$4.66 and \$3.31, respectively.

***(b) Warrants***

On September 6, 1995, APT issued three warrants to financing companies and a bank. Two of the warrants permit the holders to purchase 35,715 shares each and one warrant permits the holder to purchase 35,714 shares of APT's common stock, each at exercise prices of \$1.40 per share. The fair value of \$77 was determined using the Black-Scholes methodology using the refinancing date as the measurement date, a risk-free rate of 5.2%, expected dividend yield of 0%, 2-year term and expected volatility of 65%. One warrant to purchase 35,715 shares was exercised in August 2000 and the warrant to purchase 35,714 shares was exercised in September 2000. The final warrant to purchase 35,715 shares was exercised November 2003.

F-17

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On November 5, 1998, APT issued warrants to two financing companies in connection with the renegotiations of certain commitments. The warrants permitted the holders to purchase a total of 10,000 shares of APT's common stock at \$1.40 per share. The fair value of the warrants issued of \$87 was determined by applying the Black-Scholes methodology using the issuance date as the measurement date, a risk-free rate of 5.15%, expected dividend yield of 0%, a seven-year term and expected volatility of 80%. The warrant values represented a deferred financing cost and were amortized over the term of the debt facility of sixteen months. Warrants to purchase 2,500 shares were exercised in August 2000. The remaining warrant to purchase 7,500 shares was exercised in November 2003.

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 3). 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, 2003, 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 2003 and 2002, APT did not provide any matching contributions to the plan. During 2001, APT provided matching contributions for the 401k at the rate of 25% of each dollar contributed up to 3% of eligible compensation. Contributions by APT in 2001 were \$59.

#### **(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, 2003, 2002, and 2001, revenues to Advanced Energy were approximately \$4,530, \$4,122, and \$4,140, respectively. Accounts receivable from Advanced Energy were \$321 and \$319 at December 31, 2003 and 2002, 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 currently involved in various legal proceedings. The Company does not believe that the ultimate resolution of such litigation will have a material adverse effect on the Company's financial position, results of operations or cash flows. However, the length of time and legal fees associated with such litigation may be significant. 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. The claim filed by IXYS alleges that APT infringes on their United States Patent No. 5,486,715 and 5,801,419. The IXYS claim also requested that damages be determined at trial and that such damages be trebled. On October 1, 2002, APT filed its answer to the IXYS

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complaint, denying the allegations of patent infringement. In addition, APT filed a patent infringement counterclaim against IXYS, alleging that IXYS infringes on APT United States Patent No. 5,283,202, entitled IGBT Device With Platinum Lifetime Control Having Gradient Or Profile Tailored Platinum Diffusion Regions. APT has filed with the court several affirmative defenses related to the validity of the IXYS patents. Trial is scheduled to commence in July of 2004. As stated above, APT does not believe that it infringes upon the IXYS patents cited in the claim and intends to vigorously defend itself in this lawsuit. The length of time and legal fees associated with the patent infringement litigation with IXYS may be significant.

APT has agreements with foundry partners in Europe and Taiwan to process wafers. APT also has agreements with subcontractors in the Philippines, Malaysia, and Mexico 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, 2003, APT's total commitments under these purchase obligations was approximately \$5,170.

F-18

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**(11) 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 revenues, operating income (loss) and identifiable assets are summarized as follows:

	Years Ended December 31,		
	2003	2002	2001
<b>Geographic revenues:</b>			
United States	\$ 31,768	\$ 27,831	\$ 19,722
China	4,144	2,293	3,534
Germany	2,517	2,828	3,288
United Kingdom	1,976	849	928
Austria	1,967	2,889	3,189
Other	6,520	6,735	6,194
	\$ 48,892	\$ 43,425	\$ 36,855
<b>Operating income (loss):</b>			
United States	\$ (2,282)	\$ (6,628)	\$ (54)
France	(615)	586	808
	\$ (2,897)	\$ (6,042)	\$ 754

	December 31,	
	2003	2002
<b>Identifiable assets:</b>		
United States	\$ 72,008	\$ 74,038
France	2,495	2,910
	\$ 74,503	\$ 76,948

**(b) Significant Customers**

During 2003, the largest customer was our key distributor, Richardson Electronics Ltd., representing 15.8%, 12.0%, and 7.9%, of our revenues in 2003, 2002, and 2001, respectively. Revenues from Advanced Energy represented 9.3%, 9.5%, and 10.8%, of revenues in 2003, 2002, and 2001, respectively.



**(12) Quarterly Financial Data (Unaudited)**

**Year Ended December 31, 2003**  
(In thousands, except per share data)

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Revenues, 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
Revenues, 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 net income (loss) per share	\$ (0.26)	\$ (0.05)	\$ 0.01	\$ (0.06)
Diluted net income (loss) per share	\$ (0.26)	\$ (0.05)	\$ 0.01	\$ (0.06)

**Year Ended December 31, 2001**  
(In thousands, except per share data)

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Revenues, net	\$ 13,158	\$ 11,526	\$ 6,838	\$ 5,333
Gross profit	5,214	4,252	1,309	1,057
Operating income (loss)	2,137	1,119	(1,020)	(1,482)
Net income (loss)	1,782	1,143	(417)	(712)
Basic net income (loss) per share	\$ 0.21	\$ 0.13	\$ (0.05)	\$ (0.08)
Diluted net income (loss) per share	\$ 0.19	\$ 0.12	\$ (0.05)	\$ (0.08)

(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.

F-20

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