# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

**WASHINGTON, D.C. 20549** 

#### **FORM 10-K**

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

For the fiscal year ended December 31, 2004

or

0	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the transition period from to
	Commission file number 1-7416

## Vishay Intertechnology, Inc.

(Exact name of registrant as specified in its charter

**Delaware** (State or other jurisdiction of incorporation or organization) 38-1686453 (IRS employer identification no.)

63 Lincoln Highway Malvern, Pennsylvania 19355-2143 (Address of principal executive offices)

(610) 644-1300 (Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:
Common Stock, \$0.10 par value
(Title of Class)
New York Stock Exchange
(Exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).

Yes x No o

The aggregate market value of the voting stock held by non-affiliates computed by reference to the price at which the common equity was last sold as of the last business day of the registrant's most recently completed second fiscal quarter (\$17.28 on July 3, 2004), assuming conversion of all of its Class B common stock held by non-affiliates into common stock of the registrant, was \$2,608,643,000. There is no non-voting stock outstanding.

As of March 9, 2005, registrant had 151,429,179 shares of its common stock and 14,679,440 shares of its Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement, which will be filed within 120 days of December 31, 2004, are incorporated by reference into Part III.

This page intentionally left blank.

# Vishay Intertechnology, Inc. Form 10-K for the year ended December 31, 2004

### **CONTENTS**

	к	۱	н	М	

Item 1. Business	5
Item 2. <u>Properties</u>	20
Item 3. <u>Legal Proceedings</u>	21
Item 4. <u>Submission of Matters to a Vote of Security Holders</u>	22
Item 4A. Executive Officers of the Registrant	23
PART II	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	24
Item 6. <u>Selected Financial Data</u>	25
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	26
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	52
Item 8. <u>Financial Statements and Supplementary Data</u>	53
Item 9. Changes In and Disagreements With Accountants on Accounting and Financial Disclosure	53
Item 9A. <u>Controls and Procedures</u>	53
Item 9B. Other Information	55
PART III	
Item 10. Directors and Executive Officers of the Registrant	55
Item 11. Executive Compensation	55
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	55
Item 13. <u>Certain Relationships and Related Transactions</u>	55
Item 14. Principal Accounting Fees and Services	56
PART IV	
Item 15. Exhibits, Financial Statement Schedules	56
<u>SIGNATURES</u>	59
Consolidated Financial Statements	
Reports of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2004 and 2003	F-4
Consolidated Statements of Operations for the years ended December 31, 2004, 2003 and 2002	F-6
Consolidated Statements of Cash Flows for the years ended December 31, 2004, 2003 and 2002	F-7
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2004, 2003 and 2002	F-8
Notes to Consolidated Financial Statements	F-10

F-10

#### PART I

#### Item 1. BUSINESS

#### General

Vishay Intertechnology, Inc. is a leading international manufacturer and supplier of passive and active electronic components. Passive components include resistors, capacitors, transducers and inductors. Active components include diodes, transistors, rectifiers, power integrated circuits (ICs), infrared (IR) transceivers, IR sensors and optocouplers. Passive electronic components and discrete active electronic components are the primary elements of almost every electronic circuit. We offer our customers "one-stop" access to one of the most comprehensive electronic component lines of any manufacturer in the United States, Europe and Asia.

Our components are used in virtually every type of product that contains electronic circuitry, including:

computer-related products,

power management products,

telecommunications equipment,

measuring instruments,

industrial equipment,

automotive applications,

process control systems,

· military and aerospace applications,

consumer electronics and appliances,

medical instruments, and

electronic scales.

Since 1985, we have pursued a business strategy that principally consists of the following elements:

- 1. expanding within the electronic components industry, primarily through the acquisition of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which we have substantial marketing and technical expertise;
- 2. reducing selling, general and administrative expenses through the integration or elimination of redundant sales offices and administrative functions at acquired companies;
- 3. achieving significant production cost savings through the transfer and expansion of manufacturing operations to countries such as the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the People's Republic of China, and the Philippines, where we can take advantage of lower labor costs and available tax and other government-sponsored incentives;
- 4. maintaining significant production facilities in those regions where we market the bulk of our products in order to enhance the service and responsiveness that we provide to our customers;
- 5. consistently rolling out new and innovative products; and
- 6. strengthening our relationships with customers and strategic partners.

As a result of this strategy, we have grown from a small manufacturer of precision resistors and resistance strain gages to one of the world's largest manufacturers and suppliers of a broad line of electronic components.

Our significant acquisitions in the last several years include:

Siliconix and Telefunken. We acquired an 80.4% interest in Siliconix incorporated (NASDAQ: SILI) in March 1998 from Daimler-Benz A.G. Siliconix is a publicly-traded chip maker, based in Santa Clara, California, which designs, markets and manufactures power and analog semiconductor products, such as metal-oxide-semiconductor field-effect transistors (MOSFETs), junction field-effect transistors (JFETs), bipolar switches, signal processing ICs and power ICs for computers, cell phones, fixed communications networks, automobiles and other electronic systems. Siliconix has manufacturing facilities in Santa Clara, California and Itzehoe, Germany, maintains assembly and testing facilities in the Republic of China (Taiwan), is party to a joint venture in Shanghai, the People's Republic of China and has subcontractors in the Philippines, the People's Republic of China, and the United States.

In the same transaction, we acquired from Daimler-Benz the semiconductor business unit of TEMIC Telefunken Microelectronic GmbH headquartered in Heilbronn, Germany, but promptly disposed of its integrated circuits division. This business, renamed Vishay Semiconductor GmbH, offers a product line of diodes, RF transistors, optoelectronic semiconductors, infrared data transceivers (IRDCs) and light-emitting diodes (LEDs).

*Electro-Films, Cera-Mite and Spectrol.* In May 2000, we acquired Electro-Films, Inc., a manufacturer of thin film components and networks on ceramic and silicon. In August 2000, we acquired Cera-Mite Corporation, a worldwide supplier of ceramic capacitors, used in power supplies, electronic lighting and other applications, and thermistors (temperature-sensitive resistors) used in refrigeration, HVAC, telecommunications and other electronic applications. Separately, in August 2000, we acquired Spectrol, a manufacturer of sensing potentiometers used primarily in the automotive industry and trimmer potentiometers used in various kinds of electronic circuitry.

*Tansitor and Mallory.* In January 2001, we acquired Tansitor, a leading manufacturer of wet tantalum electrolytic capacitors and miniature conformal coated solid tantalum capacitors. These components have power management applications in the military, aerospace and medical industries. In November 2001, we acquired Yosemite Investment, Inc. d/b/a the North American Capacitor Company, known as Mallory, a manufacturer and distributor of wet tantalum capacitors and other products. As a result of these two acquisitions, we have become the number one manufacturer of wet tantalum capacitors worldwide.

*Infineon infrared components business.* In July 2001, we acquired the infrared components business of Infineon A.G. As a result, we added several new device types to our optoelectronics portfolio. We also became the largest supplier outside Japan of optocouplers and the largest supplier worldwide of IRDCs.

*General Semiconductor.* On November 2, 2001, we completed the acquisition of General Semiconductor, Inc., a leader in the design, manufacture and distribution of semiconductors for the power management market. General Semiconductor manufactures and distributes a broad range of power management products, including rectifiers, transient voltage suppressors, small-signal transistors, diodes, MOSFETs and analog ICs. As a result of this acquisition, we became the number one manufacturer of diodes and rectifiers worldwide.

Sensortronics, Tedea-Huntleigh, BLH and Nobel, and Celtron. In January 2002, we acquired the transducer and strain gage business of Sensortronics, Inc. In June 2002, we acquired Tedea-Huntleigh BV, a leading manufacturer of load cells used in digital scales by the weighing industry. In July 2002, we purchased the BLH and Nobel businesses from Thermo Electron Corporation. BLH and Nobel are engaged in the production and sale of load cell based process weighing systems, weighing and batching instruments, web tension instruments, weighing scales, servo control systems, and components relating to load cells, including strain gages, foil gages and transducers. In October 2002, we acquired Celtron Technologies, another company engaged in the production and sale of load cells used in digital scales for the weighing industry. As a result of these acquisitions, the product portfolio of our Measurements Group has been expanded and we are now a world leader in stress analysis products and transducers used in the weighing industry (load cells).

*BCcomponents*. In December 2002, we completed the acquisition of BCcomponents Holdings B.V., a leading manufacturer of passive components with operations in Europe, India and the People's Republic of China. The product lines of BCcomponents include linear and non-linear resistors; ceramic, film and aluminum electrolytic capacitors; and trimming potentiometers. This major acquisition has significantly enhanced our global market position in passive components.

Aeroflex thin film interconnect business. In September 2004, we acquired all of the outstanding shares of Aeroflex Pearl River Inc. (renamed Vishay MIC Technology Inc.), the former thin film interconnect subsidiary of Aeroflex, Incorporated. This business has significant synergies with our existing Electro-Films business.

*SI Technologies*. On December 22, 2004, we signed a definitive merger agreement pursuant to which Vishay will acquire all of the outstanding capital stock of SI Technologies, Inc., a designer, manufactuer, and marketer of high-performance industrial sensors and controls, weighing and automotive systems, and related products. Completion of the merger is subject to certain closing conditions, including the approval of the stockholders of SI Technologies. The parties currently anticipate that the merger will be completed in the first half of 2005.

*Siliconix*. As further described in Note 19 to our consolidated financial statements, on March 3, 2005, we announced our intention to commence a tender offer for all outstanding shares of Siliconix not owned by Vishay.

We continue to explore opportunities to acquire electronic component manufacturers that have established positions in major markets, reputations for product quality and reliability, and product lines with which we have substantial marketing and technical expertise.

We also seek to explore opportunities with privately held developers of electronic components, or "start-ups," whether through acquisition, investment in non-controlling interests, or strategic alliances. We made the first such investment in August 2004, when we acquired substantially all of the assets of RFWaves, Ltd., a fab-less integrated circuit design house located in Israel.

In addition to our acquisition activity in recent years, we have taken steps to assure our competitiveness, enhance our operating efficiency and strengthen our liquidity in the face of the economic downturn which broadly impacted the electronics industry from 2001 to 2003. In this regard, we:

- (i) closed or consolidated several manufacturing facilities and administrative offices;
- (ii) reduced our headcount, particularly in high-labor-cost countries;
- (iii) integrated our acquisitions within our existing management and operational infrastructure; and
- (iv) relying on the strength of our balance sheet, continued our search for suitable acquisition candidates.

Vishay was incorporated in Delaware in 1962 and maintains its principal executive offices at 63 Lincoln Highway, Malvern, Pennsylvania 19355-2143. Our telephone number is (610) 644-1300.

#### **Products**

We design, manufacture and market electronic components that cover a wide range of products and technologies. Our products primarily consist of:

- · resistors,
- tantalum capacitors,
- multi-layer and disc ceramic capacitors (MLCCs),
- aluminum and specialty ceramic capacitors,
- film capacitors,
- power MOSFETs,
- power ICs,
- inductors,

and, to a lesser extent:

- connectors.
- · transformers,

- signal processing ICs,
- transistors,
- voltage suppressors,
- infrared data transceivers (IRDCs),
- optocouplers,
- IR sensors,
- strain gages and load cells, and
- diodes and rectifiers
- · plasma displays,
- · thermistors, and
- potentiometers.

We believe that we produce one of the broadest lines of discrete electronic components available from any single manufacturer.

#### **Product Segments**

Our products can be divided into two general classes: passive components and active components. These broad categories are also the basis used to determine our operating segments for financial reporting purposes. See Note 16 to our consolidated financial statements for additional information on revenues, income, and total assets by segment.

#### **Passive Components**

Passive components include resistors, capacitors and inductors. They are referred to as "passive" because they do not require power to operate. These components adjust and regulate voltage and current, store energy and filter frequencies. We also include in this category the products and services of our Measurements Group that employ passive components in electro-mechanical measurements.

#### Resistors

Resistors are basic components used in all forms of electronic circuitry to adjust and regulate levels of voltage and current. They vary widely in precision and cost, and are manufactured from numerous materials and in many forms. Linear resistive components are classified as variable or fixed, depending on whether or not their resistance is adjustable. Non-linear resistors can also be used as measuring devices. We manufacture a line of thermistors, which are heat sensitive resistors. Other types of resistive sensors are strain gages for measurement of mechanical stress. See "Measurements Group" below.

We manufacture virtually all types of fixed resistors, both in discrete and network forms, as well as many variable types. These resistors are produced for virtually every segment of the resistive product market, from resistors used in the highest quality precision instruments for which the performance of the resistor is the most important requirement, to low-cost resistors for which price is the most important factor.

#### **Capacitors**

Capacitors perform energy storage, frequency control, discharge, coupling, timing and filtering functions. The more important applications for capacitors are:

- electronic filtering for linear and switching power supplies;
- decoupling and bypass of electronic signals for integrated circuits and circuit boards; and
- frequency control, timing and conditioning of electronic signals for a broad range of applications.

Our capacitor products include solid tantalum surface mount chip capacitors, solid tantalum leaded capacitors, wet/foil tantalum capacitors, MLCC capacitors, disc ceramic capacitors, aluminum and specialty ceramic capacitors, and film capacitors. Each capacitor product has unique physical and electrical performance characteristics that make that type of capacitor useful for specific applications. Tantalum and MLCC capacitors are generally used in conjunction with integrated circuits in applications requiring low to medium capacitance values, "capacitance" being the measure of the capacitor's ability to store energy. The tantalum capacitor is the smallest type of capacitor for its range of capacitance. MLCC capacitors, on the other hand, are more cost-effective for applications requiring lower capacitance. Disc ceramic capacitors are used for high voltage applications. Aluminum capacitors are used for high capacitance applications. Film capacitors are suitable for general use in telecommunications, automotive, consumer and industrial products. They are the most stable capacitors.

#### **Inductors**

Inductors use an internal magnetic field to change the phase of electric current. They are utilized in electronic circuitry to control alternating current and voltage, and to filter out unwanted electronic signals. They are also used in transformers to change voltage levels.

#### Measurements Group

Vishay Measurements Group is a leading manufacturer of products for precision measurement of mechanical strains. Our products include strain gages, load cells, force measurement sensors, displacement sensors, and photoelastic sensors. These products are used in experimental stress analysis systems, as well as in the electronic measurement of loads (electronic scales), acceleration and fluid pressure. The Measurements Group also provides installation accessories for its products, instrumentation to sample and record measurement output, and training seminars in stress analysis testing and transducer development and manufacture.

As a result of Vishay's acquisitions in 2002, the Measurements Group has implemented a strategy of vertical market integration, with a product range from resistance strain gages, to transducers (the metallic structures to which strain gages are cemented), to the electronic instruments and systems that measure and control output of the transducers. Vishay Measurements Group now has two operating divisions: Vishay Micro-Measurements (for strain gages, instruments and PhotoStress® products) and Vishay Transducers (for load cells, weigh modules, instruments and weighing systems).

#### **Active Components**

Our active electronic components include both discrete devices and integrated circuits (ICs). They are referred to as "active" because they require power to function. Discrete devices are single components or an arrangement of components that generate, control, regulate and amplify or switch electronic signals or energy. Examples of our discrete active components include diodes, rectifiers, transient voltage suppressors, transistors and power MOSFETs. These devices are interconnected with passive components or other active components to create an electronic circuit. Our IC devices consist of a number of active and passive components interconnected on a single chip to perform a specific function. Examples of our integrated circuits include power ICs, motor control ICs and signal processing ICs. Our discrete active components and ICs are manufactured and marketed primarily through our majority owned Siliconix subsidiary, our European subsidiary Vishay Semiconductor GmbH, and our General Semiconductor business.

We also include in the category of active components our line of optoelectronic components, manufactured and marketed by our European subsidiary Vishay Semiconductor GmbH, our infrared components business, and our radio frequency products business.

#### Discrete Devices

Diodes and rectifiers are used to convert electrical currents from alternating current (AC) into direct current (DC) by conducting electricity in one direction and blocking it in the reverse direction. Because electrical outlets carry AC while the vast majority of electronic devices use DC, rectifiers are used in a wide variety of applications. We offer a broad line of diodes and rectifiers with differing power, speed, cost, packaging and conversion (half wave or full wave) characteristics. Our rectifiers include a series of high voltage devices that have been optimized for power correction circuits.

Transient voltage suppressors protect electronic circuits by limiting voltage to a safe level. Examples of transient events that could damage unprotected circuits include static electricity charges and natural or induced lightning. Voltage suppressors protect circuits by absorbing large amounts of energy for short periods of time. We offer a broad range of state-of-the-art transient voltage suppressors for use in most modern electronic equipment.

Small signal diodes and transistors perform amplification, signal blocking, routing and switching functions at lower current levels. Our small-signal transistors range from the older junction field-effect transistors (JFETs), to newer products such as those based upon double-diffused metal oxide semiconductor (DMOS) technology.

Discrete power MOSFETs are specialized field-effect transistors used to switch and manage power in a broad range of electronic devices. They are used in particularly low-voltage applications such as cell phones, portable and desktop computers, automobiles, instrumentation and industrial applications. Our innovative TrenchFET® power MOSFET technology offers very high cell density, very low on-resistance and optimized switching parameters for high frequency DC-DC power conversion. Power MOSFETs conserve power and help prevent components from over-heating.

#### **Integrated Circuits**

Power ICs are used in applications such as cell phones, where an input voltage from a battery or other supply source must be switched, interfaced or converted to a level that is compatible with logic signals used by microprocessors and other digital components. Our ICs are designed to operate at higher frequencies without compromising efficiencies. Often our power MOSFETs and power ICs can be used together as chip sets with complementary performance characteristics optimized for a specific application.

Motor control ICs control the starting, speed or position of electric motors, such as the head positioning and spindle motors in hard disk drives.

Signal processing ICs are used for analog switching and multiplexing in devices that either receive or output analog (non-digital) signals. A recent application of this technology is in broadband communications devices such as DSL modems.

#### **Optoelectronics**

Our line of optoelectronic components includes light emitting diodes (LEDs), infrared emitters (IREDs) and photo detectors, infrared receiver modules, optocouplers, solid-state relays (SSRs), optical sensors, and infrared transceivers (IRDCs).

Our photo detectors are light-sensitive semiconductor devices, and include linear photo diodes for light measurement, photo-transistors for light switching applications in printers, copiers, facsimile machines, vending machines and automobiles, and high speed photo PIN diodes specially designed for infrared data transfer. Our photo detector products are available in a wide variety of sensitivity angles, light sensitivities, daylight filters and packaging shapes. Our infrared emitters are used for optical switching and data transfer applications, often in conjunction with our photo detectors, and in devices like infrared remote controls for televisions.

An optocoupler consists of an infrared emitting diode and a receiver facing each other through an insulation medium inside a light-isolated housing. The receiver may either be a photodetector or a pair of MOSFETs, and in the latter case the device is referred to as a solid-state relay (SSR). The function of an optocoupler is to electrically isolate input and output signals. Our optocouplers are used in switch mode power supplies, safety circuitry and programmable controllers for computer monitors, consumer electronics, telecommunications equipment and industrial systems.

IRDCs consist of a detector photo diode, an infrared light emitting diode and a control IC. IRDCs are used for short range, two-way wireless, infrared data transfer between electronic devices such as mobile phones and other telecommunications equipment, computers and personal digital assistants (PDAs). LEDs are light emitting diodes used as light indicators in a broad range of electronic devices.

#### **Packaging**

We have taken advantage of the growth of the surface mount component market, and we are an industry leader in designing and marketing surface mount devices. Surface mount devices adhere to the surface of a circuit board rather than being secured by leads that pass through holes to the back side of the board.

We believe that we are a market leader in the development and production of a wide range of surface mount devices, including:

- thick film chip resistors,
- thick film resistor networks and arrays,
- metal film leadless resistors (MELFs),
- molded tantalum chip capacitors,
- coated tantalum chip capacitors,
- multi-layer ceramic chip capacitors,
- · thin film chip resistors,
- thin film networks,
- · certain diodes and transistor products,
- power MOSFETs,

- wirewound chip resistors,
- power strip resistors,
- bulk metal foil chip resistors,
- current sensing chips,
- chip inductors,
- chip transformers,
- · chip trimmers,
- NTC chip thermistors,
- · PTC chip thermistors, and
- strain gages.

We also provide a number of component packaging styles to facilitate automated product assembly by our customers.

#### Military Qualifications

We have qualified certain products under various military specifications, approved and monitored by the United States Defense Electronic Supply Center (DESC), and under certain European military specifications. DESC qualification levels are based in part upon the rate of failure of products. In order to maintain the classification level of a product, we must continuously perform tests on the product and the results of these tests must be reported to DESC. If the product fails to meet the requirements for the applicable classification level, the product's classification may be reduced to a lower level. Products from some of our United States manufacturing facilities experience a reduction in product classification levels from time to time. During the time that the DESC classification level is reduced for a product with military application, net sales and earnings attributable to that product may be adversely affected.

#### **Manufacturing Operations**

We strive to balance the location of our manufacturing facilities. In order to better serve our customers, we maintain production facilities in regions where we market the bulk of our products, such as the United States, Germany, France, the United Kingdom, and Asia. To maximize production efficiencies, we seek whenever practicable to establish manufacturing facilities in countries, such as the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the People's Republic of China, and the Philippines, where we can take advantage of lower labor and tax costs and, in the case of Israel, to take advantage of various government incentives, including grants and tax relief.

One of our most sophisticated manufacturing operations is the production of power semiconductor components. This manufacturing process involves two phases of production: wafer fabrication and assembly (or packaging). Wafer fabrication subjects silicon wafers to various thermal, metallurgical and chemical process steps that change their electrical and physical properties. These process steps define cells or circuits within numerous individual devices (termed "dies" or "chips") on each wafer. Assembly is the sequence of production steps that divides the wafer into individual chips and encloses the chips in structures (termed "packages") that make them usable in a circuit. Both wafer fabrication and assembly phases incorporate wafer level and device level electrical testing to ensure that device design integrity has been achieved.

At December 31, 2004, approximately 16% of our fixed assets were located in the United States, approximately 31% were located in Europe, approximately 23% were located in Israel, and approximately 30% were located in Asia. In the United States, our manufacturing facilities are located in California, Connecticut, Maine, Maryland, New York, Nebraska, North Carolina, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin. In Europe, our main manufacturing facilities are located in Germany, France, Hungary, and the Czech Republic, with other facilities in Austria, Belgium, Portugal, the Netherlands, and the United Kingdom. We also have manufacturing facilities in India, Israel, Malaysia, Mexico, the People's Republic of China, the Philippines, and the Republic of China (Taiwan). Over the past several years, we have invested substantial resources to increase capacity and to maximize automation in our plants, which we believe will further reduce production costs.

We are aggressively undertaking to have the quality systems at most of our major manufacturing facilities approved under the ISO 9001 international quality control standard. ISO 9001 is a comprehensive set of quality program standards developed by the International Standards Organization. A majority of our manufacturing operations have already received ISO 9001 approval and others are actively pursuing such approval.

In 2004, we continued the implementation of our strategy to shift manufacturing emphasis to higher automation in higher labor cost regions and to relocate a fair amount of production to regions with skilled workforces and relatively lower labor costs. As a result, we incurred restructuring costs in the year ended December 31, 2004 associated with the downsizing of manufacturing facilities in Europe and the United States. We may continue to incur such expenses in 2005.

See Note 16 to our consolidated financial statements for financial information by geographic area.

#### Sources of Supplies

Although most materials incorporated in our products are available from a number of sources, certain materials, particularly tantalum and palladium, are available only from a relatively limited number of suppliers.

#### Tantalum

We are a major consumer of the world's annual production of tantalum. Tantalum, a metal purchased in powder or wire form, is the principal material used in the manufacture of tantalum capacitors. There are currently three major suppliers that process tantalum ore into capacitor grade tantalum powder. Due to the strong demand for our tantalum capacitors and difficulty in obtaining sufficient quantities of tantalum powder from our suppliers, we stockpiled tantalum in 2000 and early 2001. From 2001 to 2003, we and our competitors experienced a significant decline in the tantalum capacitor business as well as significant decreases in the market prices for tantalum. As a result, we recorded in costs of products sold write-downs of \$5.4 million and \$25.7 million on tantalum inventories during the years ended December 31, 2003 and 2002, respectively.

We have two agreements with Cabot Corporation for the supply of tantalum powder, a July 2000 agreement (which expires in 2005) and a November 2000 agreement (which expires in 2006). With the decline in market demand and prices for tantalum during 2001, we began the process of negotiating modifications to the agreements with Cabot. Our major competitors in the tantalum capacitor business were also seeking modifications to their contracts with Cabot. In June 2002, following the prior initiation of legal proceedings by Cabot, we and Cabot agreed to make certain modifications to the supply agreements. These included price reductions, the extension of the term of one of the contracts, and the regular scheduling of our purchase commitments. The contracts with Cabot commit us to minimum purchases of tantalum powder and wire at fixed prices through 2006. One of these contracts provides for price reductions in 2006 if certain conditions are met.

In addition to the raw material write-downs described above, we also recorded losses on purchase commitments of \$16.2 million, \$11.4 million and \$106.0 million for the years ended December 31, 2004, 2003 and 2002, respectively. Our purchase commitments were entered into at a time when market demand for tantalum capacitors was high and tantalum powder was in short supply. Our liability for purchase commitments is estimated based on our contractually obligated purchase prices, expected market prices and the mix of tantalum-grades expected to be purchased. The mix of tantalum-grades expected to be purchased is within a range specified by the contracts. The pricing trend for tantalum has been relatively stable since 2003. The mix of our purchases of tantalum grades during 2004 was significantly different than initially expected, which resulted in additional losses on purchase commitments being recorded in 2004. If the downward pricing trend were to resume, we could again be required to write down the carrying value of our tantalum inventory and record additional losses on our purchase commitments. Changes in our mix of tantalum-grade purchases could also require us to record additional losses on our purchase commitments are based on the assumption that we will not receive certain conditional price reductions in 2006 pursuant to one of our contracts with Cabot. We may be required to reverse a portion of these recorded losses if we meet all conditions to receive these price reductions.

#### Palladium

Palladium, a metal used to produce multi-layer ceramic capacitors, is currently found primarily in South Africa and Russia. Palladium is a commodity product that is subject to price volatility. The price of palladium fluctuated in the range of approximately \$148 to \$435 per troy ounce during the three years ended December 31, 2004, and during 2001, the price was as high as \$1,090 per troy ounce. As of December 31, 2004, the price of palladium was approximately \$184 per troy ounce. During the years ended December 31, 2004, 2003 and 2002, we recorded in costs of products sold write-downs of palladium inventories to then-current market value of \$0.4 million, \$1.6 million and \$1.7 million, respectively. At December 31, 2004, we had commitments to purchase palladium in 2005 at prices in excess of current market. Accordingly, we recorded a loss on purchase commitment of approximately \$0.4 million during the year ended December 31, 2004.

#### **Israeli Government Incentives**

We have substantial manufacturing operations in Israel, where we benefit from the government's employment and tax incentive programs. These programs have contributed substantially to our growth and profitability. For the year ended December 31, 2004, sales of products manufactured in Israel accounted for approximately 19% of our net sales.

Under the terms of the Israeli government's incentive programs, once a project is approved, the recipient is eligible to receive the benefits of the related grants for the life of the project, so long as the recipient continues to meet preset eligibility standards. None of our approved projects has ever been cancelled or modified, and we have already received approval for a majority of the projects contemplated by our capital expenditure program. However, as a result of the economic downturn beginning in 2001, we were forced to lay off a significant number of employees in Israel in 2001. In 2002, the Israeli government initially withheld certain grant monies claiming that we had not maintained employment at the required minimum levels; however, we were able to settle our dispute in the fourth quarter of 2002 and the government agreed to continue making grant payments to us, conditioned upon our agreement to employ a certain number of additional employees by December 31, 2005. Under certain circumstances, we would be able to delay the December 31, 2005 deadline by one year. While we expect the number of employees to satisfy the eligibility requirements for our Israeli government grants, economic circumstances could compel future additional layoffs. Also, over the past few years, the Israeli government has scaled back or discontinued some of its incentive programs. There can be no assurance that we will maintain our eligibility for existing projects or that in the future the Israeli government will continue to offer new incentive programs applicable to us or that, if it does, such programs will provide the same level of benefits we have historically received or that we will continue to be eligible to take advantage of them. Because we have received approvals for most projects currently contemplated, we do not anticipate that cutbacks in the incentive programs for new projects would have an adverse impact on our earnings and operations for at least several years.

We might be materially adversely affected if events were to occur in the Middle East that interfered with our operations in Israel. However, we have never experienced any material interruption in our Israeli operations in our 34 years of operations there, in spite of several Middle East crises, including wars.

#### **Inventory and Backlog**

We manufacture both standardized products and those designed and produced to meet customer specifications. We maintain an inventory of standardized components. Backlogs of outstanding orders for our products were \$439.9 million, \$532.0 million, and \$407.6 million at December 31, 2004, 2003, and 2002, respectively.

We include in our backlog only open orders that have been released by the customer for shipment in the next twelve months. Our customers encounter uncertain and changing demand for their products. They typically order products from us based on their forecasts. If demand falls below customers' forecasts, or if customers do not control their inventory effectively, they may cancel or reschedule the shipments that are included in our backlog, in many instances without the payment of any penalty. Therefore, the backlog at any point in time is not necessarily indicative of the results to be expected for future periods.

#### **Customers and Marketing**

We sell our products to original equipment manufacturers (OEMs), electronic manufacturing services (EMS) companies, which manufacture for OEMs on an outsourcing basis, and independent distributors that maintain large inventories of electronic components for resale to OEMs. During 2004, approximately 46% of our sales were to distributors, approximately 47% of our sales were to OEMs, and approximately 7% of our sales were to EMS companies.

To better serve our customers, we maintain production facilities in regions where we market the bulk of our products. We work with our customers so that our products are incorporated into the design of electronic equipment at the research and prototype stages. We also employ a staff of application and field engineers to assist our customers, independent manufacturers' representatives and distributors in solving technical problems and developing products to meet specific needs.

The sales organizations are regionally based. The aim of our sales organizations is to unify the activities of all our divisions and subsidiaries, provide efficiencies by eliminating duplication of functions, and bring greater value to end customers by allowing them to deal with one entity for their active and passive electronic component purchasing needs. We market our products in different geographic areas as follows:

North America: Sales are made by our North American sales force, sales representative organizations and distributors. Sales representatives are compensated by commissions. Regional sales directors employed by Vishay coordinate these representatives and the North American sales force. Our North American sales headquarters are located in Shelton, Connecticut. Regional sales offices are located in or near Chicago, Illinois; Tampa, Florida; Irving, Texas; Santa Clara, California; Orange County, California; Hauppauge, New York; Juarez, Mexico; and Guadalajara, Mexico.

<u>South America</u>: Sales are made by our South American sales force, sales representative organizations, and distributors. Sales representatives are compensated by commissions. Regional sales directors employed by Vishay coordinate these representatives and the South American sales force. Vishay's South American sales office is located in Campinas, Brazil.

<u>Europe</u>: Sales of our products in Europe are made by our European sales force, sales representative organizations and distributors. Our European headquarters are in Selb, Germany. Regional sales offices are in Heilbronn, Heide, and Selb, Germany; Sunderland and Bracknell, United Kingdom; Paris, Lyon, and Nice, France; Madrid, Spain; Stockholm, Sweden; Helsinki, Finland; Milan, Italy; Istanbul, Turkey; Warsaw, Poland; Moscow, Russia; Budapest, Hungary; Voecklabruck, Austria; and Eindhoven, the Netherlands.

<u>Japan</u>: Sales in Japan are made both by our Japan sales force and distributors. Sales representatives are compensated by commissions. Regional sales offices are located in Tokyo and Osaka.

Asia-Pacific: Sales are made in Hong Kong, Korea, the Republic of China (Taiwan), the People's Republic of China and in Southeast Asia by our Asia-Pacific sales force, sales representative organizations and distributors. Our Asian sales headquarters are in Singapore. Regional sales offices are located in Singapore; Taipei, Taiwan; Beijing, Shanghai, Shenzhen and Hong Kong, China; Seoul and Gumi, Korea; New Delhi, Pune and Bangalore, India; Penang, Malaysia; and Bangkok, Thailand.

Sales in the rest of the world are made through sales representatives, stocking representatives and distributors.

We have established a Strategic Global Account program, which aligns our top customers with an identified Strategic Global Account manager, enabling our diverse product families to have "one face to the customer." This Strategic Global Account manager coordinates sales, marketing, and contract administration for all Vishay products, providing "one-stop" access to one of the broadest selections of discrete electronic components available directly from a manufacturing source anywhere in the world.

Our top 30 customers are quite stable despite not having long-term commitments to purchase our products. With selected customers, we have signed two to three year contracts for specific products. Sales to our top 30 customers comprise approximately 60% of our total sales.

During 2004, approximately 26% of our net sales were attributable to customers in the Americas, approximately 38% were attributable to customers in Europe, and approximately 36% were attributable to customers in Asia. During 2004, the share of net sales by end-use market was as follows: Industrial, 36%; Computer, 18%; Automotive, 16%; Consumer Products, 12%; Telecommunications, 12%; Aerospace and Military, 4%; Medical, 2%.

#### Competition

We face strong competition in various product lines from both domestic and foreign manufacturers that produce products using technologies similar to ours. Our main competitors for tantalum capacitors are KEMET Corporation, AVX Corporation and NEC Electronics, Inc. For MLCC capacitors, our principal competitors are KEMET, AVX, Murata and TDK Corp. For thick film chip resistors, our major competitors include Rohm Corp., Koa Speer Electronics Inc. and Yageo Corporation. For wirewound and metal film resistors, our principal competitors are I.R.C. Inc., Rohm Corp., Koa Speer Electronics Inc. and Ohmite Manufacturing Company. For active components, our main competitors include International Rectifier, Philips, N.V., ON Semiconductor, Rohm Corp., Motorola, Inc., Fairchild Semiconductor Corp., Maxim, Shindengen Electric Manufacturing Co. Ltd., Sanken Electric Co. Ltd., STMicroelectronics N.V. and Samsung Co., Ltd. There are many other companies that produce products in the markets in which we compete.

Our competitive position depends on our product quality, know-how, proprietary data, marketing and service capabilities and business reputation, as well as on price. We compete for sales of certain products on the basis of our marketing and distribution network, which provides a high level of customer service. For example, we work closely with our customers to have our components incorporated into their electronic equipment at the early stages of design and production and maintain redundant production sites for some of our products to ensure an uninterrupted supply of products. Additionally, our Strategic Global Accounts program, described above, provides us with a competitive advantage.

#### **Research and Development**

Many of our products and manufacturing techniques, technologies and packaging methods have been invented, designed and developed by our engineers and scientists. We maintain strategically placed design centers where proximity to customers enables us to more easily gauge and satisfy the needs of local markets. These design centers are located predominantly in the United States, Germany, Israel, the People's Republic of China, France, the Republic of China (Taiwan) and South Korea.

We also maintain research and development staffs and promote programs at a number of our production facilities to develop new products and new applications of existing products, and to improve manufacturing techniques. This decentralized system encourages individual product development at individual manufacturing facilities that occasionally has applications at other facilities. Our research and development costs (exclusive of purchased in-process research and development) were approximately \$51.0 million for 2004, \$45.4 million for 2003, and \$37.1 million for 2002. These amounts include expenditures of our Siliconix subsidiary of \$21.2 million, \$19.5 million, and \$19.3 million in 2004, 2003, and 2002, respectively, principally for the development of new power products and power ICs. These amounts do not include substantial expenditures for the development and manufacturing of machinery and equipment for new processes and for cost reduction measures.

#### Patents and Licenses

We have made a significant investment in securing intellectual property protection for our technology and products. We seek to protect our technology by, among other things, filing patent applications for technology considered important to the development of our business. We also rely upon trade secrets, unpatented know-how, continuing technological innovation and the aggressive pursuit of licensing opportunities to help develop and maintain our competitive position.

Our ability to compete effectively with other companies depends, in part, on our ability to maintain the proprietary nature of our technology. Although we have been awarded, have filed applications for, or have been licensed under numerous patents in the United States and other countries, there can be no assurance concerning the degree of protection afforded by these patents or the likelihood that pending patents will be issued.

We require all employees and most consultants and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information developed or made known to the entity or individual during the course of the entity's or individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. All of our employees have entered into agreements providing for the assignment to us of rights to inventions made by them while employed by us.

When we believe other companies are misappropriating our intellectual property rights, we vigorously enforce those rights through legal action, and we intend to continue to do so. See Item 3, "Legal Proceedings."

Although we have numerous United States and foreign patents covering certain of our products and manufacturing processes, no particular patent is considered individually material to our business.

#### **Environment, Health and Safety**

We have adopted an Environmental Health and Safety Corporate Policy that commits us to achieve and maintain compliance with applicable environmental laws, to promote proper management of hazardous materials for the safety of our employees and the protection of the environment, and to minimize the hazardous materials generated in the course of our operations. This policy is implemented with accountability directly to the Chairman of the Board of Directors. In addition, our manufacturing operations are subject to various federal, state and local laws restricting discharge of materials into the environment.

We are not involved in any pending or threatened proceedings that would require curtailment of our operations. We continually expend funds to ensure that our facilities comply with applicable environmental regulations. While we believe that we are in material compliance with applicable environmental laws, we cannot accurately predict future developments and do not necessarily have knowledge of all past occurrences on sites that we currently occupy. More stringent environmental regulations may be enacted in the future, and we cannot determine the modifications, if any, in our operations that any such future regulations might require, or the cost of compliance with such regulations. Moreover, the risk of environmental liability and remediation costs is inherent in the nature of our business and, therefore, there can be no assurance that material environmental costs, including remediation costs, will not arise in the future.

We have been named a Potentially Responsible Party (PRP) at nine Superfund sites, including two Siliconix facilities, and have become responsible for certain obligations as a PRP in connection with our acquisition of General Semiconductor. We expend minimal amounts in connection with several of these sites and do not expect costs associated with the others to be material.

General Semiconductor has also been named as a defendant in three actions in the United States District Court for the Eastern District of New York in connection with its former operations at a facility in Hicksville, New York. The plaintiffs in these actions allege that they have suffered personal injury and property damage as a result of the facility's operations.

The ultimate cost of site cleanup is difficult to predict given the uncertainties regarding the extent of the required cleanup, the interpretation of applicable laws and regulations and alternative cleanup methods. Based upon our experience with the foregoing environmental matters, we have concluded that there is at least a reasonable possibility that we will incur remedial costs in the range of \$30 million to \$40 million. As of December 31, 2004, we concluded that the best estimate within this range is \$37.6 million, of which \$33.2 million is included in other noncurrent liabilities on the consolidated balance sheet, and \$4.4 million is included in accrued expenses on the consolidated balance sheet. Of this accrual, approximately \$19.4 million is due to the acquisition of General Semiconductor; approximately \$7.8 million is due to the acquisition of BCcomponents; and approximately \$10.4 million is reserved for other miscellaneous environmental liabilities, the most significant of which is related to our Vitramon subsidiary in the United States. In view of our financial position and provisions for environmental matters of \$37.6 million, we have concluded that any potential payment of such estimated amounts will not have a material adverse effect on our consolidated financial position, results of operations or liquidity.

With each acquisition, we attempt to identify potential environmental concerns and to minimize, or obtain indemnification for, the environmental matters we may be required to address. In addition, we establish reserves for specifically identified potential environmental liabilities. We believe that the reserves we have established are adequate. Nevertheless, we often unavoidably inherit certain pre-existing environmental liabilities, generally based on successor liability doctrines. Although we have never been involved in any environmental matter that has had a material adverse impact on our overall operations, there can be no assurance that in connection with any past or future acquisition we will not be obligated to address environmental matters that could have a material adverse impact on our operations.

#### **Employees**

As of December 31, 2004, we employed approximately 25,700 full time employees, of whom approximately 22,500 were located outside the United States. Our future success is substantially dependent on our ability to attract and retain these highly qualified technical and administrative personnel. Some of our employees outside the United States are members of trade unions, and employees at one small U.S. facility are represented by a union. Our relationship with our employees is good. However, no assurance can be given that, if we continue to restructure our operations in response to changing economic conditions, labor unrest or strikes, especially at European facilities, will not occur.

#### **Company Information and Website**

We file annual, quarterly, and current reports, proxy statements, and other documents with the Securities and Exchange Commission ("SEC") under the Securities Exchange Act of 1934 (the "Exchange Act"). The public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, the SEC maintains an Internet website that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically with the SEC. The public can obtain any documents that we file with the SEC at http://www.sec.gov.

In addition, our company website can be found on the Internet at www.vishay.com. The website contains information about us and our operations. Copies of each of our filings with the SEC on Form 10-K, Form 10-Q and Form 8-K, and all amendments to those reports, can be viewed and downloaded free of charge as soon as reasonably practicable after the reports and amendments are electronically filed with or furnished to the SEC. To view the reports, access ir.vishay.com and click on "SEC Filings".

The following corporate governance related documents are also available on our website:

- Corporate Governance Principles
- Code of Business Conduct and Ethics
- Code of Ethics Applicable to the Company's Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer or Controller and Financial Managers
- Audit Committee Charter
- Nominating and Corporate Governance Committee Charter
- Compensation Committee Charter
- Policy on Director Attendance at Annual Meetings
- Nominating and Corporate Governance Committee Policy Regarding Qualification of Directors
- Procedures for Securityholders' Submissions of Nominating Recommendations
- Securityholder Communications with Directors and Interested Party Communication with Non-Management Directors
- Whistleblower and Ethics Hotline Procedures.

To review these documents, access ir.vishay.com and click on "Corporate Governance".

Any of the above documents can also be obtained in print by any shareholder upon request to our Investor Relations Department at the following address:

Corporate Investor Relations Vishay Intertechnology, Inc. 63 Lincoln Highway Malvern, PA 19355-2143

#### Item 2. PROPERTIES

As of December 31, 2004, we maintained approximately 70 manufacturing facilities. The principal locations of such facilities, along with available space including administrative offices, are:

Owned Locations	Business Segment	Approx. Available Space (Square Feet)
United States		
Columbus and Norfolk, NE	Passive components	298,000
Sanford, ME	Passive components	225,000
Santa Clara, CA	Active components	220,000
Wendell and Statesville, NC	Passive components	159,000
Pearl River and Niagra Falls, NY	Passive components	104,000
Monroe, CT	Passive components	91,000
Malvern, PA	Passive components	79,000
Yankton, SD	Passive components	58,000
Warwick, RI	Passive components	55,000
Bennington, VT	Passive components	54,000
Grafton, WI	Passive components	49,000
Hagerstown, MD	Passive components	39,000
Non-U.S.		
Israel (5 locations)	Active and passive components	1,058,000
People's Republic of China (4 locations)	Active and passive components	631,000
Czech Republic (4 locations)	Passive components	446,000
Republic of China (Taiwan) (3 locations)	Active and passive components	397,000
Germany (3 locations)	Active and passive components	333,000
Portugal	Passive components	301,000
Hungary (2 locations)	Passive components	294,000
Netherlands	Passive components	286,000
France (2 locations)	Passive components	259,000
Belgium (2 locations)	Passive components	248,000
Austria	Active components	153,000
Philippines	Passive components	149,000
India	Passive components	140,000
Malaysia	Active components	115,000
Mexico	Passive components	57,000

Leased facilities in the United States include 120,000 square feet of space located in California (passive components), Connecticut (passive components), New York (active components), and South Dakota (passive components). Foreign leased facilities consist of 750,000 square feet in China (active and passive components), 273,000 square feet in Germany (active and passive components), 192,000 square feet in Mexico (passive components), 120,000 square feet in Austria (passive components), 85,000 square feet in the Czech Republic (passive components), 40,000 square feet in Sweden (passive components), 30,000 square feet in Israel (active and passive components), 13,000 square feet in the United Kingdom (passive components), and 3,000 square feet in Taiwan (active components).

In the opinion of management, our properties and equipment generally are in good operating condition and are adequate for our present needs. We do not anticipate difficulty in renewing existing leases as they expire or in finding alternative facilities.

#### Item 3. LEGAL PROCEEDINGS

From time to time we are involved in routine litigation incidental to our business. Management believes that such matters, either individually or in the aggregate, should not have a material adverse effect on our business or financial condition.

#### **Environmental Matters**

Our 80.4% owned subsidiary, Siliconix, is a party to two environmental proceedings. The first involves property that Siliconix vacated in 1972. In July 1989, the California Regional Water Quality Control Board ("RWQCB") issued Cleanup and Abatement Order No. 89-115 both to Siliconix and the then-owner of the property. The Order alleged that Siliconix contaminated both the soil and the groundwater on the property by the improper disposal of certain chemical solvents. The RWQCB considered both parties to be liable for the contamination and sought to have them decontaminate the site to acceptable levels. Siliconix subsequently reached a settlement of this matter with the then-owner of the property. The settlement provided that said owner will indemnify Siliconix and its employees, officers, and directors against any liability that may arise out of any governmental agency actions brought for environmental cleanup of the subject site, including liability arising out of RWQCB Order No. 89-115, to which Siliconix remains nominally subject.

The second proceeding involves Siliconix's Santa Clara, California facility, which Siliconix has owned and occupied since 1969. In February 1989, the RWQCB issued Cleanup and Abatement Order No. 89-27 to Siliconix. The Order is based on the discovery of contamination of both the soil and the groundwater on the property by certain chemical solvents. The Order calls for Siliconix to specify and implement interim remedial actions and to evaluate final remedial alternatives. The RWQCB issued subsequent orders regarding monitoring and clean-up of the site. Siliconix has substantially complied with the RWQCB's orders to date.

Our subsidiary General Semiconductor has been named a PRP at several Superfund sites and as a defendant in three lawsuits in the United States District Court for the Eastern District of New York. See "Environment, Health and Safety."

#### **Intellectual Property Matters**

We are engaged in discussions with various parties regarding patent licensing and cross patent licensing issues. In addition, we have observed that in the current electronic component and semiconductor industry business environment, companies have become more aggressive in asserting and defending patent claims against competitors. While we will continue to vigorously defend our intellectual property rights, we may become party to disputes regarding patent licensing and cross patent licensing. An unfavorable outcome regarding one of these intellectual property matters could have a material adverse effect on our business and operating results.

When we believe other companies are misappropriating our intellectual property rights, we vigorously enforce those rights through legal action, and we intend to continue to do so. During 2004, we settled two suits which we had initiated to enforce our intellectual property rights. We are receiving royalty income on sales of these companies' products which use our technology. We presently have other pending legal actions that we have initiated against companies which we believe are misappropriating our intellectual property rights.

#### Siliconix Shareholder Matters

In January 2005, an amended class action complaint was filed on behalf of all non-Vishay shareholders of our 80.4% owned subsidiary, Siliconix, against Vishay, Ernst & Young LLP (independent registered public accounting firm that audits the Company's consolidated financial statements), Dr. Felix Zandman, Chairman and Chief Technical and Business Development Officer of Vishay, and, as a nominal defendant, Siliconix. The suit purports to state various derivative and class claims against the defendants including the purported taking by Vishay of Siliconix sales subsidiaries and the profits of those subsidiaries; the purported taking by Vishay of Siliconix's SAP software system without compensation to Siliconix; the alleged use by Vishay of Siliconix; the purported misappropriation by Vishay of Siliconix's identity; the alleged taking by Vishay of Siliconix testing equipment; the alleged use by Vishay of Siliconix to save Vishay certain credits made available by an Israeli business development agency; the alleged misuse by Vishay of Siliconix's patents to help Vishay acquire General Semiconductor; and the allegedly improper identification of Dr. Zandman as a co-inventor on certain Siliconix patents. The action seeks injunctive relief and unspecified damages. The defendants have not yet responded to the complaint, but intend to deny all allegations.

As further described in Note 19 to our consolidated financial statements, on March 3, 2005, we announced our intention to commence a tender offer for all outstanding shares of Siliconix not owned by Vishay. Following this announcement, several purported class-action complaints were filed against Vishay, Siliconix, and the Siliconix directors, alleging, among other things, that the intended offer is unfair and a breach of fiduciary duty, and seeking, among other things, to enjoin the transaction. The defendants have not yet responded to the complaints.

#### <u>Item 4.</u> <u>SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS</u>

None.

#### <u>Item 4A.</u> <u>EXECUTIVE OFFICERS OF THE REGISTRANT</u>

The following table sets forth certain information regarding our executive officers as of March 15, 2005:

Name	Age	Positions Held
Dr. Felix Zandman*	76	Chairman of the Board, Chief Technical and Business Development Officer
Dr. Gerald Paul*	56	Chief Executive Officer, President, Chief Operating Officer, and Director
Marc Zandman*	43	Vice-Chairman of the Board, President-Vishay Israel Ltd.
Richard N. Grubb	58	Executive Vice President, Treasurer, and Chief Financial Officer
Ziv Shoshani*	39	Assistant Chief Operating Officer, Executive Vice President, Resistor and Inductor Group and Vishay Measurements Group, and Director

<sup>\*</sup> Member of the Executive Committee of the Board of Directors.

Dr. Felix Zandman, a founder of the Company, has been Chairman of the Board since March 1989, and has been a Director of the Company since its inception in 1962. Dr. Zandman became Chief Technical and Business Development Officer effective January 1, 2005. Dr. Zandman was Chief Executive Officer of the Company since its inception in 1962 through December 31, 2004, when Dr. Gerald Paul was appointed Chief Executive Officer. Dr. Zandman had been President of the Company from its inception until March 16, 1998.

Dr. Gerald Paul was appointed Chief Executive Officer effective January 1, 2005. Dr. Paul has served as a Director of the Company since May 1993, has been Chief Operating Officer and an Executive Vice President of the Company since August 1996, and has been President of the Company since March 16, 1998. Dr. Paul was President of Vishay Electronic Components, Europe from January 1994 to August 1996. Dr. Paul has been Managing Director of Draloric Electronic GmbH, an affiliate of the Company, since January 1991. Dr. Paul has been employed by Draloric since February 1978.

Marc Zandman was appointed Vice-Chairman of the Board as of March 1, 2003. He has been a Director of the Company since May 2001, and President of Vishay Israel Ltd. since April 1998. Mr. Zandman was Group Vice President of Vishay Measurements Group from August 2002 until December 31, 2004. Mr. Zandman has served in various other capacities with the Company since August 1984. He is the son of Dr. Felix Zandman, the Company's Chairman and Chief Technical and Business Development Officer.

Richard N. Grubb has been Vice President, Treasurer and Chief Financial Officer of the Company since May 1994, and has been an Executive Vice President of the Company since August 1996. Mr. Grubb has been associated with the Company in various capacities since 1972, and was a Director from 1994 through 2003.

Ziv Shoshani has been Executive Vice President of the Resistor and Inductor Group since 2002, and Executive Vice President of Vishay Measurements Group since January 1, 2005. In March 2005, Mr. Shoshani was also appointed to the position of Assistant Chief Operating Officer, effective April 1, 2005. He was Executive Vice President of the Capacitors Group in 2001 and 2002 and was Executive Vice President, Specialty Products Division in 2000 and 2001, including responsibility for oversight of Vishay's Measurements Group Division. Prior to that, Mr. Shoshani served in various capacities including Senior Vice President Precision Resistors and Worldwide Foil Resistors Manager. Mr. Shoshani has been employed by the Company since 1995. He is the nephew of Dr. Felix Zandman, the Company's Chairman and Chief Technical and Business Development Officer.

#### PART II

### Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock is listed on the New York Stock Exchange under the symbol VSH. The following table sets forth the high and low sales prices for our common stock as reported on the New York Stock Exchange composite tape for the indicated fiscal quarters. We do not currently pay cash dividends on our capital stock. Our policy is to retain earnings to support the growth of our business and we do not intend to change this policy at the present time. In addition, we are restricted from paying cash dividends under the terms of our revolving credit agreement. See Note 6 to our consolidated financial statements. Holders of record of our common stock totaled approximately 1,563 at March 9, 2005.

	20	04				20	03	
	High		Low			High		Low
Fourth quarter	\$ 15.37	\$	11.60	Fourth quarter	\$	23.15	\$	17.45
Third quarter	\$ 17.57	\$	11.49	Third quarter	\$	19.00	\$	12.47
Second quarter	\$ 22.79	\$	16.58	Second quarter	\$	15.15	\$	9.93
First quarter	\$ 24.99	\$	18.96	First quarter	\$	13.24	\$	8.77

At March 9, 2005, we had outstanding 14,679,440 shares of Class B common stock, par value \$.10 per share, each of which entitles the holder to ten votes. The Class B common stock generally is not transferable except in certain very limited instances, and there is no market for those shares. The Class B common stock is convertible, at the option of the holder, into common stock on a share for share basis. Substantially all of the Class B common stock is owned by Dr. Felix Zandman, our Chairman and Chief Technical and Business Development Officer, the estate of Mrs. Luella B. Slaner, a former director, the children of Mrs. Slaner, and trusts for the benefit of the grandchildren of Mrs. Slaner, either directly or beneficially. Directly, and as voting trustee under a voting trust agreement, Dr. Zandman has voting power over substantially all of the outstanding Class B common stock.

See Item 12 for certain equity compensation information with respect to equity compensation plans approved by security holders.

#### Item 6. SELECTED FINANCIAL DATA

The following table sets forth selected consolidated financial information as of and for the fiscal years ended December 31, 2004, 2003, 2002, 2001, and 2000. This table should be read in conjunction with our consolidated financial statements and the related notes thereto included elsewhere in this Form 10-K (in thousands, except per share amounts):

As of and for the years ended December 31,

	2004 (1)			2003 (2)	 2002 (3)	2001 (4)			2000
Statement of Operations Data:									
Net sales	\$	2,413,576	\$	2,170,597	\$ 1,822,813	\$	1,655,346	\$	2,465,066
Interest expense		34,252		39,226	29,503		16,848		25,177
Earnings (loss) before income tax provision (benefit)									
and minority interest		70,017		46,426	(100,045)		10,103		690,225
Income tax provision (benefit)		13,729		11,528	(16,900)		5,695		148,186
Minority interest		11,592		8,056	9,469		3,895		24,175
Net earnings (loss)		44,696		26,842	(92,614)		513		517,864
Basic earnings (loss) per share (5)	\$	0.27	\$	0.17	\$ (0.58)	\$	0.00	\$	3.83
Diluted earnings (loss) per share (5)	\$	0.27	\$	0.17	\$ (0.58)	\$	0.00	\$	3.77
Weighted average shares outstanding – basic (5)		163,701		159,631	159,413		141,171		135,295
Weighted average shares outstanding – diluted (5)		165,938		160,443	159,413		142,514		137,463
Balance Sheet Data:									
Total assets	\$	4,638,590	\$	4,566,360	\$ 4,315,159	\$	3,951,523	\$	2,783,658
Long-term debt		752,145		836,606	706,316		605,031		140,467
Working capital		1,164,682		1,049,892	897,456		1,096,034		1,057,200
Stockholders' equity		2,773,335		2,514,034	2,358,787		2,366,545		1,833,855

- (1) Includes the results of RFWaves from August 31, 2004 and Vishay MIC Technology from September 29, 2004. Also includes net charges of \$89,959,000 for restructuring and severance costs, asset write-downs, inventory write-downs, losses on purchase commitments, a write-off of purchased in-process research and development, partially offset by a gain on favorable settlement on a note receivable. These items and their related tax consequences, net of a favorable tax settlement, had a negative \$0.32 effect on earnings per share. These items are more fully described in the notes to the consolidated financial statements.
- (2) Includes the results of BCcomponents, acquired in December 2002. Also includes net charge of \$23,947,000 for restructuring and severance costs, asset write-downs, inventory write-downs, losses on purchase commitments, and a loss on extinguishment of debt, partially offset by a gain on insurance proceeds. These items and their tax related consequences had a negative \$0.11 effect on earnings per share. These items are more fully described in the notes to the consolidated financial statements.
- (3) Includes the results of Infineon Malaysia optoelectronic infrared components business from January 1, 2002, of Sensortronics from January 31, 2002, of Tedea-Huntleigh from July 1, 2002, of BLH/Nobel from August 1, 2002, and of Celtron from October 1, 2002. Also includes charges for restructuring and severance costs, asset write-downs, inventory write-downs, losses on purchase commitments and other charges of \$169,900,000. These items and their tax related consequences had a negative \$0.85 effect on earnings per share. These items are more fully described in the notes to the consolidated financial statements.
- (4) Includes the results of Tansitor from January 1, 2001, of Infineon U.S. optoelectronic infrared components business from July 27, 2001, of General Semiconductor from November 2, 2001, and of Mallory from November 7, 2001. Also includes charges for restructuring and severance costs, asset write-downs, inventory write-downs, a write-off of purchased in-process research and development, and other charges of \$156,590,000. These items and their tax related consequences had a negative \$0.84 effect on earnings per share. These items are more fully described in the notes to the consolidated financial statements.
- (5) Adjusted to reflect a three-for-two stock split distributed June 9, 2000.

Management believes that stating the impact on net earnings of items such as restructuring, asset write-downs, inventory write-downs, losses on purchase commitments, losses on early extinguishment of debt, gains on insurance proceeds, write-offs of in-process research and development, and other charges and credits is meaningful to investors because its provides insight with respect to ongoing operating results of the Company.

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

#### Overview

Vishay Intertechnology, Inc. is an international manufacturer and supplier of passive and active electronic components, including resistors, capacitors, inductors, strain gages, load cells, force measurement sensors, displacement sensors, photoelastic sensors, power MOSFETs, power conversion and motor control integrated circuits, transistors, diodes and optoelectronic components. Electronic components manufactured by Vishay are used in virtually all types of electronic products, including those in the computer, telecommunications, military/aerospace, instrument, automotive, medical, and consumer electronics industries.

Vishay operates in two segments, passive components and active components. Passive components include resistors, capacitors, and inductors. We include in this segment our Measurements Group, which manufactures and markets strain gages, load cells, transducers, instruments and weighing systems whose core components are resistors that are sensitive to various types of mechanical stress. Active components include transistors, diodes, rectifiers, certain types of integrated circuits and optoelectronic products. Our active segment includes our 80.4% owned subsidiary, Siliconix. The passive components business had historically predominated at Vishay until the purchase of General Semiconductor in November 2001, after which the lead position shifted to the active business. With the acquisition of BCcomponents in December 2002, revenues from our active and passive businesses are essentially split evenly.

Consolidated sales for the year ended December 31, 2004 were \$2.414 billion, compared to sales of \$2.171 billion for the year ended December 31, 2004 were \$44.7 million or \$0.27 per share, compared to net earnings of \$26.8 million or \$0.17 per share for the year ended December 31, 2003. Earnings for the year ended December 31, 2004 were impacted by restructuring and severance costs of \$47.3 million, asset write-downs of \$27.3 million, losses on purchase commitments of \$16.6 million, write-downs of inventory of \$0.4 million, a write-off of purchased in-process research and development of \$1.5 million, partially offset by a favorable settlement of an outstanding note receivable of \$3.1 million. These items and their related tax effects, net of a favorable tax settlement, reduced earnings by \$0.32 per share. Earnings for the year ended December 31, 2003 were impacted by restructuring and severance costs of \$28.5 million, asset write-downs of \$1.0 million, a loss on extinguishment of debt of \$9.9 million, losses on purchase commitments of \$11.4 million, and write-downs of tantalum and palladium inventories on hand to then-market value of \$7.0 million, offset by a gain on an insurance claim of \$33.9 million. These items and their tax related consequences had a negative \$0.11 effect on earnings per share.

Strong financial results for the first half of 2004 followed an economic recovery that began in the active business during the third quarter of 2003 and continued in the passive business in the fourth quarter of 2003. By the third quarter of 2004, we noted a decline in orders from our distributors, but sales levels were still higher than in prior year periods. There was a noticeable recovery of orders from distributors in the fourth quarter, but distributor orders remained at a book-to-bill ratio of less than 1.0. Orders from original equipment manufacturers and electronic manufacturing services companies were substantially reduced in the fourth quarter of 2004. We believe these changes in ordering patterns are largely attributable to inventory levels in the various supply channels. Despite challenges in the second half of 2004, we believe that the macro economy will remain friendly into 2005.

#### **Financial Metrics**

We utilize several financial measures and metrics to evaluate the performance and assess the future direction of our business. These key financial measures and metrics include sales, gross profit margin, end-of-period backlog, and the book-to-bill ratio. We also monitor changes in inventory turnover and average selling prices ("ASP").

End-of-period backlog is one indicator of future sales. However, if demand falls below customers' forecasts, or if customers do not control their inventory effectively, they may cancel or reschedule the shipments that are included in our backlog, in many instances without the payment of any penalty. Therefore, the backlog is not necessarily indicative of the results to be expected for future periods.

Another important indicator of demand in our industry is the book-to-bill ratio, which is the ratio of the amount of product ordered during a period as compared with the product that we ship during that period. A book-to-bill ratio that is greater than one indicates that our backlog is building and that we are likely to see increasing revenues in future periods. Conversely, a book-to-bill ratio that is less than one is an indicator of declining demand and may foretell declining sales.

We focus on our inventory turnover as a measure of how well we are managing our inventory. We define inventory turnover for a financial reporting period as our cost of products sold for the four fiscal quarters ending on the last day of the reporting period divided by our average inventory (computed using each quarter-end balance) for this same period. A higher level of inventory turnover reflects more efficient use of our capital.

Pricing in our industry can be volatile. We analyze trends and changes in average selling prices to evaluate likely future pricing.

The quarter-to-quarter trends in these financial metrics can also be an important indicator of the likely direction of our business. The following table shows sales, gross profit margin, the end-of-period backlog, the book-to-bill ratio, the inventory turnover, and changes in ASP for our business as a whole during the five quarters beginning with the fourth quarter of 2003 and through the fourth quarter of 2004 (dollars in thousands):

	4	th Quarter 2003		1st Quarter 2004	_	2nd Quarter 2004	_	3rd Quarter 2004		4th Quarter 2004
Sales	\$	567,199	\$	640,921	\$	646,699	\$	584,320	\$	541,636
Gross profit margin		22.0%	ó	24.9%	ó	26.1%	ó	24.1%	)	15.7%
End-of-Period Backlog	\$	532,000	\$	619,900	\$	607,000	\$	473,900	\$	439,900
Book-to-Bill Ratio		1.14		1.14		0.98		0.84		0.90
Inventory Turnover		3.25		3.53		3.51		3.22		3.27
Change in ASP vs. prior quarter		-1.8%	ó	0.1%	ó	-0.8%	ó	-0.4%	)	-2.4%

Despite relatively friendly macroeconomic conditions, we noted deterioration in market conditions in the second half of 2004, with sequential declines in sales and orders in the third and fourth quarters. Orders from original equipment manufacturers and electronic manufacturing services companies declined significantly during the fourth quarter, with a book-to-bill ratio of 1.03 in the third quarter, decreasing to a book-to-bill ratio of 0.87 in the fourth quarter. Orders from distributors declined significantly in the third quarter, with some recovery noted in the fourth quarter. The book-to-bill ratio was 0.65 for distributors in the third quarter, as compared to 0.94 in the fourth quarter. The weak order rates have reduced our backlog as of the end of 2004. We believe these changes in ordering patterns are largely attributable to inventory levels in the various supply channels.

Price declines were abrupt during the fourth quarter, particularly in the active components segment. During this period, average selling prices declined by 3.9% in the active components segment, and 1.0% in the passive component segment. This follows a year of historically-low volatility in prices. We expect pricing to be moderately lower for 2005.

These volume and price declines in the second half of 2004 had a negative impact on our gross profit margins, particularly in the fourth quarter of 2004. Despite these challenges in the second half of 2004, we believe that the macro economy will remain friendly into 2005.

#### **Capacity Utilization**

Capacity utilization is a reflection of product demand trends.

Capacity load declined during the second half of 2004 in the passive components segment. While certain specialty resistor lines were operating at up to 90% of capacity, commodity resistors and inductors were operating at approximately 60% to 70% of capacity on average. This level of capacity utilization was in line with 2003 utilization of 60% to 75%, but lower than the 70% to 80% utilization during the first half of 2004. During the second half of 2004, our capacitor lines operated at approximately 50% to 60% of capacity, in line with average utilization of 50% in 2003, but below the approximately 65% utilization rate during the first half of 2004.

We continue to operate near full capacity in most of our front-end active components facilities. We have taken and will continue to take necessary steps to increase our capacity to accommodate increased demand. These steps have included removing production bottlenecks in our fabrication facilities and securing additional equipment to expand our backend operations. We have made significant investments in expanding capacity in our active components facilities, which will ramp up in future quarters. Our 80.4% owned subsidiary, Siliconix, has begun a project to add 8-inch silicon wafer manufacturing capabilities at the fabrication facility in Itzehoe, Germany. This project is expected to alleviate capacity constraints for high-cell-density wafers and reduce costs. We expect Siliconix to be eligible to receive the benefits of grants from the government of the German state of Schleswig Holstein related to these additional investments at the Itzehoe facility. Except for any grant monies received, this significant increase in capital expenditures required to support our expansion program is expected to be funded almost entirely by cash flows from operations.

Siliconix also maintains long-term foundry agreements with subcontractors to ensure access to external front-end capacity. Siliconix entered into a long-term foundry agreement for semiconductor manufacturing with Tower Semiconductor in May 2004, pursuant to which Siliconix will purchase semiconductor wafers from and transfer certain technology to Tower Semiconductor. Siliconix will place orders valued at approximately \$200 million for the purchase of semiconductor wafers to be manufactured in Tower's Fab 1 facility over a seven to ten year period. The agreement specifies minimum quantities per month and a fixed quantity for the term of the agreement. Siliconix must pay for any short-fall in minimum order quantities specified under the agreement. The technology transfer from Siliconix to Tower has started and is estimated to be completed by the second quarter of 2005, at which time Siliconix will begin receiving wafers.

Also in 2004, Siliconix entered into a five-year foundry agreement for semiconductor manufacturing with a subcontractor in Japan. This agreement was a continuation and expansion of a previous technology transfer and business agreement for the manufacture of silicon wafers. The agreement calls for Siliconix to provide a rolling twelve month forecast of estimated requirements. The first six months of this forecast are fixed as to quantity, and the subsequent six months are guaranteed not to be less than a quantity stated in the agreement. Thereafter, the monthly quantity may vary based on market demand. Under the agreement, Siliconix must guarantee that its business with this subcontractor represents a minimum percentage of wafer requirements and is required to make its best efforts not to reduce the average monthly demand rate below a specified threshold.

#### Acquisitions

As part of our growth strategy, we seek to expand through acquisition of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which we have substantial marketing and technical expertise. Also as part of this growth strategy, we seek to explore opportunities with privately held developers of electronic components, whether through acquisition, investment in non-controlling interests, or strategic alliances.

During 2004, we completed two acquisitions. On August 31, 2004, we acquired substantially all of the assets of RFWaves, Ltd., a fab-less integrated circuit design house located in Israel. On September 29, 2004, we acquired all of the outstanding shares of Aeroflex Pearl River Inc. (renamed Vishay MIC Technology Inc.), the former thin film interconnect subsidiary of Aeroflex, Incorporated. The total purchase price of these acquisitions was approximately \$12.7 million, which included cash payments of \$11.8 million plus stock options with an aggregate fair value of approximately \$0.9 million. The purchase agreement for RFWaves includes provisions for Vishay to pay additional consideration subject to RFWaves achieving operational targets through 2006. The payment of this additional consideration would not be material to Vishay's financial position or cash flows.

Purchased in-process research and development represents the value assigned in a business combination to research and development projects of the acquired business that were commenced, but not completed at the date of acquisition, for which technological feasibility has not been established, and which have no alternative future use in research and development activities or otherwise. Amounts assigned to purchased in-process research and development meeting the above criteria must be charged to expense at the date of consummation of the business combination. A charge of \$1.5 million was recorded in the third quarter of 2004 in conjunction with the RFWaves acquisition.

For financial reporting purposes, the results of operations for RFWaves have been included in the actives segment from August 31, 2004. The results of operations for Vishay MIC Technology have been included in the passives segment from September 29, 2004. The inclusion of these entities did not have a material impact on consolidated results for the third fiscal quarter of 2004. After allocating the purchase price to the assets acquired and liabilities assumed based on an evaluation of their fair values, we recorded goodwill of \$10.1 million related to these acquisitions.

Had these acquisitions occurred as of the beginning of the periods presented in the consolidated financial statements, the pro forma statements of operations would not be materially different than the consolidated statements of operations presented.

#### **Pending Transactions**

We are continuously evaluating opportunities to expand our business, whether through acquisition, investment in non-controlling interests, or strategic alliances. When appropriate or necessary, we periodically announce the status of possible transactions to the public. On December 22, 2004, we signed a definitive merger agreement pursuant to which Vishay will acquire all of the outstanding capital stock of SI Technologies, Inc. for approximately \$17.65 million in cash, plus assumption of SI Technologies debt. SI Technologies, traded on NASDAQ, is a designer, manufacturer, and marketer of high-performance industrial sensors and controls, weighing and factory automotive systems, and related products. Completion of the merger is subject to certain closing conditions, including the approval of the stockholders of SI Technologies. The parties currently anticipate that the merger will be completed in the first half of 2005.

As further described in Note 19 to our consolidated financial statements, on March 3, 2005, we announced our intention to commence a tender offer for all outstanding shares of Siliconix not owned by Vishay.

#### Segments

The following table shows sales, book-to-bill ratios, and gross profit margins broken out by segment for the five quarters beginning with the fourth quarter of 2003 through the fourth quarter of 2004 (dollars in thousands):

	41	th Quarter 2003		1st Quarter 2004		2nd Quarter 2004		3rd Quarter 2004		4th Quarter 2004
Passive Components										
Sales	\$	281,558	\$	321,328	\$	325,745	\$	290,698	\$	272,191
Book-to-Bill Ratio		1.06		1.08		0.95		0.89		0.94
Gross profit margin*		17.5%	% 22.6%		23.1%		ó	20.4%	)	9.3%
Active Components										
Sales	\$	285,641	\$	319,593	\$	320,954	\$	293,622	\$	269,445
Book-to-Bill Ratio		1.23		1.21		1.02		0.79		0.86
Gross profit margin		26.4%	ó	27.3%	ó	29.2%	ó	27.8%	)	22.3%

<sup>\* -</sup> Gross profit margins for the passive components segment include the impact of inventory write-downs and losses on purchase commitments during the fourth quarters of 2004 and 2003.

#### **Cost Management**

We place a strong emphasis on reducing our costs. One way we do this is by moving production to the extent possible from high-labor-cost markets, such as the United States and Western Europe, to lower-labor-cost markets, such as Israel, Mexico, the People's Republic of China and Eastern Europe. The percentage of our total headcount in lower-labor-cost countries is a measure of the extent to which we are successful in implementing this program. This percentage was 72% at the end of 2004, as compared to 69% at the end of 2003, 65% at the end of 2002, 61% at the end of 2001, and 57% at the end of 2000. We expect this percentage to be 73% at the end of 2005. Our long-term target is to have between 75% and 80% of our headcount in lower-labor-cost countries.

We are placing particular emphasis on cost reduction in our capacitor lines, which were hardest hit by the market downturn experienced from 2001 to 2003 and where the business continues to suffer from worldwide overcapacity. In 2003, we completed the transfer of our power capacitor production from Western Europe to the Czech Republic and began moving our molded tantalum capacitor business to the People's Republic of China. We also began to consolidate our existing film capacitor line within the business of BCcomponents.

In 2004, we successfully transferred certain back-end production from Austria to Hungary and the People's Republic of China. In August, we announced our intent to close our small-signal diode assembly facility in Colmar, France, and transfer the production to the People's Republic of China and Hungary.

Our previous plan to transfer power diode production from the Republic of China (Taiwan) to the People's Republic of China was intentionally delayed due to an increase in orders in the first half of 2004. We anticipate this transfer of production will be finalized by the third quarter of 2005. We also delayed the planned transfer of certain production lines from our BCcomponents acquisition from Germany to Israel, but expect to complete this transfer of production by the fourth quarter of 2005.

The restructuring plans we initiated in 2004 are expected to generate approximately \$23 million of annual cost savings. Furthermore, we are implementing an aggressive program in 2005 to reduce our annual fixed costs by an additional \$50 million.

In addition to completing the delayed projects described above, these 2005 programs include finalizing the planned closing of our Norfolk, Nebraska resistors plant, finalizing the production transfer of tantalum molded finishing from Israel to the People's Republic of China, integrating Vishay MIC Technologies into our existing Electro-Films business, transferring our film capacitor production to India and the People's Republic of China after closing facilities in Germany and the Czech Republic and reducing production in Portugal and Belgium, finalizing transfers of production from France to the Czech Republic and also streamlining various general and administrative costs.

#### **Israeli Government Incentives**

Our production facilities in Israel benefit from incentives offered by the Israeli government for the creation of jobs and capital investment in that country. These benefits take the form of government grants and reduced tax rates that are lower than those in the United States.

These reduced tax rates apply to specific approved projects and are normally available for a period of ten or fifteen years. The lower tax rates in Israel applicable to us ordinarily have resulted in increased earnings compared to what earnings would have been had statutory United States tax rates applied. However, due to write-downs of inventories and the losses on purchase commitments recorded in 2002, 2003, and 2004, the application of the Israeli tax rates rather than United States tax rates resulted in decreases in net income of \$18.9 million in 2004 and \$3.1 million in 2003, and an increase in net loss of \$24.8 million in 2002, as compared to what earnings would have been had statutory United States tax rates applied.

Israeli government grants are awarded to specific projects. These grants are intended to promote employment in Israel's industrial sector and are conditioned on the recipient maintaining certain prescribed employment levels. Grants are paid when the related projects become operational, and the Israeli government approves the project. Israeli government grants, recorded as a reduction in the costs of products sold, were \$8.9 million, \$12.4 million, and \$17.3 million in 2004, 2003, and 2002, respectively. At December 31, 2004, our consolidated balance sheet reflected \$18.7 million in deferred grant income.

During the second quarter of 2002, the government of Israel informed us that because the headcount in our Israeli subsidiaries decreased significantly over the previous 18 months, the government intended to withhold up to \$15 million in grant monies otherwise due to us. The grant, which was made by the Israeli government under an economic stimulus program, was conditioned in part on the employment levels at certain of our Israeli facilities. The Israeli government argued that we had not maintained employment at the required minimum levels. During the fourth quarter of 2002, we settled our dispute with the government of Israel, and the government agreed to continue making grant payments to us. Under the terms of the settlement with the Israeli government, we are required to employ at least an additional 1,500 employees in Israel by December 31, 2005 in order to preserve our eligibility for the government grant and tax benefits. Under certain circumstances, we would be able to delay the December 31, 2005 deadline by one year. We have hired an additional 1,428 employees to date and expect to comply with these requirements.

If we were no longer able to maintain the required level of employment in the future, we could be required to return some grant funds and repay certain tax benefits that were previously awarded to us. The effect of the return of these funds would be to reduce our income in future years.

#### **Write-Downs of Inventory and Purchase Commitments**

Tantalum is the principal material used in the manufacture of tantalum capacitors. We generally purchase this metal in powder or wire form, although in 2000 and early 2001, when we perceived possible supply shortages, we also stockpiled quantities of tantalum ore. In July and November of 2000, we entered into purchase contracts with Cabot Corporation for tantalum powder and wire that committed us to minimum purchases of these materials at fixed prices through 2006. Palladium is a precious metal used in the production of multi-layer ceramic capacitors that we purchase under short-term contracts.

In 2001 through 2003, as a result of the general downturn in the electronics business, we experienced a significant decrease in capacitor sales. Prices of tantalum ore, powder and wire and of palladium also experienced significant declines. As a result of these declines in prices, we recorded in costs of products sold write-downs of tantalum inventories to then-current market value of \$5.4 million and \$25.7 million during the years ended December 31, 2003 and 2002, respectively. Also as a result of this decline in prices, we recorded losses on purchase commitments for tantalum of \$11.4 million and \$106.0 million for the years ended December 31, 2003 and 2002, respectively. We recorded in costs of products sold write-downs of palladium inventories to then-current market value of \$0.4 million, \$1.6 million and \$1.7 million, for the years ended December 31, 2004, 2003, and 2002, respectively, and a loss on purchase commitments of \$0.4 million during the year ended December 31, 2004.

Losses on purchase commitments and the related liability recorded on our consolidated balance sheet is estimated based on our contractually obligated purchase prices, expected market prices, and the mix of tantalum-grades expected to be purchased. The mix of tantalum-grades expected to be purchased is within a range specified by the contracts. The pricing trend for tantalum has been relatively stable since 2003. The mix of our purchases of tantalum grades during 2004 was significantly different than initially expected, which resulted in losses on purchase commitments of \$16.2 million being recorded in the year ended December 31, 2004. If the downward pricing trend were to resume, we could again be required to write down the carrying value of our tantalum inventory and record additional losses on our purchase commitments. Changes in our mix of tantalum-grade purchases could also require us to record additional losses on our purchase commitments. Furthermore, one of our contracts for tantalum purchases provides for price reductions in 2006 if certain conditions are met. Our estimates of losses on purchase commitments are based on the assumption that we will not receive these conditional price reductions in 2006. We may be required to reverse a portion of these recorded losses if we meet all conditions to receive these price reductions.

The improvement in market conditions for our capacitor products in 2003 and the first half of 2004 resulted in increased usage of our tantalum inventories as compared to previous years. However, we still anticipate, based on current and foreseeable demand for tantalum capacitors, that our minimum purchase commitments under the contracts with Cabot will exceed our requirements over the terms of the contracts. See "Contractual Commitments" below. Tantalum powder and wire have an indefinite shelf life; therefore, we believe that we will eventually utilize all of the material in our inventory or purchased under the contracts. Based on usage currently expected in 2005, our inventory on hand plus our future purchase commitments represent approximately 3 to 4 years of usage. We have little visibility of the demand for our tantalum capacitor products beyond twelve months. It is almost certain that our actual requirements of tantalum will differ from those projected, and likely that the difference will be material.

Write-downs of raw materials inventory and losses on purchase commitments have the effect of improving gross margins in subsequent periods by reducing cost of products sold as inventory is utilized. This effect cannot be precisely quantified in any specific reporting period, however, because of the large number of affected products and the impracticality of tracking raw material inventory usage on a product-by-product basis. Management estimates that the impact on margins for 2004 was between approximately \$6 million to \$10 million.

#### **Foreign Currency**

In 2004, we realized approximately 74% of our revenues from customers outside the United States. Any third party sales not using the U.S. dollar as the functional currency must be reported in the local currency and be translated at the weighted average exchange rate. This translation has an impact on the net sales line of the consolidated statements of operations. We generally do not purchase foreign currency exchange contracts or other derivative instruments to hedge our exposure to foreign currency fluctuations, although we do maintain cash balances in foreign currencies to act as a natural hedge of certain net exposures. As of December 31, 2004 and 2003, we had no outstanding foreign currency forward exchange contracts.

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

Our significant accounting policies are summarized in Note 1 to our consolidated financial statements. We identify here a number of policies that entail significant judgments or estimates.

#### Revenue Recognition

We recognize revenue on product sales during the period when the sales process is complete. This generally occurs when products are shipped to the customer in accordance with terms of an agreement of sale, title and risk of loss have been transferred, collectibility is reasonably assured and pricing is fixed or determinable. For a small percentage of sales where title and risk of loss passes at point of delivery, we recognize revenue upon delivery to the customer, assuming all other criteria for revenue recognition are met. We historically have had agreements with distributors that provided limited rights of product return. Beginning in 2002, we modified these arrangements to allow distributors a limited credit for unsaleable products, which we term a "scrap allowance." Consistent with industry practice, we also have a "stock, ship and debit" program whereby we consider, and grant at our discretion, requests by distributors for credits on previously purchased products that remain in distributors' inventory, to enable the distributors to offer more competitive pricing. In addition, we have contractual arrangements whereby we provide distributors with protection against price reductions that we initiate after sale of product to the distributor and prior to resale by the distributor.

We record end of period accruals for each of the programs based upon our estimate of future credits under the programs that will be attributable to sales recorded through the end of the period. We calculate reductions of revenue attributable to each of the programs during any period by computing the change in the accruals from the prior period and adding the credits actually given to distributors during the period under the programs. These procedures require the exercise of significant judgments, but we believe they enable us to estimate reasonably future credits under the programs.

Recording and monitoring of these accruals takes place at our subsidiaries and divisions, with input from sales and marketing personnel and review, assessment and, if necessary, adjustment by corporate management. While our subsidiaries and divisions utilize different methodologies based on their individual experiences, all of the methodologies take into account certain elements that management considers relevant, such as sales to distributors during the relevant period, inventory levels at the distributors, current and projected market trends and conditions, recent and historical activity under the relevant programs, changes in program policies, and open requests for credits. In our judgment, the different methodologies provide us with equally reliable estimates upon which to base our accruals. We do not track the credits that we record against specific products sold from distributor inventories, so as to directly compare revenue reduction for credits recorded during any period with credits ultimately awarded in respect of products sold during that period. Nevertheless, we believe that we have an adequate basis to assess the reasonableness and reliability of our estimates.

#### Accounts Receivable

Our receivables represent a significant portion of our current assets. We are required to estimate the collectibility of our receivables and to establish allowances for the amount of receivables that will prove uncollectible. We base these allowances on our historical collection experience, the length of time our receivables are outstanding, the financial circumstances of individual customers, and general business and economic conditions.

#### Inventories

We value our inventories at the lower of cost or market, with cost determined under the first-in first-out method and market based upon net realizable value. The valuation of our inventories requires our management to make market estimates. For instance, in the case of tantalum, we estimate market value by obtaining current quotations from available sources of supply. For work in process goods, we are required to estimate the cost to completion of the products and the prices at which we will be able to sell the products. For finished goods, we must assess the prices at which we believe the inventory can be sold. As noted, we recorded write-downs of our tantalum and palladium inventories in 2002 and 2003, and write-downs of our palladium inventories in 2004. Inventories are also adjusted for estimated obsolescence and written down to net realizable value based upon estimates of future demand, technology developments and market conditions.

#### Estimates of Restructuring and Severance Costs and Purchase-Related Restructuring Costs

In 2004 and 2003, we recorded restructuring and severance costs of approximately \$47.3 million and \$28.5 million, respectively, related to our existing businesses. In 2002, we recorded restructuring costs of approximately \$48.0 million related to our acquisitions and \$18.6 million related to our existing businesses. Our acquisition-related restructuring costs included, among other things, costs related to our acquisition of BCcomponents in December 2002. Our restructuring activities related to existing business were designed to reduce both our fixed and variable costs, particularly in response to the reduced demand for our products occasioned by the electronics industry downturn. These included the disposition of fixed assets and the termination of employees. Acquisition-related costs are included in the allocation of the cost of the acquired business and generally add to goodwill. Other restructuring costs are expensed during the period in which we determine that we will incur those costs, and all of the requirements for accrual are met.

Because these costs are recorded based upon estimates, our actual expenditures for the restructuring activities may differ from the initially recorded costs. If this happens, we will have to adjust our estimates in future periods. In the case of acquisition-related restructuring costs, if our initial estimate is too high, this would generally require a change in value of the goodwill appearing on our balance sheet, but would not affect our earnings. Assuming our allocation of purchase price of the respective acquisition is finalized, if our initial estimate of purchase-related restructuring costs is too low, we would be required to record additional expenses in future periods.

In the case of other restructuring costs, we could be required either to record additional expenses in future periods, if our initial estimates were too low, or to reverse part of the charges that we recorded initially, if our initial estimates were too high.

#### Raw Material Write-Downs

In 2002 and 2003, we took charges against contractual commitments to purchase tantalum powder and wire through 2006 and wrote-down our existing inventory of tantalum ore, powder and wire to then-present market value. We did this because the current market prices of tantalum are substantially below the prices at which we are committed to purchase tantalum in the future under long-term contracts and the prices at which we were carrying our tantalum raw materials inventory. These actions involved significant judgments on our part, including decisions of whether to take these charges and write-downs, their timing and their amount.

We made the decision to take the charges and write-downs after our management concluded that the substantial fall-off in the demand for tantalum capacitors was likely to continue for the foreseeable future. Combining this assessment with the worldwide over-capacity in tantalum production, we could not foresee when tantalum prices might recover from their currently depressed levels. Although we believe that both the charges and write-downs as well as their timing were appropriate under the circumstances, our visibility for future demand and pricing is limited and the judgments made by our management necessarily involved subjective assessments.

Losses on purchase commitments and the related liability recorded on our consolidated balance sheet is estimated based on our contractually obligated purchase prices, expected market prices, and the mix of tantalum-grades expected to be purchased. The mix of tantalum-grades expected to be purchased is within a range specified by the contracts. There is no established market on which tantalum raw materials are regularly traded and quoted. We based our determination of current market price on quotations from two suppliers of these materials. We cannot say that the prices at which we could currently enter into contracts for the purchase of tantalum would be the same as these quoted prices. Had we made other assumptions on current and future prices for tantalum, the amount of the inventory write-downs and the losses on our purchase commitments would have been different. The pricing trend for tantalum has been relatively stable since 2003. The mix of our purchases of tantalum grades during 2004 was significantly different than initially expected, which resulted in losses on purchase commitments of \$16.2 million being recorded during that year. If the downward pricing trend were to resume, we could again be required to write down the carrying value of our tantalum inventory and record additional losses on our purchase commitments. Changes in our mix of tantalum-grade purchases could also require us to record additional losses on our purchase commitments. Furthermore, one of our contracts for tantalum purchases provides for price reductions in 2006 if certain conditions are met. Our estimates of losses on purchase commitments are based on the assumption that we will not receive these conditional price reductions in 2006. We may be required to reverse a portion of these recorded losses if we meet all conditions to receive these price reductions.

If tantalum prices were to recover in the future, we would not reverse the write-downs that we have taken on our raw materials inventory, so that our cost of materials will continue to reflect these write-downs regardless of future price increases in tantalum. This could have the effect of increasing the earnings that we realize in future periods.

Based upon similar considerations, we recorded write-downs of our palladium inventory to market value in 2004, 2003, and 2002. We also recorded a loss on purchase commitments for palladium of \$0.4 million in 2004.

#### Goodwill

Goodwill represents the excess of the cost of businesses acquired over the fair value of the related net assets at the date of acquisition. Goodwill is tested for impairment at least annually. These tests will be performed more frequently if there are triggering events. Statement of Financial Accounting Standards ("SFAS") No. 142 prescribes a two-step method for determining goodwill impairment. In the first step, we determine the fair value of the reporting unit using a comparable companies market multiple approach. The comparable companies utilized in our evaluation are the members of our peer group included in the presentation of our stock performance in our annual proxy statement. If the net book value of the reporting unit exceeds the fair value, we would then perform the second step of the impairment test which requires allocation of the reporting unit's fair value to all of its assets and liabilities in a manner similar to a purchase price allocation, with any residual fair value being allocated to goodwill. An impairment charge will be recognized only when the implied fair value of a reporting unit's goodwill is less than its carrying amount. We noted no impairment in our annual assessment of goodwill during the years ended December 31, 2004, 2003, or 2002.

#### Impairment of Long-Lived Assets

We assess the impairment of our long-lived assets, other than goodwill and tradenames, including property and equipment, and identifiable intangible assets subject to amortization, whenever events or changes in circumstances indicate the carrying value may not be recoverable. Factors we consider important, which could trigger an impairment review, include significant changes in the manner of our use of the asset, changes in historical or projected operating performance and significant negative economic trends.

During the years ended December 31, 2004, 2003 and 2002, we recorded asset write-downs of \$27.3 million, \$1.0 million, and \$12.4 million, respectively. Asset write-downs in 2004 and 2003 included amounts to reduce the carrying value of certain buildings which had been vacated as part of our restructuring activities, based on expected future selling prices. Asset write downs in 2004 and 2002 included charges to write down certain equipment to salvage value after we determined that it would not be used at other Vishay locations subsequent to the completion of our restructuring plans.

#### Income Tax Exposures

Our income tax returns in the United States and several foreign tax jurisdictions are presently under examination by the U.S. Internal Revenue Service and foreign tax authorities. We believe that any potential tax assessment plus related interest and penalties, if any, have been sufficiently provided for in the consolidated financial statements. These provisions are based on management's best estimate of potential tax exposures. The completion of these examinations could have a material impact on our results of operations or cash flows during the period in which they are resolved. However, the resolution of these examinations is not expected to have a material adverse effect on our financial position or liquidity.

#### **Results of Operations**

Statement of operations captions as a percentage of sales and the effective tax rates were as follows:

	rea	rears ended December 51,					
	2004	2003	2002				
Costs of products sold	76.3%	77.9%	79.8%				
Gross profit*	23.0%	21.6%	14.4%				
Selling, general & administrative expenses	16.0%	17.5%	17.0%				
Operating income	3.8%	2.7%	-4.3%				
Earnings before taxes & minority interest	2.9%	2.1%	-5.5%				
Net earnings	1.9%	1.2%	-5.1%				
Effective tax rate	19.6%	24.8%	16.9%				

w anded December 21

#### **Net Sales**

Net sales for the year ended December 31, 2004 increased by \$243.0 million or 11% over the prior year. The increase is attributable to strong volumes and positive foreign currency effects, partially offset by lower pricing. Despite the weaker market conditions during the second half of 2004 compared to the first half of 2004, virtually all market segments performed better during 2004 versus 2003. Telecom (networks and mobile phones) was particularly strong in Asia and Europe during the first half of 2004. Automotive products have been solid, particularly in Europe. Industrial products were strong throughout all of 2004. In the consumer products segment, we noted some softening in Asia during the second half of the year, especially compared to the strong conditions noted during the first half of the year. The European consumer products segment was relatively weak during 2004. During the second half of 2004, we also noted a slow-down in notebook computers and mobile phones, mainly impacting sales in Asia. The weakening of the U.S. dollar against foreign currencies for the year ended December 31, 2004 resulted in increases in reported revenues of \$81 million as compared to 2003.

Net sales for the year ended December 31, 2003 increased by \$347.8 million or 19% over the prior year. The increase primarily reflects the acquisitions of BCcomponents in December 2002, Celtron Technologies in October 2002, BLH and Nobel in July 2002 and Tedea-Huntleigh BV in September 2002. Net sales of our existing businesses increased \$49.1 million, or 3%. The weakening of the U.S. dollar against foreign currencies for the year ended December 31, 2003 resulted in increases in reported revenues of \$74 million as compared to 2002.

<sup>\* -</sup> Reflects losses on purchase commitments of \$16.6 million, \$11.4 million and \$106.0 million during the years ended December 31, 2004, 2003 and 2002, respectively.

We deduct, from the sales that we record to distributors, allowances for future credits that we expect to provide for returns, scrapped product and price adjustments under various programs made available to the distributors. We make deductions corresponding to particular sales in the period in which the sales are made, although the corresponding credits may not be issued until future periods. We estimate the deductions based on sales levels to distributors, inventory levels at the distributors, current and projected market trends and conditions, recent and historical activity under the relevant programs, changes in program policies and open requests for credits. We recorded deductions from gross sales under our distributor incentive programs of \$51.4 million, \$67.2 million, and \$67.4 million for the years ended December 31, 2004, 2003 and 2002, respectively, or, as a percentage of gross sales 2.1%, 3.0%, and 3.6%, respectively. Actual credits issued under the programs for the years ended December 31, 2004, 2003 and 2002 were approximately \$55.9 million, \$62.4 million, and \$63.4 million, respectively. Increases and decreases in these incentives are largely attributable to the then-current business climate. The decrease in the incentives since 2002 is indicative of the generally improving business climate affecting our distributors and the electronic component industry. The decrease in 2004 is also attributable to changes in our pricing structure to more closely match the distributors' pricing structure to their end-use customers. The decline in distributor orders noted in the second half of 2004 has not had a material impact on our distributor incentive programs. We continue to monitor the factors described above in light of current market conditions.

# **Gross Profit and Margins**

Costs of products sold as a percentage of net sales for the year ended December 31, 2004 was 76.3%, as compared to 77.9% for the prior year. Gross profit as a percentage of net sales for the year ended December 31, 2004 was 23.0% as compared to 21.6% for the prior year. Gross profit margins for 2004 were favorably impacted by volume increases and our cost reduction programs, partially offset by lower pricing. Gross profit for 2004 reflects a write-down of palladium inventories to current market value of \$0.4 million, included in cost of goods sold, and losses on tantalum purchase commitments of \$16.2 million. Gross profit for 2003 reflects a write-down of tantalum and palladium inventories to then-current market value of \$7.0 million, which is included in cost of goods sold, and losses on tantalum purchase commitments of \$11.4 million.

Costs of products sold as a percentage of net sales for the year ended December 31, 2003 was 77.9% as compared to 79.8% for the prior year. Gross profit as a percentage of net sales for year ended December 31, 2003 was 21.6% as compared to 14.4% for the prior year. Price declines were offset in substantial part by volume increases and cost savings programs. As described above, gross profit for 2003 reflects inventory-related charges totaling \$18.4 million. Gross profit for 2002 reflects inventory-related charges totaling \$133.4 million, reflecting a write-down of raw material inventory to then-current market value of \$27.4 million, which is included in cost of products sold, and an accrual for losses on purchase commitments of \$106.0 million.

See "Israeli Government Incentives" regarding Israeli government grants, which are recorded as a reduction in costs of products sold.

# Segments

Discussion and analysis of sales and gross profit margins for our passive and active segments are provided below.

#### Passive Components

	 rears ended December 31,				
(In thousands)	 2004		2003		2002
Net sales	\$ 1,209,962	\$	1,104,856	\$	767,246
Gross margin percentage	19.2%	6	17.3%	ó	-4.9%

Net sales of passive components for the year ended December 31, 2004 increased \$105.1 million or 10% as compared to the prior year. The increase in net sales is attributable to volume increases in all passive component product lines and the positive impact of foreign currency exchange rates, partially offset by price declines. Volumes increased approximately 11% in 2004, which was offset by a 5% decline in average selling prices versus the prior year. The weakening of the U.S. dollar against foreign currencies for the year ended December 31, 2004 resulted in increases in reported revenues of \$47 million as compared to 2003.

Net sales of passive components for the year ended December 31, 2003 increased \$337.6 million or 44% as compared to the prior year. Without the acquisitions of BCcomponents, Celtron Technologies, BLH and Nobel, and Tedea-Huntleigh, the passive components business sales would have increased by \$38.9 million or 5% as compared to the prior year. The organic increase in net sales was attributable to the volume increases in the resistor and inductor product lines and the positive impact of foreign currency exchange rates, partially offset by price declines.

Several significant cost reduction programs have been initiated in all of the products lines, including facility combinations and shifting production to lower cost regions. The impact of these cost savings plans has been partially offset by the underutilization of capacity in commodity products.

Gross margins were 19.2% for the year ended December 31, 2004 as compared to 17.3% for the prior year. Margins were affected negatively by raw material related write-downs in both 2004 and 2003. During 2004, we recorded write-downs of \$0.4 million to reduce palladium inventories to market value. We also recorded losses on tantalum purchase commitments of \$16.2 million and on palladium purchase commitments of \$0.4 million during 2004. During 2003, we recorded write-downs of \$7.0 million to reduce tantalum and palladium inventories to then-current market value, and losses on purchase commitments for future delivery of tantalum of \$11.4 million. The improvement in gross margins in 2004 is primarily due to lower inventory-related charges in 2004, higher volume, lower obsolescence costs, and our cost reduction programs, partially offset by lower prices.

Gross margins were 17.3% for the year ended December 31, 2003, as compared to negative 4.9% for the prior year. Results for 2003 reflected average margins of 29% for our resistor and inductor lines and 5% for our capacitor lines. Margins were affected negatively by raw material related write-downs in 2003 and 2002, as market prices for these materials continued to decline. As described above, during 2003, we recorded inventory-related charges of \$18.4 million. In 2002, we recorded losses on purchase commitments of tantalum of \$106.0 million and write-downs of \$27.4 million on tantalum and palladium inventories.

	rears clucu December 31,					
(In thousands)	 2004		2003		2002	
Net sales	\$ 1,203,614	\$	1,065,741	\$	1,055,567	
Gross margin percentage	26.8%	ń	26.1%	6	28.4%	

s anded December 31

Net sales of the active components business for the year ended December 31, 2004 increased \$137.9 million, or 13% as compared to the prior year. The increase in sales was primarily attributable to increased volumes and the positive impact of foreign currency exchange rates, partially offset by lower prices versus the prior year. The weakening of the U.S. dollar against foreign currencies for the year ended December 31, 2004 resulted in increases in reported revenues of \$34 million as compared to 2003. Our active components business was particularly impacted by the decline in distributor orders noted in the second half of 2004. Despite these sequential declines in sales as compared to the first half of 2004, demand was stronger across all product lines and virtually all market segments versus 2003. In particular, sales volume of products for end-uses in mobile phones and networks, industrial products, and consumer products (digital cameras and DVDs) was strong compared to the prior year. Volumes increased approximately 15% in 2004, which was offset by a 4% decline in average selling prices versus the prior year. The volume increase was due to improved market conditions, and also due to the absence of the 2003 SARS-related sales declines in Asia, particularly at our Siliconix subsidiary, which sells approximately 70% of its products to customers in Asia. Gross margins were 26.8%, as compared to 26.1% for the prior year. The improvement in margins is attributable to higher volumes and lower costs.

Net sales of the active components business for year ended December 31, 2003 increased by \$10.2 million, or 1%, as compared to the prior year. The active segment continued to experience pricing pressure in 2003, especially during the first half of the year. Sales for the first half of 2003 actually decreased from the comparable 2002 period, primarily as a result of the SARS outbreak in Asia where Siliconix sells approximately 70% of its total sales. The modest revenue growth for the year was fueled by a significant rebound in Asian business during the second half of 2003, driven by demand for computer components and by distributors restocking inventories. Gross margins were 26.1% for the year ended December 31, 2003 as compared to 28.4% for the prior year. Margins were negatively impacted by product mix changes at Siliconix, where there was a higher share of commodity products as compared to the comparable prior year periods. Also, because of capacity constraints that it had begun to experience, Siliconix made greater use of subcontractors during 2003, which had the effect of driving down margins. Siliconix's net sales for 2003 were \$392.1 million, compared to \$372.9 million in 2002, a 5% increase, and its gross profit margins declined from 31% for 2002 to 29% for 2003.

# Selling, General, and Administrative Expenses

Selling, general, and administrative (SG&A) expenses were 16.0% of net sales for 2004 as compared to 17.5% of net sales for the prior year. The prior year included expenses due to the acquisition of BCcomponents. The reduction in this percentage is largely due to increased sales, but also reflects progress in our cost reduction initiatives. These improvements, as a percentage of sales, were achieved despite increased costs associated with Sarbanes-Oxley compliance requirements.

SG&A expenses for the year ended December 31, 2003 were 17.5% of net sales as compared to 17.0% of net sales for the prior year. This increase was mainly due to the costs associated with the acquisition and integration of BCcomponents.

# Restructuring and Severance Costs and Related Asset Write-Downs

Our restructuring activities have been designed to cut both fixed and variable costs, particularly in response to the reduced demand for products occasioned by the electronics industry downturn experienced from 2001 to 2003. These activities include the closing of facilities and the termination of employees. Because costs are recorded based upon estimates, actual expenditures for the restructuring activities may differ from the initially recorded costs. If the initial estimates are too low or too high, we could be required either to record additional expenses in future periods or to reverse previously recorded expenses. We anticipate that we will realize the benefits of our restructuring through lower labor costs and other operating expenses in future periods. We expect to continue to restructure our operations and incur restructuring and severance costs as explained in "Cost Management" above, and in Note 4 to our consolidated financial statements.

We continued our restructuring activities during the year ended December 31, 2004, recording restructuring and severance costs of \$47.3 million and asset write-downs of \$27.3 million. The largest component of our 2004 restructuring costs relate to our decision to close our Colmar, France small-signal diode assembly facility and transfer production to other Vishay facilities. During the fourth quarter, we recorded restructuring and severance costs of \$26.2 million related to this closure. Of the \$47.3 million restructuring and severance costs recorded in 2004, approximately \$43.1 million relates to workforce reduction expenses, and approximately \$4.2 million relates to other exit costs. The asset write-downs are related to plant closures and decisions not to utilize certain equipment in other locations. As a result of restructuring activities initiated in 2004, we expect an annual increase in gross profit of approximately \$23 million.

We recorded restructuring and severance costs for the years ended December 31, 2003, 2002 and 2001 of \$28.5 million, \$18.6 million, and \$40.9 million, respectively. We also recorded asset write-downs of \$1.0 million, \$12.4 million, and \$21.0 million during the years ended December 31, 2003, 2002, and 2001, respectively. We continued to realize the expected savings in 2004 related to these restructuring charges, and we expect to continue to realize annual cost savings associated with the restructuring activities initiated in 2001, 2002, and 2003.

Restructuring and severance costs are separate from plant closure, employee termination and similar integration costs we incur in connection with our acquisition activities. These amounts are included in the costs of our acquisitions and do not affect earnings or losses on our statement of operations. For a discussion of these costs, see Note 2 to our consolidated financial statements.

# Other Income (Expense)

# 2004 Compared to 2003

Interest expense for the year ended December 31, 2004 decreased by \$5.0 million, as compared to the prior year. This decrease is primarily attributable to repayment of debt with the proceeds of lower interest rate debt issued in the third quarter of 2003. These proceeds, from our issuance of our 3-5/8% convertible subordinated notes, were used to repay approximately \$171 million principal amount of General Semiconductor's 5.75% convertible notes, approximately \$97 million accreted principal amount of our Liquid Yield Option™ Notes ("LYONs") and \$130 million in borrowings under our revolving credit facility in the third quarter of 2003. Additionally, on June 4, 2004, we repurchased \$102.1 million accreted principal amount of our LYONs through the issuance of 5,534,905 shares of common stock. The repurchase of the LYONs is expected to reduce future interest expense by approximately \$3 million per year.

We recorded a loss of \$9.9 million for extinguishment of debt during the year ended December 31, 2003 on the redemption of \$171 million principal amount of the General Semiconductor notes and the repurchase of \$97 million in accreted principal amount of our LYONs. Also during 2003, we recorded a gain of \$33.9 million on the receipt of insurance proceeds in excess of book value subsequent to the destruction of the thin film resistor facility of our Electro-Films, Inc. subsidiary in Warwick, Rhode Island. That facility has now been completely rebuilt into a state-of-the-art production center. No comparable losses or gains were recorded in 2004. These items are reported on separate lines in the consolidated statement of operations.

The following table analyzes the components of the line "Other" on the consolidated statements of operations (in thousands):

	Years ended December 31,					
		2004		2003		Change
Foreign exchange losses	\$	(2,310)	\$	(5,235)	\$	2,925
Interest income		8,702		7,228		1,474
Dividend income		490		96		394
Losses on disposal of property and equipment		(1,697)		(2,521)		824
Other		38		(1,062)		1,100
Royalty income		1,078		_		1,078
Gain on interest rate swap		_		3,783		(3,783)
Incentive from Chinese government		2,377		_		2,377
Favorable settlement of note receivable		3,100		_		3,100
					_	
	\$	11,778	\$	2,289	\$	9,489

The year ended December 31, 2004 includes a one-time gain of \$3.1 million due to the favorable settlement of an outstanding note receivable, and includes \$2.4 million received from the Chinese government as an incentive for being a foreign investment partner in China. There were no comparable items in 2003. The year ended December 31, 2003 included a gain on expiration of an interest rate swap of \$3.8 million, and there was no comparable item in 2004.

Foreign exchange losses were incurred in both years due to the weakening of the U.S. dollar. The amount of the exchange loss is driven by the extent of currency fluctuation and by the timing of receipts and payments. We do not use any derivative financial instruments to hedge foreign currency exposures, although we do maintain cash balances in foreign currencies to act as a natural hedge of certain net exposures.

Interest income for 2004 increased as compared to 2003, primarily attributable to an increase in invested cash and higher average interest rates.

Royalty income was approximately \$1.1 million in 2004 and is expected to be higher in future periods due to the settlement of two patent infringement cases which we had initiated.

# 2003 Compared to 2002

Interest expense for the year ended December 31, 2003 increased by \$9.7 million, as compared to the prior year. This increase was primarily a result of debt issued or assumed in the various acquisitions made in 2002 and the issuance in August 2003 of our \$500 million principal amount 3-5/8% convertible subordinated notes due 2023, net of debt repaid with the proceeds of these notes of \$398 million. Acquisition-related debt included borrowings of \$116 million under our revolving credit facility and the issuance of \$105 million principal amount of unsecured loan notes, currently bearing interest at LIBOR plus 1.5%, in connection with the BCcomponents acquisition in December 2002.

As described above, we recorded a loss of \$9.9 million for extinguishment of debt during the year ended December 31, 2003. Also during 2003, we recorded a gain of \$33.9 million on the receipt of insurance proceeds in excess of book value. No comparable losses or gains were recorded in 2002. These items are reported on separate lines in the consolidated statement of operations.

The following table analyzes the components of the line "Other" on the consolidated statements of operations (in thousands):

		Years ended December 31,					
	2003		2003 2002		2002		Change
Foreign exchange losses	\$	(5,235)	\$ (77)	77) \$	(4,458)		
Gain (loss) on interest rate swap		3,783	(11	.5)	3,898		
Interest income		7,228	7,95	52	(724)		
Dividend income		96	10	00	(4)		
Losses on disposal of property and equipment		(2,521)	(29	(6)	(2,225)		
Other		(1,062)	40	00	(1,462)		
Incentive from Chinese government		_	1,40	00	(1,400)		
	\$	2,289	\$ 8,66	54 \$	(6,375)		

The year ended December 31, 2002 includes \$1.4 million received from the Chinese government as an incentive for being a foreign investment partner in China, with no comparable item in 2003.

The year ended December 31, 2003 included a gain on expiration of an interest rate swap of \$3.8 million, compared to a loss on ineffective interest rate swaps of \$0.1 million in 2002.

Foreign exchange losses were incurred in both years due to the weakening of the U.S. dollar. The amount of the exchange loss is driven by the extent of currency fluctuation and by the timing of receipts and payments. We do not use any derivative financial instruments to hedge foreign currency exposures, although we do maintain cash balances in foreign currencies to act as a natural hedge of certain net exposures.

Interest income for 2003 decreased as compared to 2002, primarily attributable to lower average interest rates.

# **Minority Interest**

Minority interest in earnings increased by \$3.5 million for the year ended December 31, 2004 as compared to the prior year, primarily due to an increase in net earnings of Siliconix, of which we own 80.4% of the outstanding shares. Minority interest in earnings decreased by \$1.4 million for the year ended December 31, 2003 as compared to the prior year, primarily due to a decrease in net earnings of Siliconix.

# **Income Taxes**

The effective tax rate, based on earnings before income taxes and minority interest, for the year ended December 31, 2004 was 19.6% as compared to 24.8% for the comparable prior year period. The effective tax rate for 2004 reflects the favorable settlement of a tax audit in Germany, which resulted in a decrease in tax expense of \$10.6 million. The effective tax rates reflect the fact that we could not recognize for accounting purposes the tax benefit of losses incurred in certain jurisdictions, although these losses are available to offset future taxable income. Under applicable accounting principles, we may not recognize deferred tax assets for loss carryforwards in jurisdictions where there is a recent history of cumulative losses, where there is no taxable income in the carryback period, where there is insufficient evidence of future earnings to overcome the loss history and where there is no other positive evidence, such as the likely reversal of temporary timing differences, that would result in the utilization of loss carryforwards for tax purposes.

The effective tax rate for the year ended December 31, 2003 was 24.8%, reflecting tax expense, as compared to 16.9% for the prior year, reflecting a tax benefit. The effective tax rate in 2003 reflects the fact that we could not recognize for accounting purposes the tax benefit of losses incurred in certain jurisdictions, although these losses are available to offset future taxable income.

# Financial Condition, Liquidity, and Capital Resources

Cash and cash equivalents were \$633 million as of December 31, 2004, of which \$306 million belonged to Siliconix. Siliconix has its own Board of Directors which must approve transactions with Vishay. Excluding cash held by Siliconix, the remaining amount of \$327 million includes approximately \$292 million held by our non-U.S. subsidiaries. Under U.S. tax law, any repatriation of earnings and cash back to the United States would be deemed to be a dividend and would be subject to U.S. income taxes, state income taxes, and foreign withholding taxes. We continue to evaluate the impact of repatriation of earnings and cash pursuant to the American Jobs Creation Act of 2004, which was signed into law in October 2004. At the present time, we expect our cash and profits generated by foreign subsidiaries, including foreign subsidiaries of Siliconix, to continue to be reinvested indefinitely.

Cash flows from operations were \$233.1 million for the year ended December 31, 2004 as compared to \$255.8 million for the year ended December 31, 2003, despite increased earnings. The decrease in cash flows from operations was primarily due to changes in working capital and the prepayment of \$20 million to Tower Semiconductor related to the semiconductor manufacturing agreement entered into by Siliconix.

Our financial condition at December 31, 2004 continued to be strong, with a current ratio (current assets to current liabilities) of 3.2 to 1, compared with a ratio of 2.8 to 1 at December 31, 2003. The increase in this ratio in 2004 is primarily due to cash generated by operations. Our ratio of long-term debt, less current portion, to stockholders' equity was 0.27 to 1 at December 31, 2004. This ratio was 0.33 to 1 at December 31, 2003. The improvement in this ratio in 2004 is due to the reduction of debt subsequent to the issuance of shares of common stock to holders of our LYONs who elected to exercise their option to require us to repurchase their LYONs on June 4, 2004.

Holders of our LYONs had the option to require us to purchase all or a portion of their LYONs on June 4, 2004 at their accreted value of \$602.77 per \$1,000 principal amount at maturity. Pursuant to the terms of the notes, we elected to pay the purchase price in Vishay common stock. Holders representing approximately 44% of outstanding LYONs exercised their option. We issued 5,534,905 shares of common stock as consideration in the purchase of approximately \$102.1 million accreted principal amount of the LYONs. The remaining LYONs holders also have the right to require us to repurchase their notes on June 4, 2006, June 4, 2011, and June 4, 2016 at their accreted value on those dates, as set forth in the notes. See also "Contractual Commitments" below.

Even with the reduction of debt by \$102.1 million subsequent to our repurchase of the LYONs, our debt levels have increased significantly since 2000. This is primarily attributable to acquisition activity. Additionally, in 2003, we issued \$500 million of convertible subordinated notes, using a majority of the proceeds to repay other higher interest rate debt.

We maintain a secured revolving credit facility of \$400 million, which was extended in 2003 until May 2007. At December 31, 2004, an Asian subsidiary had \$11 million outstanding under the revolving credit facility. There were no borrowings outstanding under this credit facility at December 31, 2003. Letters of credit totaling \$7.3 million were issued under the revolving credit facility at December 31, 2004. Accordingly, \$381.7 million was available under the revolving credit facility at December 31, 2004.

The revolving credit facility restricts us from paying cash dividends and requires us to comply with other covenants, including the maintenance of specific financial ratios. Pursuant to the amended and restated credit facility agreement, we must maintain a tangible net worth of \$850 million plus 50% of net income (without offset for losses) and 75% of net proceeds of equity offerings since July 1, 2003. Our tangible net worth at December 31, 2004, as calculated pursuant to the terms of the credit facility, was \$1,093 million, which is \$193 million more than the minimum required under the related credit facility covenant.

Borrowings under the revolving credit facility are secured by pledges of stock in certain significant subsidiaries and certain guarantees by significant subsidiaries. The subsidiaries would be required to perform under the guarantees in the event that Vishay failed to make principal or interest payments under the revolving credit facility. Our Siliconix subsidiary is not a party to our revolving credit agreement. Certain of Vishay's subsidiaries, not including Siliconix, are permitted to borrow under the revolving credit facility. Any borrowings of these subsidiaries under the credit facility are guaranteed by Vishay, including the borrowing by our Asian subsidiary referred to above.

On May 24, 2004, we entered into a Consent and First Amendment to our revolving credit facility, effective as of May 14, 2004. The amendment provides for lender consent to the corporate restructuring of certain subsidiaries of Vishay, permits subsidiary guarantees of certain equipment leases and revises and clarifies the conditions under which Vishay and its subsidiaries may extend loans to one another. In addition, in connection with the execution of the amendment, certain additional Vishay subsidiaries, which have become "significant subsidiaries" as that term is defined under the credit agreement, have become parties to various security and guaranty documents. Effective August 6, 2004, we entered into a second amendment, which made certain additional technical changes to the collateral arrangements under the revolving credit agreement.

At December 31, 2004, we had committed and uncommitted short-term credit lines with various U.S. and foreign banks aggregating approximately \$73.6 million, of which approximately \$69.9 million was unused.

Net purchases of property and equipment for the year ended December 31, 2004 were \$158.6 million, as compared to \$126.6 million in the prior year. This increase is principally due to our planned expansion of capacity in the active business. Our capital expenditures are projected to be approximately \$135 million in 2005, principally to expand capacity in the active business. Purchase of businesses, net of cash acquired, of \$24.9 million and \$41.2 million, for the years ended December 31, 2004 and 2003, respectively, represent cash payments for the acquisition of the assets of RFWaves and the acquisition of Aeroflex Pearl River, Inc. (renamed Vishay MIC Technology Inc.) in 2004, and payments made related to liabilities assumed from previous acquisitions in both periods.

For the next twelve months, management expects that cash flows from operations will be sufficient to meet our normal operating requirements, to meet our obligations under restructuring and acquisition integration programs, and to fund our research and development and capital expenditure plans. Acquisition activity may require additional borrowing under our revolving credit facilities or may require us to incur additional debt.

#### **Contractual Commitments**

As of December 31, 2004 we had contractual obligations as follows (in thousands):

		Payments due by period							
	 Total		Less than 1 year		1-3 years		4-5 years		After 5 years
Long-term debt	\$ 752,196	\$	51	\$	11,272	\$	95	\$	740,778
Operating leases	65,540		23,280		34,068		5,629		2,563
Expected pension and postretirement plan funding	319,170		24,961		53,547		61,715		178,947
Estimated costs to complete construction in progress	11,600		11,600		_		_		_
Purchase commitments - tantalum	183,600		123,500		60,100		_		_
Purchase commitments - Tower	200,000		4,000		34,000		58,000		104,000
Purchase commitments - other	137,000		47,000		54,000		36,000		_
	 							_	
Total contractual cash obligations	\$ 1,669,106	\$	234,392	\$	246,987	\$	161,439	\$	1,026,288
						_			

Pursuant to the terms of the LYONs due 2021, the remaining holders of the LYONs will have the right to "put" these notes to us on June 4, 2006, June 4, 2011, and June 4, 2016 at their accreted values on those dates, as set forth in the notes. The aggregate purchase price for the June 2006 put date would be approximately \$138 million. Pursuant to the terms of the convertible subordinated notes due 2023, the holders of these notes will have the right to "put" these notes to us on August 1, 2008, August 1, 2010, August 1, 2013 and August 1, 2018 at a redemption price equal to 100% of the principal amount of the notes (\$500 million). The commitments set forth in the table are based on the stated maturity dates and do not assume acceleration of payment pursuant to the respective options of the holders.

In 2004, our subsidiary Siliconix signed a long-term manufacturing and supply agreement with Tower Semiconductor. The technology transfer from Siliconix to Tower has started and is estimated to be completed by the second quarter of 2005. The commitments reflected above are based on the expected date of completion of the technology transfer in the second quarter of 2005. An acceleration or delay in the completion of the technology transfer will accelerate or delay, respectively, the timing of the future purchase commitments.

In 2004, our subsidiary Siliconix entered a five-year foundry agreement for semiconductor manufacturing with a subcontractor in Japan. This agreement was a continuation and expansion of a previous technology transfer and business agreement for the manufacture of silicon wafers. The agreement calls for Siliconix to provide a rolling twelve month forecast of estimated requirements. The first six months of this forecast are fixed as to quantity, and the subsequent six months are guaranteed not to be less than a quantity stated in the agreement. Thereafter, the monthly quantity may vary based on market demand. Under the agreement Siliconix must guarantee that its business with this subcontractor represents a minimum percentage of wafer requirements and is required to make its best efforts not to reduce the average monthly demand rate below a specified threshold ("best efforts threshold"). The purchase commitments in the table above represent the minimum commitments for year one (based on the fixed quantities for months one through six and the minimum average quantities for months seven through twelve), and the expected minimum commitment based on the best efforts threshold for the remainder of the agreement. Our actual purchases in future periods are expected to be greater than these minimum commitments.

Generally accepted accounting principles require that management evaluate if purchase commitments are at prices in excess of current market price. The purchase commitments for silicon wafers entered by Siliconix are for the manufacture of proprietary products using Siliconix-owned technology licensed to these subcontractors by Siliconix, and accordingly, management can only estimate the "market price" of the wafers which are the subject of these commitments. Management believes that these commitments are at prices which are not in excess of estimated current market prices.

For a further discussion of long-term debt, pensions, operating leases, and purchase commitments, please see Notes 6, 11, 13, and 15 to our consolidated financial statements.

# Inflation

Normally, inflation does not have a significant impact on our operations as our products are not generally sold on long-term contracts. Consequently, we can adjust our selling prices, to the extent permitted by competition, to reflect cost increases caused by inflation.

# **Recent Accounting Pronouncements**

In January 2003, the Financial Accounting Standards Board ("FASB") issued Interpretation No. 46, *Consolidation of Variable Interest Entities*, *an interpretation of ARB 51* ("FIN 46"). The primary objectives of this interpretation are to provide guidance on the identification of entities for which control is achieved through means other than through voting rights ("variable interest entities") and how to determine when and which business enterprise (the "primary beneficiary") should consolidate the variable interest entity. This new model for consolidation applies to an entity in which either (i) the equity investors (if any) do not have a controlling financial interest; or (ii) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. In addition, FIN 46 requires that the primary beneficiary, as well as all other enterprises with a significant variable interest in a variable interest entity, make additional disclosures. Certain disclosure requirements of FIN 46 were effective for financial statements issued after January 31, 2003. In December 2003, the FASB issued FIN 46 (revised December 2003), *Consolidation of Variable Interest Entities* ("FIN 46-R") to address certain FIN 46 implementation issues. The adoption of FIN 46 and FIN 46-R did not have any effect on our financial position, results of operations, or liquidity.

In December 2003, the FASB issued a revision to SFAS No. 132, *Employers' Disclosures about Pensions and Other Postretirement Benefits* ("SFAS No. 132-R"). The revised standard retains the disclosure requirement contained in the original standard and requires additional disclosures about the assets, obligations, cash flows and net period cost of defined pension plans and other defined benefit postretirement plans. We adopted the annual disclosure requirements required by SFAS No. 132-R for our U.S. pension and other postretirement plans in our annual report on Form 10-K for the year ended December 31, 2003. As permitted by SFAS No. 132-R, certain disclosures regarding non-U.S. pension plans and estimated future benefit payments for both U.S. and non-U.S. pension and other postretirement benefit plans were delayed until this annual report on Form 10-K for the year ending December 31, 2004.

On December 8, 2003, the President of the United States signed the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the "Act"). On May 19, 2004, the FASB issued Staff Position ("FSP") No. 106-2, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug Improvement and Modernization Act of 2003*. The Act introduces a prescription drug benefit under Medicare as well as a federal subsidy to sponsors of retiree health care benefit plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. FSP No. 106-2 is effective for the first interim period beginning after June 15, 2004 and provides that an employer shall measure the accumulated plan benefit obligation ("APBO") and net periodic postretirement benefit cost taking into account any subsidy received under the Act. Management does not believe that the prescription drug benefits available under our retiree health care benefit plans would be considered actuarially equivalent to Medicare Part D. Accordingly, our measures of APBO and net periodic postretirement benefit cost as of and for the year ended December 31, 2004 do not include any subsidies which might be received under the Act.

In September 2004, the Emerging Issues Task Force reached a consensus on Issue No. 04-8, *The Effect of Contingently Convertible Instruments on Diluted Earnings per Share* ("EITF 04-8"). The Task Force concluded that contingently convertible instruments in which conversion into common stock is based on meeting a market price contingency should be included in the computation of diluted earnings per share at issuance, rather than waiting until the specified share price is met. EITF 04-8 is effective for reporting periods ending after December 15, 2004 and is applied retroactively. While we have contingently convertible debt, EITF 04-8 has no impact on our computation of diluted earnings per share, because our contingently convertible debt has a conversion trigger which has been deemed to be non-substantive and thus these convertible notes have always been considered in our computation of diluted earnings per share.

In November 2004, the FASB issued Statement No. 151, *Inventory Costs—an amendment of ARB No. 43*, *Chapter 4*, which amends and clarifies existing accounting literature regarding abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This statement is effective for inventory costs incurred during fiscal years beginning after June 15, 2005, with earlier application permitted. The provisions of this statement are to be applied prospectively. We are presently evaluating the impact of this new standard.

In December 2004, the FASB issued Statement No. 123-R ("SFAS No. 123-R"), *Share-Based Payment*. This statement replaces SFAS No. 123, *Accounting for Stock-Based Compensation*, and supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees*, which we presently apply. SFAS No. 123-R will require compensation costs related to share-based payment transactions to be recognized in the consolidated financial statements (with limited exceptions). The amount of compensation cost will be measured based on the grant-date fair value of the equity or liability instruments issued. Compensation cost will be recognized over the period that an employee provides service in exchange for the award. This statement is effective as of the beginning of the first interim or annual reporting period that begins after June 15, 2005, with earlier adoption permitted. The adoption of this standard is not expected to have a material effect on our financial position, or liquidity.

In December 2004, the FASB issued Statement No. 153, *Exchanges of Nonmonetary Assets—an amendment of APB Opinion No. 29.* This statement amends APB No. 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. The provisions of this statement are effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005, with earlier application permitted. The provisions of this statement are to be applied prospectively. The adoption of this standard is not expected to have a material effect on our financial position, results of operations, or liquidity.

In December 2004, the FASB issued two FSP's that provide accounting guidance on how companies should account for the effect of the American Jobs Creation Act of 2004 (the "Jobs Act"), which was signed into law in October 2004. The Jobs Act could affect how companies report their deferred income tax balances. In FSP No. 109-1, the FASB concluded that the tax relief (special tax deduction for domestic manufacturing) from the Jobs Act should be accounted for as a "special deduction" instead of a tax rate reduction. FSP No. 109-2 allows a company additional time to evaluate the effects of the Jobs Act on any plan for reinvestment or repatriation of foreign earnings, provided that appropriate disclosures are made. These disclosures required by FSP No. 109-2 are included in Note 5 to our consolidated financial statements.

#### **Safe Harbor Statement**

From time to time, information provided by us, including but not limited to statements in this report, or other statements made by or on our behalf, may contain "forward-looking" information within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements involve a number of risks, uncertainties and contingencies, many of which are beyond our control, which may cause actual results, performance or achievements to differ materially from those anticipated. Set forth below are important factors that could cause our results, performance or achievements to differ materially from those in any forward-looking statements made by us or on our behalf:

# Factors relating to our business generally

Our business is cyclical and the recent decline in demand in the electronic component industry may resume and may become more pronounced.

From 2001 to 2003, we and others in the electronic and semiconductor component industry experienced a decline in product demand on a global basis, resulting in order cancellations and deferrals, lower average selling prices, and a material and adverse impact on our results of operations. This decline was primarily attributable to a slowing of growth in the personal computer and cellular telephone product markets. We and others in the industry saw indications of improvements in the economy and the electronic and semiconductor component industry in the first half of 2004, followed by a downtrend in the second half of the year. While we are anticipating that there will be an improved business climate in 2005, improvements in the economy and the electronic and semiconductor component industry may not materialize. The slowdown may resume and may become more pronounced. A slowdown in demand, as well as recessionary trends in the global economy, make it more difficult for us to predict our future sales and manage our operations, and could adversely impact our results of operations.

#### We have incurred and may continue to incur restructuring costs and associated asset write-downs.

To remain competitive, particularly when business conditions are difficult, we attempt to reduce our cost structure through restructuring activities. This includes acquisition-related restructuring, where we attempt to streamline the operations of companies we acquire and achieve synergies between our acquisitions and our existing businesses. It also includes restructuring our existing businesses, where we seek to eliminate redundant facilities and staff positions and move operations, where possible, to jurisdictions with lower labor costs. We recorded restructuring and severance costs, plus related asset write-downs, in each of 2001, 2002, 2003, and 2004 and expect to incur such expenses during 2005.

# In the past we have grown through acquisitions but this may not continue.

Our long-term historical growth in revenues and net earnings has resulted in large part from our strategy of expansion through acquisitions. We cannot assure you, however, that we will identify or successfully complete transactions with suitable acquisition candidates in the future. We also cannot assure you that acquisitions that we complete in the future will be successful. If an acquired business fails to operate as anticipated or cannot be successfully integrated with our other businesses, our results of operations, enterprise value, market value and prospects could all be materially and adversely affected.

#### Our debt levels have increased, which could adversely affect the perception in the financial markets of our financial condition.

Our outstanding debt increased from approximately \$141 million at the end of 2000 to approximately \$752 million at the end of 2004. While our debt levels decreased in 2004, the marketplace could react negatively to our current debt levels which in turn could affect our share price and also make it more difficult for us to obtain financing in the future.

#### To remain successful, we must continue to innovate.

Our future operating results are dependent on our ability to continually develop, introduce and market new and innovative products, to modify existing products, to respond to technological change and to customize certain products to meet customer requirements. There are numerous risks inherent in this process, including the risks that we will be unable to anticipate the direction of technological change or that we will be unable to develop and market new products and applications in a timely fashion to satisfy customer demands. If this occurs, we could lose customers and experience adverse effects on our financial condition and results of operations.

# Our ability to compete effectively with other companies depends, in part, on our ability to maintain the proprietary nature of our technology.

Protection of intellectual property often involves complex legal and factual issues. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We have applied, and will continue to apply, for patents covering our technologies and products, as we deem appropriate. However, our applications may not result in issued patents. Also, our existing patents and any future patents may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Others may independently develop similar or alternative technologies, design around our patented technologies or may challenge or seek to invalidate our patents.

The electronic components industry, particularly the discrete semiconductor sector, is characterized by litigation regarding patent and other intellectual property rights. We have on occasion been notified that we may be infringing patent and other intellectual property rights of others. In addition, customers purchasing components from us have rights to indemnification under certain circumstances if such components violate the intellectual property rights of others. Further, we have observed that in the current electronic components industry business environment, companies have become more aggressive in asserting and defending patent claims against competitors. We will continue to vigorously defend our intellectual property rights, and may become party to disputes regarding patent licensing and cross patent licensing. Although licenses are generally offered in such situations and we have successfully resolved these situations in the past, there can be no assurance that we will not be subject to future litigation alleging intellectual property rights infringement, or that we will be able to obtain licenses on acceptable terms. An unfavorable outcome regarding one of these matters could have a material adverse effect on our business and operating results.

# We have begun to invest in start-ups but our investments may not prove successful.

We believe that investment in new technologies that are related to our core businesses is important to position us for the future. Accordingly, we have begun a program of investing in technology start-up enterprises, in which we may acquire a controlling or non-controlling interest but whose technology would be available to be commercialized by us. An example is our recent acquisition of all of the assets of RFWaves, Ltd. There are numerous risks in investments of this nature including the limited operating history of such start-up entities, their need for capital and their limited or absence of production experience, as well as the risk that their technologies may prove ineffective or fail to gain acceptance in the market place. Their can be no assurance, therefore, that our investments in start-up enterprises will prove successful.

#### <u>Future acquisitions could require us to issue additional indebtedness or equity.</u>

If we were to undertake a substantial acquisition for cash, the acquisition would likely need to be financed in part through bank borrowings or the issuance of public or private debt. This acquisition financing would likely decrease our ratio of earnings to fixed charges and adversely affect other leverage criteria. Under our existing credit facility, we are required to obtain the lenders' consent for certain additional debt financing and to comply with other covenants including the application of specific financial ratios. We are also restricted from paying cash dividends on our capital stock. We cannot assure you that the necessary acquisition financing would be available to us on acceptable terms when required. If we were to undertake an acquisition for equity, the acquisition may have a dilutive effect on the interests of the holders of our common stock.

# Our results are sensitive to raw material availability, quality and cost.

Many of our products require the use of raw materials that are produced in only a limited number of regions around the world or are available from only a limited number of suppliers. Our results of operations may be materially and adversely affected if we have difficulty obtaining these raw materials, the quality of available raw materials deteriorates or there are significant price increases for these raw materials. For example, the prices for tantalum and palladium, two raw materials that we use in our capacitors, are subject to fluctuation. For periods in which the prices of these raw materials are rising, we may be unable to pass on the increased cost to our customers which would result in decreased margins for the products in which they are used. For periods in which the prices are declining, we may be required to write down our inventory carrying cost of these raw materials, since we record our inventory at the lower of cost or market. Depending on the extent of the difference between market price and our carrying cost, this write-down could have a material adverse effect on our net earnings. We recorded substantial write-downs of tantalum and palladium in the economic downturn from 2001 to 2003, and recorded more modest write-downs in 2004.

From time to time there have been short-term market shortages of raw materials. While these shortages have not historically adversely affected our ability to increase production of products containing tantalum and palladium, they have historically resulted in higher raw material costs for us. We cannot assure you that any of these market shortages in the future would not adversely affect our ability to increase production, particularly during periods of growing demand for our products.

# Our backlog is subject to customer cancellation.

As of December 31, 2004, our backlog was \$439.9 million. Many of the orders that comprise our backlog may be canceled by our customers without penalty. Our customers may on occasion double and triple order components from multiple sources to ensure timely delivery when backlog is particularly long. They often cancel orders when business is weak and inventories are excessive, a situation that we have experienced during periods of economic slowdown. Therefore, we cannot be certain that the amount of our backlog does not exceed the level of orders that will ultimately be delivered. Our results of operations could be adversely impacted if customers cancel a material portion of orders in our backlog.

# We face intense competition in our business, and we market our products to an increasingly concentrated group of customers.

Our business is highly competitive worldwide, with low transportation costs and few import barriers. We compete principally on the basis of product quality and reliability, availability, customer service, technological innovation, timely delivery and price. The electronics components industry has become increasingly concentrated and globalized in recent years and our major competitors, some of which are larger than us, have significant financial resources and technological capabilities.

Our customers have become increasingly concentrated in recent years, and as a result, their buying power has increased and they have had greater ability to negotiate favorable pricing. This trend has adversely affected our average selling prices, particularly for commodity components.

#### We may not have adequate facilities to satisfy future increases in demand for our products.

Our business is cyclical and in periods of a rising economy, we may experience intense demand for our products. During such periods, we may have difficulty expanding our manufacturing to satisfy demand. Factors which could limit such expansion include delays in procurement of manufacturing equipment, shortages of skilled personnel and capacity constraints at our facilities. If we are unable to meet our customers' requirements and our competitors sufficiently expand production, we could lose customers and/or market share. This loss could have an adverse effect on our financial condition and results of operations.

# Future changes in our environmental liability and compliance obligations may harm our ability to operate or increase costs.

Our manufacturing operations, products and/or product packaging are subject to environmental laws and regulations governing air emissions, wastewater discharges, the handling, disposal and remediation of hazardous substances, wastes and certain chemicals used or generated in our manufacturing processes, employee health and safety labeling or other notifications with respect to the content or other aspects of our processes, products or packaging, restrictions on the use of certain materials in or on design aspects of our products or product packaging and responsibility for disposal of products or product packaging. We establish reserves for specifically identified potential environmental liabilities which we believe are adequate. Nevertheless, we often unavoidably inherit certain pre-existing environmental liabilities, generally based on successor liability doctrines. Although we have never been involved in any environmental matter that has had a material adverse impact on our overall operations, there can be no assurance that in connection with any past or future acquisition we will not be obligated to address environmental matters that could have a material adverse impact on our operations. In addition, more stringent environmental regulations may be enacted in the future, and we cannot presently determine the modifications, if any, in our operations that any such future regulations might require, or the cost of compliance with these regulations. In order to resolve liabilities at various sites, we have entered into various administrative orders and consent decrees, some of which may be, under certain conditions, reopened or subject to renegotiations.

# Our products may experience a reduction in product classification levels under various military specifications.

We have qualified certain of our products under various military specifications, approved and monitored by the United States Defense Electronic Supply Center, and under certain European military specifications. These products are assigned certain classification levels. In order to maintain the classification level of a product, we must continuously perform tests on the product and the results of these tests must be reported to governmental agencies. If any of our products fails to meet the requirements of the applicable classification level, that product's classification may be reduced to a lower level. A decrease in the classification level for any of our products with a military application could have an adverse impact on the net sales and earnings attributable to that product.

<u>Our future success is substantially dependent on our ability to attract and retain highly qualified technical, managerial, marketing, finance and administrative personnel.</u>

Rapid changes in technologies, frequent new product introductions, and declining average selling prices over product life cycles require us to attract and retain highly qualified personnel to develop technological innovations and bring them to market on a timely basis. Our complex operations also require us to attract and retain highly qualified administrative personnel in functions such as legal, tax, accounting, financial reporting, auditing, and treasury. The market for personnel with such qualifications is highly competitive. While we have employment agreements with six of our executives, we have not entered into employment agreements with all of our key personnel.

Management's assessment of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act of 2002, identified a material weakness regarding the adequacy of our finance organization.

The loss of the services of or the failure to effectively recruit qualified personnel could have a material adverse effect on our business.

# Factors relating to Vishay's operations outside the United States

# We obtain substantial benefits by operating in Israel, but these benefits may not continue.

We have increased our operations in Israel over the past several years. The low tax rates in Israel applicable to earnings of our operations in that country, compared to the rates in the United States, have had the general effect of increasing our net earnings, although this was not the case during 2002, 2003, and 2004 due to losses on purchase commitments. Also, we have benefited from employment incentive grants made by the Israeli government. In 2002, the Israeli government suspended payment on one of these grants after we were forced to lay off a significant number of employees as a result of the recent economic downturn. Although we reached agreement with the Israeli government to resume payment on this grant, there can be no assurance that we will maintain our eligibility for this or other existing project grants. There can also be no assurance in the future the Israeli government will continue to offer new grant and tax incentive programs applicable to us or that, if it does, such programs will provide the same level of benefits we have historically received or that we will continue to be eligible to take advantage of them. Any significant increase in the Israeli tax rates or reduction or elimination of the Israeli grant programs that have benefited us could have an adverse impact on our results of operations.

We attempt to improve profitability by operating in countries in which labor costs are low, but the shift of operations to these regions may entail considerable expense.

Our strategy is aimed at achieving significant production cost savings through the transfer and expansion of manufacturing operations to and in countries with lower production costs, such as the Czech Republic, Hungary, India, Israel, Malaysia, Mexico, the People's Republic of China, and the Philippines. In this process, we may experience under-utilization of certain plants and factories in high-labor-cost regions and capacity constraints in plants and factories located in low-labor-cost regions. This under-utilization may result initially in production inefficiencies and higher costs. These costs include those associated with compensation in connection with work force reductions and plant closings in the higher-labor-cost regions, and start-up expenses, manufacturing and construction delays, and increased depreciation costs in connection with the initiation or expansion of production in lower-labor-cost regions. In addition, as we implement transfers of certain of our operations we may experience strikes or other types of labor unrest as a result of lay-offs or termination of our employees in high-labor-cost countries.

# We are subject to the risks of political, economic and military instability in countries outside the United States in which we operate.

We have operations outside the United States, and approximately 74% of our revenues during 2004 were derived from sales to customers outside the United States. Some of the countries in which we operate have in the past experienced and may continue to experience political, economic and military instability or unrest. These conditions could have an adverse impact on our ability to operate in these regions and, depending on the extent and severity of these conditions, could materially and adversely affect our overall financial condition and operating results. We have never experienced any material interruption in our Israeli operations in our 34 years of operations there, in spite of several Middle East crises, including wars. However, we might be adversely affected if events were to occur in the Middle East that interfered with our operations in Israel.

# Our business was affected by the outbreak of SARS in 2003 and the effects of that outbreak may recur.

The outbreak of severe acute respiratory syndrome, or SARS, that began in the People's Republic of China adversely affected our business during the first six months of 2003, particularly in Asia where we derive approximately 35% to 40% of our revenue. This impact included disruptions in the operations of our customers, a slowdown in customer orders and reduced sales in certain end markets. If an outbreak of SARS or a like disease were to recur on a comparable scale in Asia or elsewhere, we could experience similar disruptions to our business.

#### General Economic and Business Factors

In addition to the factors relating specifically to our business, a variety of other factors relating to general conditions could cause actual results, performance, or achievements to differ materially from those expressed in any of our forward-looking statements. These factors include:

- overall economic and business conditions;
- competitive factors in the industries in which we conduct our business;
- changes in governmental regulation;
- changes in tax requirements, including tax rate changes, new tax laws, and revised tax law interpretations;
- changes in generally accepted accounting principles or interpretations of those principles by governmental agencies and self-regulatory groups;
- · interest rate fluctuations, foreign currency rate fluctuations, and other capital market conditions; and
- economic and political conditions in international markets, including governmental changes and restrictions on the ability to transfer capital
  across borders.

Our common stock, traded on the New York Stock Exchange, has in the past experienced, and may continue to experience, significant fluctuations in price and volume. We believe that the financial performance and activities of other publicly traded companies in the electronic component and semiconductor industries could cause the price of our common stock to fluctuate substantially without regard to our operating performance.

We operate in a continually changing business environment, and new factors emerge from time to time. Other unknown and unpredictable factors also could have a material adverse effect on our future results, performance, or achievements.

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

# **Market Risk Disclosure**

Our cash flows and earnings are subject to fluctuations resulting from changes in foreign currency exchange rates and interest rates. We manage our exposure to these market risks through internally established policies and procedures and, when deemed appropriate, through the use of derivative financial instruments. Our policies do not allow speculation in derivative instruments for profit or execution of derivative instrument contracts for which there are no underlying exposures. We do not use financial instruments for trading purposes and we are not a party to any leveraged derivatives. We monitor our underlying market risk exposures on an ongoing basis and believe that we can modify or adapt our hedging strategies as needed.

We are exposed to changes in U.S. dollar LIBOR interest rates on our floating rate revolving credit facility. At December 31, 2004, there was \$11 million outstanding under this facility. On a selective basis, we from time to time enter into interest rate swap or cap agreements to reduce the potential negative impact that increases in interest rates could have on our outstanding variable rate debt. The impact of interest rate instruments on our results of operations in each of the three years ended December 31, 2004, 2003, and 2002 was not significant. See Notes 6 and 14 to our consolidated financial statements for components of our long-term debt and interest rate swap arrangements.

In August 1998, we entered into six interest rate swap agreements with a total notional amount of \$300 million to manage interest rate risk related to our multicurrency revolving line of credit. As of December 31, 2002, five of these six agreements had been terminated. The remaining agreement had a notional amount of \$100 million and required us to make payments to the counterparty at variable rates based on USD-LIBOR-BBA rates. This agreement expired in 2003. During the year ended December 31, 2003, we had a pretax gain of approximately \$3.8 million related to the expiration of the final swap agreement. During the year ended December 31, 2002, we recorded pretax losses of \$0.1 million relating to an ineffective hedge for a portion of time relating to an interest rate swap agreement. See Note 14 to our consolidated financial statements.

# Foreign Exchange Risk

We are exposed to foreign currency exchange rate risks. Our significant foreign subsidiaries are located in Germany, France, Israel and Asia. In most locations, we have introduced a "netting" policy where subsidiaries pay all intercompany balances within thirty days. As of December 31, 2004, we did not have any outstanding foreign currency forward exchange contracts.

In the normal course of business, our financial position is routinely subjected to a variety of risks, including market risks associated with interest rate movements, currency rate movements on non-U.S. dollar denominated assets and liabilities and collectibility of accounts receivable.

# Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required by this Item are included herein, commencing on page F-1 of this report.

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

None.

# **Item 9A.** CONTROLS AND PROCEDURES

# **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

An evaluation was performed under the supervision and with the participation of our management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on that evaluation and the material weakness described below, our CEO and CFO concluded that our disclosure controls and procedures were not effective as of the end of the period covered by this annual report.

# Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2004 based on the framework set forth in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In making its assessment, our management evaluated the structure and effectiveness of our worldwide finance organization and the design and operating effectiveness of controls surrounding the financial statement close processes. Management determined that certain of our operating locations have insufficient staffing of the accounting and financial reporting function. This inadequate level of staffing results in certain accounting processes not being performed on a timely basis. These issues, when combined with an inadequate level of finance staffing at our corporate headquarters, reduce the effectiveness of the corporate finance staff in its monitoring and evaluation of the financial position and operating results of the Company, increasing the risk of a financial statement misstatement.

As a result of the items described above, we and our independent registered public accounting firm, Ernst & Young LLP, identified adjustments during the audit process which have been recorded in our consolidated financial statements. These adjustments should have been identified and resolved by us as part of our normal operating procedures. The adjustments primarily were reflected in accounting for accruals, purchase commitments, fixed asset account reconciliations, and intercompany reconciliations among our wholly owned subsidiaries. The necessary adjustments were all recorded prior to the public release of our financial results on February 8, 2005 and do not affect previously reported results.

Management has determined that this control deficiency represents a "material weakness" as defined in Public Company Accounting Oversight Board Auditing Standard No. 2. Although no material misstatements were identified, until this deficiency is remediated, there is more than a remote likelihood that a material misstatement to the annual or interim financial statements could occur and not be prevented or detected by our controls in a timely manner.

As a result of this material weakness, our management concluded that our internal control over financial reporting was not effective as of December 31, 2004.

Despite this material weakness, management believes that our consolidated financial statements as of December 31, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, presented herein, are fairly stated in all material respects. Ernst & Young LLP has audited our consolidated financial statements as of December 31, 2004 and 2003, and for each of the three years in the period ended December 31, 2004, as stated in their report which is included herein on page F-2.

Ernst & Young LLP has issued an attestation report on management's assessment of our internal control over financial reporting, as stated in their report which is included herein on page F-3.

#### **Actions to Remediate Material Weakness**

Management, in particular the CEO and CFO, is committed to taking the necessary steps to address and correct the identified weakness through developing processes and enhancing the finance structure.

Management has also instituted interim measures to ensure the accuracy of reported financial results, including redirecting existing staff resources to focus on the areas identified and authorizing the use of consultants and temporary employees where necessary.

Management believes that these interim measures, combined with additional interim procedures and permanent staff resources to be added to the finance group during the next year, will ensure that we report financial data which is fairly stated in all material respects during the interim fiscal periods of 2005.

# **Changes in Internal Control Over Financial Reporting**

Except as described above, there were no changes in our internal control over financial reporting during the quarter ended December 31, 2004 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

# Item 9B. OTHER INFORMATION

None.

#### **PART III**

# Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

We have a code of ethics applicable to our chief executive officer, chief financial officer, principal accounting officer or controller and financial managers. The text of this code has been posted on our website. To view the code, go to our website at ir.vishay.com and click on Corporate Governance. You can obtain a printed copy of this code, free of charge, by contacting us at the following address:

Corporate Investor Relations Vishay Intertechnology, Inc. 63 Lincoln Highway Malvern, PA 19355-2143

It is the intention of the Company to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to, or any waiver from, a provision of this code by posting such information on our website, at the aforementioned address and location.

Information required under this Item with respect to our Executive Officers is set forth in Part I, Item 4A hereof under the caption, "Executive Officers of the Registrant."

Other information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2004, our most recent fiscal year end, and is incorporated herein by reference.

# Item 11. EXECUTIVE COMPENSATION

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2004, our most recent fiscal year end, and is incorporated herein by reference.

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

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2004, our most recent fiscal year end, and is incorporated herein by reference.

# Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2004, our most recent fiscal year end, and is incorporated herein by reference.

# Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required under this Item is contained in our definitive proxy statement, which will be filed within 120 days of December 31, 2004, our most recent fiscal year end, and is incorporated herein by reference.

# **PART IV**

# Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

# (a) Documents Filed as Part of Form 10-K

# 1. <u>Financial Statements</u>

The Consolidated Financial Statements for the year ended December 31, 2004 are filed herewith. See Index to the Consolidated Financial Statements on page F-1 of this report.

# 2. Financial Statement Schedules

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

# 3. Exhibits

- 2.1 Share Sale and Purchase Agreement between Phoenix Acquisition Company S.ar.l; Other Investors (as defined); Mezzanine Lenders (as defined); Vishay Intertechnology, Inc.; Vishay Europe GmbH; and BCcomponents International B.V., dated as of November 10, 2002. Incorporated by reference to Exhibit 2.1 to Form 8-K filed December 23, 2002.
- Amendment to the Share Sale and Purchase Agreement between Phoenix Acquisition Company S.ar.l; Other Investors (as defined); Mezzanine Lenders (as defined); Vishay Intertechnology, Inc.; Vishay Europe GmbH; and BCcomponents International B.V., dated as of December 4, 2002. Incorporated by reference to Exhibit 2.2 to Form 8-K filed December 23, 2002.
- 3.1 Composite Amended and Restated Certificate of Incorporation of Vishay Intertechnology, Inc. dated August 3, 1995; Certificate of Amendment of Composite Amended and Restated Certificate of Incorporation dated May 22, 1997; Certificate of Amendment of the Amended and Restated Certificate of Incorporation dated November 2, 2001; and Certificate of Amendment of the Amended and Restated Certificate of Incorporation dated July 29, 2003. Incorporated by reference to Exhibit 3.1 to Amendment No. 2 to our Registration Statement on Form S-3, File No. 333-102507, filed on October 3, 2003.
- Amended and Restated Bylaws of Registrant. Incorporated by reference to Exhibit 3.1 to our quarterly report on Form 10-Q for the quarter ended March 31, 2001.
- 4.1 Indenture dated as of June 4, 2001 between Vishay Intertechnology, Inc. and Bank of New York as Trustee. Incorporated by reference to Exhibit 4.1 to our current report on Form 8-K filed on June 18, 2001 except that clause (x) of Section 5 thereof is corrected to read "(x) 0.0625% of the average LYON Market Price for the Five Day Period with respect to such Contingent Interest Period and".
- 4.2 Indenture, dated as of August 6, 2003, by and between Vishay Intertechnology, Inc. and Wachovia Bank, National Association.

  Incorporated by reference to Exhibit 4.1 to our Registration Statement on Form S-3 (No. 333-110259) filed on November 5, 2003.

Vishay Intertechnology Section 162(m) Cash Bonus Plan. Incorporated by reference to Annex B to our Proxy Statement, dated April 7, 10.1 2004, for our 2004 Annual Meeting of Stockholders. Vishay Intertechnology Senior Executive Phantom Stock Plan. Incorporated by reference to Annex C to our Proxy Statement, dated 10.2 April 7, 2004, for our 2004 Annual Meeting of Stockholders. 10.3 Second Amended and Restated Vishay Intertechnology, Inc. Long Term Revolving Credit Agreement and Consent, made as of July 31, 2003, by and among Vishay Intertechnology, Inc., the Permitted Borrowers (as defined), the Lenders signatory thereto and Comerica Bank, as Co-lead Arranger Co-Book Running Manager and Administrative agent, et al. Incorporated by reference to Exhibit 10.2 to our annual report on Form 10-K for the year ended December 31, 2003. Consent and First Amendment to Vishay Intertechnology, Inc. Second Amended and Restated Long Term Revolving Credit Agreement, 10.4 dated as of May 14, 2004. Incorporated by reference to Exhibit 10.1 to our current report on Form 8-K filed on May 25, 2004. 10.5 Consent and Second Amendment to Vishay Intertechnology, Inc. Second Amended and Restated Long Term Revolving Credit Agreement, dated as of August 6, 2004. 10.6 Vishay Intertechnology, Inc. 1997 Stock Option Program. Incorporated by reference to our Definitive Proxy Statement on Schedule 14A filed April 16, 1998. 10.7 Vishay Intertechnology, Inc. 1998 Stock Option Program. Incorporated by reference to our Definitive Proxy Statement on Schedule 14A filed April 16, 1998. 10.8 General Semiconductor, Inc. Amended and Restated 1998 Long-Term Incentive Plan as amended on February 7, 2001. Incorporated by reference to Exhibit 10.9 to General Semiconductor's annual report on Form 10-K for the year ended December 31, 2000. 10.9 Money Purchase Plan Agreement of Measurements Group, Inc. Incorporated by reference to Exhibit 10(a)(6) to Amendment No. 1 to our Registration Statement on Form S-7 (No. 2-69970). Agreement Amending Supply Agreements among Cabot Corporation through its Cabot Performance Materials Division, Vishay Sprague, 10.10 Inc. and Vishay Intertechnology, Inc. dated as of June 6, 2002. Incorporated by reference to Exhibit 10.10 to our annual report on Form 10-K for the year ended December 31, 2002. 10.11 Severance and General Release Agreement, dated November 4, 2003, between Vishay Intertechnology, Inc. and Avi D. Eden. Incorporated by reference to Exhibit 10.10 to our annual report on Form 10-K for the year ended December 31, 2003. Consulting and Non-Competition Agreement, dated November 4, 2003, between Vishay Intertechnology, Inc. and Avi D. Eden. 10.12 Incorporated by reference to Exhibit 10.11 to our annual report on Form 10-K for the year ended December 31, 2003. 10.13 Employment agreement, between Vishay Intertechnology, Inc. and Dr. Felix Zandman. Incorporated by reference to Exhibit 10.1 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004. 10.14 Employment agreement, between Vishay Israel Ltd. (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.) and Marc Zandman. Incorporated by reference to Exhibit 10.2 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004.

10.15	Employment agreement, between Vishay Europe GmbH (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.) and Dr. Gerald Paul. Incorporated by reference to Exhibit 10.3 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004.
10.16	Employment agreement, between Vishay Intertechnology, Inc. and Richard N. Grubb. Incorporated by reference to Exhibit 10.4 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004.
10.17	Employment agreement, between Vishay Israel Ltd. (an indirect wholly owned subsidiary of Vishay Intertechnology, Inc.) and Ziv Shoshani. Incorporated by reference to Exhibit 10.5 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004.
10.18	Employment agreement, between Vishay Intertechnology, Inc. and Robert A. Freece. Incorporated by reference to Exhibit 10.6 to our quarterly report on Form 10-Q for the fiscal quarter ended October 2, 2004.
21	Subsidiaries of the Registrant.
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Certification pursuant to Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 – Chief Executive Officer.
31.2	Certification pursuant to Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 – Chief Financial Officer.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 – Chief Executive Officer.
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 – Chief Financial Officer.

# **SIGNATURES**

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

VISHAY INTERTECHNOLOGY, INC.

By: /s/ Dr. Gerald Paul

Dr. Gerald Paul President, Chief Executive Officer, and Chief Operating Officer

March 15, 2005

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

Signature	Title			
Principal Executive Officer:				
/s/ Dr. GERALD PAUL	President, Chief Executive Officer,	March 15, 2005		
Dr. Gerald Paul	Chief Operating Officer, and Director			
Principal Financial and Accounting Officer:				
/s/ RICHARD N. GRUBB	Executive Vice President, Treasurer,	March 15, 2005		
Richard N. Grubb	and Chief Financial Officer			
Board of Directors:				
/s/ Dr. Felix Zandman	Chairman of the Board of Directors	March 15, 2005		
Dr. Felix Zandman				
/s/ MARC ZANDMAN	Vice-Chairman of the Board of Directors	March 15, 2005		
Marc Zandman				
/s/ PHILIPPE GAZEAU	Director	March 15, 2005		
Philippe Gazeau				
/s/ ZVI GRINFAS	Director	March 15, 2005		
Zvi Grinfas				
/s/ Eli Hurvitz	Director	March 15, 2005		
Eli Hurvitz				
/s/ ABRAHAM LUDOMIRSKI	Director	March 15, 2005		
Abraham Ludomirski				

/s/ Ziv Shoshani	Director	March 15, 2005
Ziv Shoshani		
/s/ MARK I. SOLOMON	Director	March 15, 2005
Mark I. Solomon		
/s/ Thomas C. Wertheimer	Director	March 15, 2005
Thomas C. Wertheimer		
/s/ Ruta Zandman	Director	March 15, 2005
Ruta Zandman		

# Vishay Intertechnology, Inc.

# Index to Consolidated Financial Statements

Reports of Independent Registered Public Accounting Firm	F-2
Audited Consolidated Financial Statements	
Consolidated Balance Sheets	F-4
Consolidated Statements of Operations	F-6
Consolidated Statements of Cash Flows	F-7
Consolidated Statements of Stockholders' Equity	F-8
Notes to Consolidated Financial Statements	F-10

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders of Vishay Intertechnology, Inc.:

We have audited the accompanying consolidated balance sheets of Vishay Intertechnology, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, cash flows, and stockholders' equity for each of the three years in the period ended December 31, 2004. These 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Vishay Intertechnology, Inc. at December 31, 2004 and 2003, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Vishay Intertechnology, Inc.'s internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2005 expressed an unqualified opinion on management's assessment and an adverse opinion on the effectiveness of internal control over financial reporting.

/s/ ERNST & YOUNG LLP

Philadelphia, Pennsylvania March 14, 2005

# REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Board of Directors and Stockholders of Vishay Intertechnology, Inc.:

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that Vishay Intertechnology, Inc. did not maintain effective internal control over financial reporting as of December 31, 2004, because of the effect of the material weakness related to inadequate staffing of the accounting and financial reporting function which resulted in certain accounting processes not being performed on a timely basis, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Vishay Intertechnology, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

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

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

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

A material weakness is a control deficiency, or combination of control deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. The following material weakness has been identified and included in management's assessment. Management determined that certain of its operating locations have insufficient staffing of the accounting and financial reporting function. This inadequate level of staffing results in certain accounting processes not being performed on a timely basis. These issues, when combined with an inadequate level of finance staffing at the Company's corporate headquarters, reduce the effectiveness of the corporate finance staff in its monitoring and evaluation of the financial position and operating results of the Company, increasing the risk of a financial statement misstatement. As a result of the items described above, adjustments were identified during the audit process which have been recorded in the consolidated financial statements. The adjustments primarily were reflected in accounting for accruals, purchase commitments, fixed asset account reconciliations, and intercompany reconciliations. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2004 consolidated financial statements, and this report does not affect our report dated March 14, 2005 on those financial statements.

In our opinion, management's assessment that Vishay Intertechnology, Inc. did not maintain effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO control criteria. Also, in our opinion, because of the effect of the material weakness described above on the achievement of the objectives of the control criteria, Vishay Intertechnology, Inc. has not maintained effective internal control over financial reporting as of December 31, 2004, based on the COSO control criteria.

/s/ ERNST & YOUNG LLP

Philadelphia, Pennsylvania March 14, 2005

Consolidated Balance Sheets

(In thousands, except share amounts)

	 December 31, 2004		ecember 31, 2003
Assets			
Current assets:			
Cash and cash equivalents	\$ 632,700	\$	555,540
Accounts receivable, net of allowances for doubtful accounts of \$13,669 and \$13,704, respectively	351,710		368,087
Inventories:			
Finished goods	155,195		171,447
Work in process	150,738		154,532
Raw materials	212,040		189,413
Deferred income taxes	43,786		48,471
Prepaid expenses and other current assets	 136,251		143,610
Total current assets	1,682,420		1,631,100
Property and equipment, at cost:			
Land	97,398		110,021
Buildings and improvements	428,829		375,178
Machinery and equipment	1,668,225		1,614,265
Construction in progress	75,974		85,169
Allowance for depreciation	(1,098,611)		(971,033)
	 <del></del>		
	1,171,815		1,213,600
Goodwill	1,435,121		1,466,714
Other intangible assets, net	127,797		135,150
Other assets	 221,437		119,796
Total assets	\$ 4,638,590	\$	4,566,360

Continues on following page.

Consolidated Balance Sheets (continued) (*In thousands, except share amounts*)

	D	December 31, 2004		ecember 31, 2003
Liabilities and stockholders' equity				
Current liabilities:				
Notes payable to banks	\$	3,727	\$	17,511
Trade accounts payable		131,243		158,182
Payroll and related expenses		131,128		111,842
Other accrued expenses		221,958		282,279
Income taxes		29,631		10,112
Current portion of long-term debt		51		1,282
Total current liabilities		517,738		581,208
Long-term debt less current portion		752,145		836,606
Deferred income taxes		14,017		35,036
Deferred grant income		18,723		27,659
Other liabilities		235,923		248,652
Accrued pension and other postretirement costs		232,142		239,950
Minority interest		94,567		83,215
Commitments and contingencies				
Stockholders' equity:				
Preferred stock, par value \$1.00 per share: authorized - 1,000,000 shares; none issued				
Common stock, par value \$0.10 per share: authorized - 300,000,000 shares; 151,423,558 and 144,668,594 shares outstanding after deducting 332,850		4= 440		44.40
shares in treasury		15,142		14,467
Class B convertible common stock, par value \$0.10 per share: authorized - 40,000,000 shares; 14,679,440 and 15,382,296 shares outstanding after deducting 279,453 shares in				
treasury		1,468		1,538
Capital in excess of par value		2,028,253		1,918,785
Retained earnings		594,892		550,196
Unearned compensation		(152)		(306)
Accumulated other comprehensive income		133,732		29,354
		2,773,335		2,514,034
	\$	4,638,590	\$	4,566,360

Consolidated Statements of Operations (In thousands, except for per share)

Years	ended	Decem	her 31.

	2004		2003	2002		
Net sales	\$ 2,413,	576 \$	2,170,597 \$	1,822,813		
Costs of products sold	1,842,	80	1,690,267	1,454,540		
Loss on purchase commitments	16,0	13	11,392	106,000		
Gross profit	554,1	83	468,938	262,273		
Selling, general, and administrative expenses	386,3	46	380,011	310,509		
Purchased in-process research and development	1,1	00	_	_		
Restructuring and severance costs	47,2	:50	28,546	18,607		
Asset write-downs	27,7	96	1,014	12,363		
Operating income (loss)	92,4	91	59,367	(79,206)		
Other income (expense):						
Interest expense	(34,2	52)	(39,226)	(29,503)		
Loss on extinguishment of debt	-	_	(9,910)			
Gain on insurance claim	-	_	33,906	_		
Other	11,	78	2,289	8,664		
	(22,	74)	(12,941)	(20,839)		
Earnings (loss) before taxes and minority interest	70,	17	46,426	(100,045)		
Income tax provision (benefit)	13,	29	11,528	(16,900)		
Minority interest	11,	92	8,056	9,469		
Net earnings (loss)	\$ 44,0	\$96 \$	26,842 \$	(92,614)		
Basic earnings (loss) per share	<b>\$</b> 0	.27 \$	0.17 \$	(0.58)		
Diluted earnings (loss) per share	\$ 0	.27 \$	0.17 \$	(0.58)		
Weighted average shares outstanding - basic	163,	01	159,631	159,413		
Weighted average shares outstanding - diluted	165,9	38	160,443	159,413		

Consolidated Statements of Cash Flows (*In thousands*)

Voore	ended	Docom	hor	21	

		rears c	ilidea December 51	,	
	 2004		2003		2002
Operating activities					
Net earnings (loss)	\$ 44,696	\$	26,842	\$	(92,614)
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:					
Depreciation and amortization	202,580		194,055		180,748
Loss on disposal of property and equipment	1,697		2,521		296
Minority interest in net earnings of consolidated subsidiaries	11,592		8,056		9,469
Purchased in-process research and development	1,500		_		_
(Gain) loss on interest rate swap	_		(3,783)		115
Accretion of interest on convertible debentures	5,138		8,396		9,325
Write-downs of tantalum and palladium inventories	400		6,991		27,400
Inventory write-offs for obsolescence	32,226		54,285		37,120
Changes in purchase commitment liability	(24,890)		(16,608)		106,000
Gain on insurance claim	_		(33,906)		_
Loss on extinguishment of debt	_		9,910		_
Asset write-downs	27,296		1,014		12,363
Deferred grant income	(8,936)		(12,359)		(17,322)
Prepayment to Tower Semiconductor	(20,000)				
Other	1,156		(24,307)		(27,595)
Changes in operating assets and liabilities, net of effects of businesses acquired:	_,		(= 1,001)		(=:,===)
Accounts receivable	30,526		(5,634)		102,322
Inventories	(35,292)		(30,448)		42,298
Prepaid expenses and other current assets	17,328		51,367		6,257
Accounts payable	(30,280)		25,474		455
Other current liabilities	(23,653)		(6,110)		(29,766)
Other current mannacs	 (25,055)		(0,110)		(23,700)
Net cash provided by operating activities	 233,084		255,756		366,871
Investing activities					
Capital expenditures	(158,627)		(126,635)		(110,074)
Proceeds from sale of property and equipment	10,446		19,349		20,621
Purchase of software license	(4,500)		_		_
Purchase of businesses, net of cash acquired	(24,892)		(41,161)		(278,735)
Net cash used in investing activities	(177,573)		(148,447)		(368,188)
Financing activities	 				
Proceeds from long-term borrowings, net of issuance costs	87		484,206		201
Principal payments on long-term debt	(3,351)		(284,595)		(17,217)
Net borrowings (payments) on revolving credit lines	11,000		(111,000)		(14,000)
Net changes in short-term borrowings	(13,700)		(316)		(10,452)
Stock issuance costs	(163)		_		_
Proceeds from stock options exercised	9,185		4,740		3,161
Net cash provided by (used in) financing activities	3,058		93,035		(38,307)
Effect of exchange rate changes on cash and cash equivalents	 18,591		15,258		12,447
Increase (decrease) in cash and cash equivalents	 77,160		215,602		(27,177)
Cash and cash equivalents at beginning of year	555,540		339,938		367,115
Cash and cash equivalents at end of year	\$ 632,700	\$	555,540	\$	339,938

Consolidated Statements of Stockholders' Equity (In thousands, except share amounts)

	Common Stock	Class B Convertible Common Stock	Convertible Capital in Excess of		Unearned Compensation	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity	
Balance at December 31, 2001	\$ 14,38	0 \$ 1,550	\$ 1,865,979	\$ 615,968	\$ (921)	\$ (130,411) \$	2,366,545	
Net loss	_	_	_	(92,614)	_		(92,614)	
Foreign currency translation adjustment	_	_	_		_	64,343	64,343	
Minimum pension liability adjustment	_	_	_	_	_	(23,230)	(23,230)	
Loss on derivative financial instruments	_	_	_	_	_	(1,817)	(1,817)	
Comprehensive loss							(53,318)	
Stock issued (127,270 shares)	1	1 —	2,124	_	(135)	_	2,000	
Stock options exercised (260,720 shares)	2	6 —	3,135	_	_	_	3,161	
Conversions from Class B to common								
(113,053 shares)	1	2 (12	<u> </u>	_	_	_	_	
Warrants issued – BCcomponents								
acquisition	_	_	39,462	_		_	39,462	
Tax effects relating to stock plan	_	_	294	_	_	_	294	
Amortization of unearned compensation		_		<del>_</del>	643		643	
Balance at December 31, 2002	14,42	9 1,538	1,910,994	523,354	(413)	(91,115)	2,358,787	
Net earnings	_	_	_	26,842	_	_	26,842	
Foreign currency translation adjustment	_	_	_	_	_	111,369	111,369	
Minimum pension liability adjustment	_	_	_	_	_	5,016	5,016	
Unrealized gain (loss) on available for sale								
securities	_	_	_	_	_	1,622	1,622	
Gain on derivative financial instruments	_	_	_	_	_	2,462	2,462	
Comprehensive income							147,311	
Stock issued (14,000 shares)		2 —	212	_	(214)		_	
Stock options exercised (356,313 shares)	3		4,704	_		_	4,740	
Fair value of modifications to nonemployee		-	.,				.,	
stock options	_	_	1,776	_	_	_	1,776	
Tax effects relating to stock plan	_	_	1,099	_	_	_	1,099	
Conversions from Class B to common			,				,	
(1,018 shares)	_	_	_	_		_		
Amortization of unearned compensation				_	321		321	
Balance at December 31, 2003	14,46	7 1,538	1,918,785	550,196	(306)	29,354	2,514,034	

Continues on following page.

Consolidated Statements of Stockholders' Equity (In thousands, except share amounts)

	 Common Stock	Class B Convertible Capital in Common Excess of Stock Par Value			Retained Earnings	Unearned Compensation	Accumulated Other Comprehensive Income (Loss)	Stoc	Total kholders' Equity	
Balance at December 31, 2003	\$ 14,467	\$ 1	1,538	\$ 1,918,785	\$	550,196	\$ (306)	\$ 29,354	\$ 2	2,514,034
Net earnings			_			44,696	_	_		44,696
Foreign currency translation adjustment	_		_	_		_	_	85,549		85,549
Minimum pension liability adjustment			_					20,150		20,150
Unrealized gain (loss) on available for sale										
securities	_		_	_		_	_	(1,321)		(1,321)
Comprehensive income										149,074
Stock issued (2,000 shares)	_		_	31		_	(31)	_		_
Stock issued for LYONs repurchase										
(5,534,905 shares), net of issuance costs	553		_	98,843	,	_	_	_		99,396
Fair value of phantom stock grants	_		_	561		_	_	_		561
Stock options exercised (515,204 shares)	52		_	9,033	,	_	_	_		9,085
Tax effects relating to stock plan	_		_	100	)	_	_	_		100
Options issued – RFWaves acquisition			_	900	)	_	_	_		900
Conversions from Class B to common										
(702,856 shares)	70		(70)	_		_	_	_		_
Amortization of unearned compensation				_		_	185	_		185
Balance at December 31, 2004	\$ 15,142	\$ 1	1,468	\$ 2,028,253	\$	594,892	\$ (152)	\$ 133,732	\$ 2	2,773,335

# Vishay Intertechnology, Inc. Notes to Consolidated Financial Statements

Vishay Intertechnology, Inc. ("Vishay" or the "Company") is an international manufacturer and supplier of passive and active electronic components, including resistors, capacitors, inductors, strain gages, load cells, force measurement sensors, displacement sensors, photoelastic sensors, power MOSFETs, power conversion and motor control integrated circuits, transistors, diodes and optoelectronic components. Electronic components manufactured by the Company are used in virtually all types of electronic products, including those in the computer, telecommunications, military/aerospace, industrial, automotive, medical, and consumer electronics products industries.

# Note 1 - Summary of Significant Accounting Policies

#### Use of Estimates

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

# Principles of Consolidation

The consolidated financial statements include the accounts of Vishay and all of its subsidiaries in which a controlling financial interest is maintained. For those consolidated subsidiaries in which the Company's ownership is less than 100 percent, the outside stockholders' interests are shown as Minority Interest in the accompanying consolidated balance sheets. Investments in affiliates over which the Company has significant influence but not a controlling interest are carried on the equity basis. Investments in affiliates over which the Company does not have significant influence are accounted for by the cost method. All significant intercompany transactions, accounts, and profits are eliminated.

# Revenue Recognition

The Company recognizes revenue on product sales during the period when the sales process is complete. This generally occurs when products are shipped to the customer in accordance with terms of an agreement of sale, title and risk of loss have been transferred, collectibility is reasonably assured and pricing is fixed or determinable. For a small percentage of sales where title and risk of loss passes at point of delivery, the Company recognizes revenue upon delivery to the customer, assuming all other criteria for revenue recognition are met. The Company historically has had agreements with distributors that provided limited rights of product return. Beginning in 2002, the Company modified these arrangements to allow distributors a limited credit for unsaleable products, which it terms a "scrap allowance." Consistent with industry practice, the Company also has a "stock, ship and debit" program whereby it considers requests by distributors for credits on previously purchased products that remain in distributors' inventory, to enable the distributors to offer more competitive pricing. In addition, the Company has contractual arrangements whereby it provides distributors with protection against price reductions initiated by the Company after product is sold by the Company to the distributor and prior to resale by the distributor.

#### Note 1 – Summary of Significant Accounting Policies (continued)

The Company records a reduction of revenue during each period, and records a related accrued expense for the period, based upon its estimate of product returns, scrap allowances, "stock, ship and debit" credits and price protection credits that will be attributable to sales recorded through the end of the period. The Company makes these estimates based upon sales levels to its distributors during the period, inventory levels at the distributors, current and projected market conditions and historical experience under the programs. While the Company utilizes a number of different methodologies to estimate the accruals, all of the methodologies take into account sales levels to distributors during the relevant period, inventory levels at the distributors, current and projected market trends and conditions, recent and historical activity under the relevant programs, changes in program policies and open requests for credits. These procedures require the exercise of significant judgments, but the Company believes that they allow the Company to reasonably estimate future credits under the programs.

# **Shipping and Handling Costs**

Shipping and handling costs are included in costs of products sold.

# Research and Development Expenses

Research and development costs are expensed as incurred. The amount charged to expense for research and development (exclusive of purchased in-process research and development) aggregated \$51,008,000, \$45,377,000, and \$37,095,000, for the years ended December 31, 2004, 2003, and 2002, respectively. The Company spends additional amounts for the development of machinery and equipment for new processes and for cost reduction measures.

#### Grants

Grants received by certain foreign subsidiaries from foreign governments, primarily in Israel, are recognized as income in accordance with the purpose of the specific contract and in the period in which the related expense is incurred. Grants from the Israeli government recognized as a reduction of costs of products sold were \$8,936,000, \$12,359,000, and \$17,322,000 for the years ended December 31, 2004, 2003, and 2002, respectively. Grants receivable of \$3,568,000 and \$9,223,000 are included in other current assets at December 31, 2004 and 2003, respectively. Deferred grant income was \$18,723,000 and \$27,659,000 at December 31, 2004 and 2003, respectively. The grants are subject to certain conditions, including maintaining specified levels of employment for periods up to ten years. Noncompliance with such conditions could result in the repayment of grants. However, management expects that the Company will comply with all terms and conditions of the grants.

#### Income Taxes

The provision for income taxes is determined using the asset and liability approach of accounting for income taxes. Under this approach, deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. The provision for income taxes represents income taxes paid or payable for the current year plus the change in deferred taxes during the year. Deferred taxes result from differences between the financial and tax bases of the Company's assets and liabilities and are adjusted for changes in tax rates and tax laws when changes are enacted. Valuation allowances are recorded to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized.

# Cash Equivalents

Cash and cash equivalents includes demand deposits and highly liquid investments with maturities of three months or less when purchased.

#### Note 1 – Summary of Significant Accounting Policies (continued)

#### Allowance for Doubtful Accounts

The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. The allowance is determined through an analysis of the aging of accounts receivable and assessments of risk that are based on historical trends and an evaluation of the impact of current and projected economic conditions. The Company evaluates the past-due status of its trade receivables based on contractual terms of sale. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. Bad debt expense was \$3,444,000, \$4,181,000, and \$6,672,000 for the years ended December 31, 2004, 2003, and 2002, respectively.

# **Inventories**

Inventories are stated at the lower of cost, determined by the first-in, first-out method, or market. Inventories are adjusted for estimated obsolescence and written down to net realizable value based upon estimates of future demand, technology developments and market conditions.

# **Property and Equipment**

Property and equipment is carried at cost and is depreciated principally by the straight-line method based upon the estimated useful lives of the assets. Machinery and equipment are being depreciated over useful lives of seven to ten years. Buildings and building improvements are being depreciated over useful lives of twenty to forty years. Construction in progress is not depreciated until the assets are placed in service. The estimated cost to complete construction in progress at December 31, 2004 was approximately \$11.6 million. Depreciation of capital lease assets is included in total depreciation expense. Depreciation expense was \$191,132,000, \$180,706,000, and \$172,174,000 for the years ended December 31, 2004, 2003, and 2002, respectively.

#### Goodwill and Other Intangible Assets

The Company adopted Statements of Financial Accounting Standards ("SFAS") No. 141, *Business Combinations*, and No. 142, *Goodwill and Other Intangible Assets*, effective January 1, 2002.

Goodwill and indefinite-lived intangible assets are not amortized but rather are tested for impairment at least annually. These tests will be performed more frequently if there are triggering events. The Company has assigned an indefinite useful life to its tradenames.

Definite-lived intangible assets are amortized over their estimated useful lives. Completed technology is being amortized over useful lives of seven to ten years. Capitalized software is being amortized over periods of three to ten years. Noncompete agreements are being amortized over a period of one to five years. The Company continually evaluates the reasonableness of the useful lives of these assets.

SFAS No. 142 prescribes a two-step method for determining goodwill impairment. In the first step, the Company determines the fair value of the reporting unit using a comparable companies market multiple approach. If the net book value of the reporting unit were to exceed the fair value, the Company would then perform the second step of the impairment test which requires allocation of the reporting unit's fair value to all of its assets and liabilities in a manner similar to a purchase price allocation, with any residual fair value being allocated to goodwill. An impairment charge will be recognized only when the implied fair value of a reporting unit's goodwill is less than its carrying amount.

#### Note 1 – Summary of Significant Accounting Policies (continued)

The Company completed the transitional goodwill impairment test as of January 1, 2002. Fair value of reporting units was determined using comparable company market multiples. The Company determined that there was no goodwill impairment as of January 1, 2002. The Company's required annual impairment test is completed as of the first day of the fourth fiscal quarter each year. The Company also performed an additional impairment test at September 30, 2002 because events and circumstances indicated that goodwill of its passives reporting unit might be impaired. Management concluded that no impairment existed at September 30, 2002. Additionally, it was determined that no impairment existed based on the annual impairment tests for 2004, 2003 and 2002.

The Company completed the transitional impairment test of its tradenames as of January 1, 2002. The fair value of the tradenames was measured as the discounted cash flow savings realized from owning such tradenames and not having to pay a royalty for their use. No impairment of the tradenames was determined to exist at January 1, 2002. The annual impairment test of tradenames is completed as of the first day of the fourth fiscal quarter each year. It was determined that no impairment existed based on the annual impairment tests for 2004, 2003 and 2002.

## Impairment of Long-Lived Assets

The Company evaluates impairment of its long-lived assets, other than goodwill and indefinite-lived intangible assets, in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. The carrying value of long-lived assets held-and-used, other than goodwill and indefinite-lived intangible assets, is evaluated when events or changes in circumstances indicate the carrying value may not be recoverable. The carrying value of a long-lived asset is considered impaired when the total projected undiscounted cash flows from such asset are separately identifiable and are less than the carrying value. In that event, a loss is recognized based on the amount by which the carrying value exceeds the fair market value of the long-lived asset. Fair market value is determined primarily using the projected cash flows from the asset discounted at a rate commensurate with the risk involved. Losses on long-lived assets held-for-sale, other than goodwill and indefinite-lived intangible assets, are determined in a similar manner, except that fair market values are reduced for disposal costs.

## Available-for-Sale Securities

Other assets includes investments in marketable securities which are classified as available-for-sale. These assets are held in trust related to the Company's non-qualified pension and deferred compensation plans. See Note 11. These assets are reported at fair value, based on quoted market prices as of the end of the reporting period. Unrealized gains and losses are reported, net of their related tax consequences, as a component of accumulated other comprehensive income in stockholders' equity until sold. At the time of sale, any gains or losses calculated by the specific identification method are recognized as a reduction to benefits expense, within selling, general, and administrative expenses.

## Stock-Based Compensation

SFAS No. 123, *Accounting for Stock-Based Compensation*, encourages entities to record compensation expense for stock-based employee compensation plans at fair value but provides the option of measuring compensation expense using the intrinsic value method prescribed in Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees*. The Company accounts for stock-based compensation in accordance with APB No. 25 and related interpretations. The following is provided to comply with the disclosure requirements of SFAS No. 123 as amended.

# Note 1 – Summary of Significant Accounting Policies (continued)

If compensation cost for the Company's stock option programs had been determined using the fair-value method prescribed by SFAS No. 123, the Company's results would have been reduced to the pro forma amounts indicated below (in thousands, except per share amounts):

	Years ended December 31,						
		2004	2003			2002	
Net income (loss), as reported	\$	44,696	\$	26,842	\$	(92,614)	
Add: Total stock-based employee compensation expense included in reported net income, net of							
related tax effects		365				_	
Deduct: Total stock-based employee compensation expense determined under fair value-based							
method for all awards, net of related tax effects		(1,385)		(1,612)		(2,430)	
			_		_		
Pro forma net income (loss)	\$	43,676	\$	25,230	\$	(95,044)	
			_		_		
Earnings (loss) per share:							
Basic—as reported	\$	0.27	\$	0.17	\$	(0.58)	
			_		_		
Basic—pro forma	\$	0.27	\$	0.16	\$	(0.60)	
·			_		_	, ,	
Diluted—as reported	\$	0.27	\$	0.17	\$	(0.58)	
Diace as reported		0.27	7	0.17	<b>—</b>	(0.50)	
Diluted—pro forma	\$	0.26	\$	0.16	\$	(0.60)	
Diluted—pro torina	Ф	0.20	Ф	0.10	Ф	(0.00)	

The weighted average fair value of the options granted was estimated using the Black-Scholes option-pricing model, with the assumptions presented below. Options granted in 2004, 2003 and 2002 had a weighted average fair value of \$7.11, \$6.53 and \$8.62, respectively, and an exercise price equal to the market value.

	2004 Grants	2003 Grants	2002 Grants
Expected dividend yield	0.0%	0.0%	0.0%
Risk-free interest rate	3.4%	2.2%	3.5%
Expected volatility	59.1%	61.2%	63.2%
Expected life (in years)	4.5	4.5	4.5

As described in Note 2, the Company granted 120,000 options as part of an acquisition made in 2004. These option grants are not considered stock-based compensation.

## Note 1 - Summary of Significant Accounting Policies (continued)

#### **Derivative Financial Instruments**

The Company reports derivative instruments on the consolidated balance sheet at their fair values. The accounting for changes in fair value depends upon the purpose of the derivative instrument and whether it is designated and qualifies for hedge accounting. For instruments designated as hedges, the effective portion of gains or losses is reported in other comprehensive income and the ineffective portion, if any, is reported in net earnings (loss). Changes in the fair values of derivative instruments that are not designated as hedges are recorded in current period earnings.

The Company has in the past used interest rate swap agreements to modify variable rate obligations to fixed rate obligations, thereby reducing exposure to market rate fluctuations. Such interest rate swap agreements were designated as hedges. See Note 14.

In prior years, the Company used financial instruments such as forward exchange contracts to hedge a portion, but not all, of its firm commitments denominated in foreign currencies. The purpose of the Company's foreign currency management is to minimize the effect of exchange rate changes on actual cash flows from foreign currency denominated transactions.

At December 31, 2004 and 2003, the Company had no outstanding derivative instruments.

## Foreign Currency Translation

The financial statements for most of the Company's foreign subsidiaries are measured using the local currency as the functional currency. Foreign assets and liabilities in the consolidated balance sheets have been translated at the rate of exchange as of the balance sheet date. Revenues and expenses are translated at the average exchange rate for the year. Translation adjustments do not impact the results of operations and are reported as a separate component of stockholders' equity. Foreign currency transaction gains and losses are included in the results of operations.

For those foreign subsidiaries where the U.S. dollar is the functional currency, all foreign currency financial statement amounts are remeasured into U.S. dollars. Exchange gains and losses arising from remeasurement of foreign currency-denominated monetary assets and liabilities are included in the results of operations.

## Commitments and Contingencies

Liabilities for loss contingencies, including environmental remediation costs, arising from claims, assessments, litigation, fines, penalties, and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated. Accrued liabilities for environmental matters recorded at December 31, 2004 and 2003 do not include claims against third parties and are not discounted.

#### Note 1 – Summary of Significant Accounting Policies (continued)

## **New Accounting Pronouncements**

In January 2003, the Financial Accounting Standards Board ("FASB") issued Interpretation No. 46, *Consolidation of Variable Interest Entities*, *an interpretation of ARB 51* ("FIN 46"). The primary objectives of this interpretation are to provide guidance on the identification of entities for which control is achieved through means other than through voting rights ("variable interest entities") and how to determine when and which business enterprise (the "primary beneficiary") should consolidate the variable interest entity. This new model for consolidation applies to an entity in which either (i) the equity investors (if any) do not have a controlling financial interest; or (ii) the equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support from other parties. In addition, FIN 46 requires that the primary beneficiary, as well as all other enterprises with a significant variable interest in a variable interest entity, make additional disclosures. Certain disclosure requirements of FIN 46 were effective for financial statements issued after January 31, 2003. In December 2003, the FASB issued FIN 46 (revised December 2003), *Consolidation of Variable Interest Entities* ("FIN 46-R") to address certain FIN 46 implementation issues. The adoption of FIN 46 and FIN 46-R did not have any effect on the Company's financial position, results of operations, or liquidity.

The consolidated financial statements also include the new required disclosures required by SFAS No. 132-R, *Employers' Disclosures about Pensions and Other Postretirement Benefits* in Note 11. Note 11 also includes disclosures regarding the impact of FASB Staff Position ("FSP") No. 106-2 on the Company's measurement of accumulated postretirement benefit obligation. Note 5 includes disclosures regarding the Company's accounting for FSP No. 109-2, *Accounting and Disclosure Guidance for the Foreign Earnings Repatriation Provision within the American Jobs Creation Act of 2004*.

In September 2004, the Emerging Issues Task Force reached a consensus on Issue No. 04-8, *The Effect of Contingently Convertible Instruments on Diluted Earnings per Share* ("EITF 04-8"). The Task Force concluded that contingently convertible instruments in which conversion into common stock is based on meeting a market price contingency should be included in the computation of diluted earnings per share at issuance, rather than waiting until the specified share price is met. EITF 04-8 is effective for reporting periods ending after December 15, 2004 and is applied retroactively. While the Company has contingently convertible debt, EITF 04-8 has no impact on its computation of diluted earnings per share because these convertible notes have always been considered in the computation of diluted earnings per share. See Note 17.

In November 2004, the FASB issued Statement No. 151, *Inventory Costs—an amendment of ARB No. 43*, *Chapter 4*, which amends and clarifies existing accounting literature regarding abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This statement is effective for inventory costs incurred during fiscal years beginning after June 15, 2005, with earlier application permitted. The provisions of this statement are to be applied prospectively. The Company is presently evaluating the impact of this new standard.

In December 2004, the FASB issued Statement No. 123-R ("SFAS No. 123-R"), *Share-Based Payment*. This statement replaces SFAS No. 123, *Accounting for Stock-Based Compensation*, and supersedes APB No. 25, which the Company presently applies. SFAS No. 123-R will require compensation costs related to share-based payment transactions to be recognized in the consolidated financial statements (with limited exceptions). The amount of compensation cost will be measured based on the grant-date fair value of the equity or liability instruments issued. Compensation cost will be recognized over the period that an employee provides service in exchange for the award. This statement is effective as of the beginning of the first interim or annual reporting period that begins after June 15, 2005, with earlier adoption permitted. The adoption of this standard is not expected to have a material effect on our financial position, or liquidity.

## Note 1 - Summary of Significant Accounting Policies (continued)

In December 2004, the FASB issued Statement No. 153, *Exchanges of Nonmonetary Assets—an amendment of APB Opinion No.* 29. This statement amends APB No. 29 to eliminate the exception for nonmonetary exchanges of similar productive assets and replaces it with a general exception for exchanges of nonmonetary assets that do not have commercial substance. A nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. The provisions of this statement are effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005, with earlier application permitted. The provisions of this statement are to be applied prospectively. The adoption of this standard is not expected to have a material effect on our financial position, results of operations, or liquidity.

#### Reclassifications

Certain prior year amounts have been reclassified to conform to the current financial statement presentation.

## Note 2 - Acquisitions

As part of its growth strategy, the Company seeks to expand through the acquisition of other manufacturers of electronic components that have established positions in major markets, reputations for product quality and reliability, and product lines with which the Company has substantial marketing and technical expertise. During the industry downturn experienced from 2001 to 2003, the Company utilized the strength of its own balance sheet to acquire businesses for consideration that it believes was lower than what it would have been required to pay in other economic environments.

In pricing an acquisition, the Company focuses primarily on the target's revenues and customer base, the strategic fit of its product line with the Company's existing product offerings, opportunities for cost cutting and integration with the Company's existing operations and production and other post-acquisition synergies rather than on the target's assets, such as its property, equipment and inventory. As a result, the fair value of the acquired assets may correspond to a relatively smaller portion of the acquisition price, with the Company recording a substantial amount of goodwill related to the acquisition. These principles apply in particular to acquisitions in the passive segment during 2002. The passive electronics business is a mature industry that, in general, has a slow organic growth rate linked to macro economic trends.

Also as part of its growth strategy, the Company seeks to explore opportunities with privately held developers of electronic components, whether through acquisition, investment in non-controlling interests, or strategic alliances.

## Year ended December 31, 2004

During 2004, the Company made two acquisitions. On August 31, 2004, the Company acquired substantially all of the assets of RFWaves, Ltd., a fab-less integrated circuit design house located in Israel. On September 29, 2004, the Company acquired all of the outstanding shares of Aeroflex Pearl River Inc. (renamed Vishay MIC Technology), the former thin film interconnect subsidiary of Aeroflex, Incorporated. The total purchase price of these acquisitions was approximately \$12,700,000, which included cash payments of \$11,800,000 plus 120,000 stock options with an aggregate fair value of approximately \$900,000. The stock options were valued using the Black-Scholes option-pricing model. The significant assumptions used included an exercise price of \$12.75 (market price on date of grant), an expected dividend yield of 0.0%, a risk-free interest rate of 3.76%, an expected volatility of 54.3%, and expected life of 7.0 years. The purchase agreement for RFWaves includes provisions for Vishay to pay additional consideration subject to RFWaves achieving operational targets through 2006. The payment of this additional consideration would not be material to Vishay's financial position or cash flows.

Purchased in-process research and development represents the value assigned in a business combination to research and development projects of the acquired business that were commenced, but not completed at the date of acquisition, for which technological feasibility has not been established, and which have no alternative future use in research and development activities or otherwise. Amounts assigned to purchased in-process research and development meeting the above criteria must be charged to expense at the date of consummation of the business combination. A charge of \$1,500,000 was recorded in the third quarter of 2004 in conjunction with the RFWaves acquisition.

For financial reporting purposes, the results of operations for RFWaves have been included in the actives segment from August 31, 2004. The results of operations for Vishay MIC Technology have been included in the passives segment from September 29, 2004. The inclusion of these entities did not have a material impact on consolidated results for the year ended December 31, 2004. After allocating the purchase price to the assets acquired and liabilities assumed based on an evaluation of their fair values, the Company recorded goodwill of \$10.1 million related to these acquisitions.

Had these acquisitions occurred as of the beginning of the periods presented in these consolidated financial statements, the pro forma statements of operations would not be materially different than the consolidated statements of operations presented.

## Year ended December 31, 2003

No acquisitions were made during the year ended December 31, 2003.

#### Year ended December 31, 2002

In January 2002, the Company acquired the transducer and strain gage businesses of Sensortronics, Inc. The acquisition included the wholly owned subsidiary of Sensortronics, JP Technologies, a manufacturer of strain gages, located in San Bernardino, California. The purchase price was \$10 million in cash. The purchase price has been allocated, with resulting goodwill of \$3,027,000. The results of operations are included in the results of the passives segment from January 31, 2002

In June 2002, the Company acquired Tedea-Huntleigh BV ("Tedea-Huntleigh"), a subsidiary of Tedea Technological Development and Automation Ltd. ("Tedea"). Tedea-Huntleigh is engaged in the production and sale of load cells used in digital scales by the weighing industry. The purchase price was approximately \$21 million in cash. Additionally, Vishay is paying Tedea a \$1 million consulting fee over a three-year period and repaid a \$9 million loan of Tedea to Tedea-Huntleigh. Tedea-Huntleigh operates two plants in Israel, in Netanya and Carmiel, where it employs approximately 350 people, as well as a number of facilities outside Israel. Tedea-Huntleigh also has load cell operations in the People's Republic of China. The purchase price has been allocated, with resulting goodwill of \$13,841,000. Results of operations are included in the passives segment beginning July 1, 2002.

On July 31, 2002, the Company acquired the BLH and Nobel businesses of Thermo Electron Corporation. BLH and Nobel are engaged in the production and sale of load cell-based process weighing systems, weighing and batching instruments, web tension instruments, weighing scales, servo control systems, and components relating to load cells including strain gages, foil gages, and transducers. The purchase price was \$18.5 million in cash. The purchase price has been allocated, with resulting goodwill of \$11,262,000. The results of operations are included in the passives segment beginning August 1, 2002.

In October 2002, the Company acquired Celtron Technologies. Celtron is engaged in the production and sale of load cells used in digital scales for the weighing industry, with manufacturing facilities and offices in Taiwan, the People's Republic of China, and California. The purchase price of \$13.5 million in cash has been allocated with resulting goodwill of \$4,711,000. Results of operations are included in the passives segment beginning October 1, 2002.

As part of purchase accounting for these acquisitions, the Company accrued certain restructuring costs. During the fourth quarter of 2004, the Company determined that, due to the passage of time since the acquisitions, and also given different market conditions, its remaining restructuring plans for the above mentioned Measurements Group businesses had significantly changed. As a result, the remaining liability of \$994,000 was reversed against goodwill. The Company continues to seek the most efficient use of its assets and employees, and should these operations be restructured in the future, the Company would need to record a charge against earnings.

On December 13, 2002, the Company acquired BCcomponents Holdings B.V. ("BCcomponents"), a leading manufacturer of passive components with operations in Europe, India and the Far East. The product lines of BCcomponents include linear and non-linear resistors; ceramic, film and aluminum electrolytic capacitors; and switches and trimming potentiometers. The acquisition of BCcomponents, and the recognition of substantial goodwill in the acquisition, was consistent with the general principles described above that guide the Company's acquisition activity and the application of these principles in particular to acquisitions in the passive component segment.

Vishay acquired the outstanding shares of BCcomponents in exchange for ten-year warrants to acquire 7,000,000 shares of Vishay common stock at an exercise price of \$20.00 per share and ten-year warrants to acquire 1,823,529 shares of Vishay common stock at an exercise price of \$30.30 per share. The fair value of the warrants (\$39,462,000) was determined using the Black-Scholes option-pricing model. Significant assumptions used included an expected dividend yield of 0%, a risk-free interest rate of 3%, an expected volatility of 66%, and an expected life of five years.

In the transaction, outstanding obligations of BCcomponents, including indebtedness and transaction fees and expenses, in the amount of approximately \$224 million were paid (\$191 million) or assumed (\$33 million). Also, \$105 million in principal amount of BCcomponents' mezzanine indebtedness and certain other securities of BCcomponents were exchanged for \$105 million principal amount of floating rate unsecured loan notes of Vishay due 2102. The Vishay notes bear interest at LIBOR plus 1.5% through December 31, 2006 and at LIBOR thereafter. The interest rate could be further reduced to 50% of LIBOR after December 31, 2010 if the price of Vishay common stock trades above a specified target price, as provided in the notes. The notes are subject to a put and call agreement under which the holders may at any time put the notes to Vishay in exchange for 6,176,471 shares of Vishay common stock in the aggregate, and Vishay may call the notes in exchange for cash or for shares of its common stock after 15 years from the date of issuance. The purchase price was as follows (in thousands):

Cash consideration	\$ 191,000
Warrants issued	39,462
Acquisition costs	3,000
Total purchase price	\$ 233,462

Under purchase accounting, the total purchase price is allocated to assets acquired and liabilities assumed based on their estimated fair values. At December 31, 2002, the purchase price allocation was preliminary, pending the completion of asset appraisals and negotiations with labor councils regarding planned restructuring. These matters were resolved in 2003, resulting in an increase in goodwill of \$66,347,000. The purchase price was allocated to the acquired assets and liabilities based on fair values as follows (in thousands):

Current assets	\$	91,859
Property and equipment		68,762
Other assets		3,054
Tradenames		23,000
Completed technology		19,000
Current liabilities		(118,425)
Long-term debt		(126, 328)
Other noncurrent liabilities		(29,860)
Goodwill		302,400
	_	
Total purchase price	\$	233,462

In connection with the BCcomponents acquisition, the Company recorded restructuring liabilities of \$47,794,000 under an exit plan that management began to formulate prior to the acquisition date. Approximately \$45,855,000 of these liabilities relate to employee termination costs covering approximately 780 technical, production, administrative and support employees located in the United States, Europe, and the Pacific Rim.

A rollforward of the activity related to these restructuring liabilities is as follows (in thousands, except number of employees):

	s	everance Costs	 Other	Total		Number of Employees Terminated
Balance at December 31, 2002	\$	45,855	\$ 1,939	\$	47,794	780
Utilized		(30,018)	(1,939)		(31,957)	(624)
Foreign currency translation		5,153	_		5,153	_
Change in estimate		(1,328)	_		(1,328)	(13)
			 	-		
Balance at December 31, 2003		19,662	_		19,662	143
Utilized		(8,971)	_		(8,971)	(71)
Foreign currency translation		(509)	_		(509)	_
Change in estimate		(10,182)	_		(10,182)	(72)
Balance at December 31, 2004	\$	_	\$ _	\$	_	_

During the fourth quarter of 2004, the Company determined that, due to the passage of time since the acquisition, and also given different market conditions, its remaining restructuring plans for businesses acquired from BCcomponents had significantly changed. As a result, the remaining liability of \$10,182,000 was reversed against goodwill. The Company continues to seek the most efficient use of its assets and employees, and should these operations be restructured in the future, the Company would record a charge against earnings in that period.

Had all of the 2002 acquisitions previously described been made at the beginning of 2002, the Company's pro forma unaudited results would have been (in thousands, except per share amounts):

	Year ended December 31, 2002
Net sales	\$ 2,095,657
Net loss	(127,379)
Basic and diluted loss per share	\$ (0.80)

The pro forma information includes adjustments for interest expense that would have been incurred to finance the acquisitions, adjustments to depreciation based on the fair value of property and equipment acquired, write-off of purchased in-process research and development, amortization of intangible assets and related tax effects. Goodwill related to the acquisitions is not tax-deductible.

The unaudited pro forma results are not necessarily indicative of the results that would have been attained had the acquisitions occurred at the beginning of the periods presented.

## Year ended December 31, 2001

On November 2, 2001, the Company acquired General Semiconductor, Inc., a leading manufacturer of rectifiers and power management devices.

In connection with the General Semiconductor acquisition, the Company recorded restructuring liabilities of \$94,643,000 under an exit plan that management began to formulate prior to the acquisition date. The exit plan included downsizing certain European and Taiwan facilities and moving production to low-labor-cost countries such as Israel, the Czech Republic, and the People's Republic of China. The plan also included reducing selling, general and administrative expenses through the integration or elimination of redundant sales offices and administrative functions at General Semiconductor. The Company's goal under the plan was to achieve significant production cost savings through the transfer and expansion of manufacturing operations to or in lower-labor-cost regions, where the Company can take advantage of lower labor costs and available tax and other government-sponsored incentives. Approximately \$88,242,000 of these restructuring liabilities related to employee termination costs covering approximately 1,460 technical, production, administrative and support employees located in the United States, Europe, and the Pacific Rim. The remaining \$6,401,000 related to provisions for lease cancellations and other costs.

A rollforward of the activity related to these restructuring liabilities is as follows (in thousands, except number of employees):

	 Severance Costs	Other		Total	Number of Employees Terminated
Balance at January 1, 2002	\$ 88,242	\$ 6,401	1 \$	94,643	1,460
Utilized	(52,118)	(1,249	9)	(53,367)	(426)
Change in estimate	(7,900)	_		(7,900)	(147)
Balance at December 31, 2002	28,224	5,152	2	33,376	887
Utilized	(6,563)	(2,642	1)	(9,204)	(118)
Foreign currency translation	504	_		504	_
Change in estimate	(271)	_		(271)	_
Balance at December 31, 2003	21,894	2,511	1	24,405	769
Utilized	(3,499)	(623	3)	(4,122)	(27)
Foreign currency translation	(21)	_		(21)	_
Change in estimate	(18,374)	(1,888	3)	(20,262)	(742)
Balance at December 31, 2004	\$ _	<b>\$</b>	\$	S —	_

During the fourth quarter of 2004, the Company determined that, due to the passage of time since the acquisition, and also given different market conditions, its remaining restructuring plans for businesses acquired from General Semiconductor had significantly changed. As a result, the remaining liability of \$20,262,000 was reversed against goodwill. The Company continues to seek the most efficient use of its assets and employees, and should these operations be restructured in the future, the Company would need to record a charge against earnings.

During the fourth quarter of 2004, the Company closed its Colmar, France small-signal diode facility, which had been acquired in the November 2001 General Semiconductor acquisition. This restructuring plan was substantially different than the original plan to relocate certain product lines. As more fully described in Note 4, the Company recorded a restructuring charge of \$26,217,000 during 2004 related to this plant closure. Also during the fourth quarter of 2004, the Company laid off 126 workers at one of its Taiwan facilities, which had been acquired in the November 2001 General Semiconductor acquisition. This restructuring plan, while substantially the same in scope as the original plan, was significantly delayed due to changing market conditions. Accordingly, the Company recorded a restructuring charge of \$2,904,000 during 2004 as part of this lay off.

# **Pending Acquisitions**

On December 22, 2004, the Company signed a definitive merger agreement pursuant to which Vishay will acquire all of the outstanding capital stock of SI Technologies, Inc. for approximately \$17,650,000, plus assumption of debt. Completion of the merger is subject to certain closing conditions, including the approval of the stockholders of SI Technologies.

See also Note 19.

# Note 3 - Goodwill and Other Intangible Assets

The changes in the carrying amounts of goodwill by segment for the years ended December 31, 2004 and 2003 were as follows (in thousands):

	Actives		Passives			Total
D. 1 1 2000	Φ.	004 004	Φ.	405.000	ф	4.256.202
Balance at January 1, 2003	\$	861,201	\$	495,092	\$	1,356,293
Purchase price allocation adjustments				66,347		66,347
Other, including currency translation adjustments		22,191		21,883		44,074
Balance at December 31, 2003		883,392		583,322		1,466,714
Goodwill acquired during the year		1,500		8,600		10,100
Purchase price allocation adjustments		(32,242)		(16,247)		(48,489)
Other, including currency translation adjustments		(106)		6,902		6,796
Balance at December 31, 2004	\$	852,544	\$	582,577	\$	1,435,121

Passives segment goodwill is allocated to the Other Passives and Measurements Group reporting units for SFAS No. 142 evaluation purposes. Goodwill allocated to the Other Passives reporting unit at December 31, 2004 and 2003 was \$543,568,000 and \$541,909,000, respectively. Goodwill allocated to the Measurements Group reporting unit at December 31, 2004 and 2003 was \$39,009,000 and \$41,413,000, respectively.

Purchase price allocation adjustments recorded in 2003 are attributable to the finalization of the purchase price allocation for BCcomponents and the five Measurements Group companies. Purchase price allocation adjustments recorded in 2004 are attributable to changes in estimates related to restructuring activities (see Note 2) and reversals of deferred tax related items established in purchase accounting.

# Note 3 - Goodwill and Other Intangible Assets (continued)

Other intangible assets were as follows (in thousands):

	Ī	December 31,				
	2004		2003			
Intangible Assets Subject to Amortization (Definite Lived):						
Patents and acquired technology	\$ 79,	301 \$	79,715			
Capitalized software	37,	612	30,005			
Noncompete agreements	2,	188	2,421			
		— –	<del>.</del>			
	119,	01	112,141			
Accumulated amortization:						
Patents and acquired technology	(23,	753)	(15,330)			
Capitalized software	(26,	742)	(23,810)			
Noncompete agreements	(1,	500)	(1,200)			
	(52,	<b>)95)</b>	(40,340)			
Net Intangible Assets Subject to Amortization	67,	306	71,801			
Intangible Assets Not Subject to Amortization (Indefinite Lived):						
Tradenames	59,	)91	63,349			
	\$ 127,	797 \$	135,150			

Amortization expense was \$9,052,000, \$11,634,000, and \$6,429,000 for the years ended December 31, 2004, 2003, and 2002, respectively. Estimated annual amortization expense for each of the next five years is as follows: 2005 - \$10,627,000; 2006 - \$9,933,000; 2007 - \$9,933,000; 2008 - \$9,933,000; and 2009 - \$8,791,000.

# Note 4 - Restructuring and Severance Costs and Related Asset Write-Downs

Restructuring and severance costs reflect the cost reduction programs currently being implemented by the Company. These include the closing of facilities and the termination of employees. Severance costs also include executive severance and charges for the fair value of stock options of certain former employees which were modified such that they did not expire at termination. Restructuring costs are expensed during the period in which the Company determines it will incur those costs and all requirements of accrual are met. Because these costs are recorded based upon estimates, actual expenditures for the restructuring activities may differ from the initially recorded costs. If the initial estimates are too low or too high, the Company could be required either to record additional expenses in future periods or to reverse part of the previously recorded charges. Asset write-downs are principally related to buildings and equipment that will not be used subsequent to the completion of restructuring plans presently being implemented, and cannot be sold for amounts in excess of carrying value.

## Note 4 – Restructuring and Severance Costs and Related Asset Write-Downs (continued)

#### Year ended December 31, 2004

The following table summarizes restructuring programs initiated during the year ended December 31, 2004 (in thousands, except for number of employees):

	Severance Costs		Other Exit Costs	Asset Write-downs		Employees to be Terminated
Colmar, France facility closure	\$ 24,236	\$	1,981	\$	2,513	292
Other European and Asian programs	17,932		500		17,119	467
U.S. programs	912		1,689		7,664	105
Total	\$ 43,080	\$	4,170	\$	27,296	864

During the year ended December 31, 2004, the Company decided to close the Colmar, France small-signal diode assembly facility and transfer all production to lower-labor-cost regions. The Colmar facility was acquired as part of Vishay's acquisition of General Semiconductor, Inc. in November 2001. At that time, Vishay planned to transfer certain product manufacturing from Colmar to other Vishay locations. The Company's plans were expanded such that it will shift production of all products manufactured at Colmar. The Company reached an agreement with the workers' council regarding severance in late October 2004. Substantially all equipment from the Colmar facility has been or will be transferred to other Vishay locations, and remaining equipment that will not be transferred was written off. No material gain or loss is anticipated related to the eventual sale of the building or land at Colmar.

The employees terminated or to be terminated under the U.S. and other European and Asian restructuring programs were employed in technical, production, administrative or support functions at locations in the United States, Germany, France, Austria, the United Kingdom, Portugal, the Netherlands, Hungary, the Czech Republic, Israel, Taiwan, and Japan.

Asset write-downs included amounts to reduce the carrying value of certain buildings which had been vacated as part of restructuring activities, based on expected future selling prices. At December 31, 2004, these buildings had a carrying value of \$10,621,000, which has been reclassified to "other assets" as assets held-for-sale. Additionally, these charges included the write-down to salvage value of certain equipment which the Company has determined will not be used at other Vishay locations subsequent to the execution of its restructuring plans.

Activity related to these restructuring programs initiated during 2004 is as follows (in thousands, except for number of employees):

	 Geverance Costs	Other Exit Costs	Total		Employees to be Terminated
Restructuring and severance costs	\$ 43,080	\$ 4,170	\$	47,250	864
Utilized	(22,579)	(1,315)		(23,894)	(637)
Foreign currency translation	931	_		931	_
	 	 	_		
Balance at December 31, 2004	\$ 21,432	\$ 2,855	\$	24,287	227

#### Note 4 - Restructuring and Severance Costs and Related Asset Write-Downs (continued)

Substantially all of the remaining restructuring liability, currently shown in other accrued expenses, is expected to be paid by December 31, 2005. The payment terms related to these programs varies, usually based on local customs and laws. Most amounts are paid in a lump sum at termination, while some payments are structured to be paid in installments.

## Year ended December 31, 2003

The Company recorded restructuring and severance costs of \$28,546,000 for the year ended December 31, 2003. Restructuring of European and Asian operations included \$23,007,000 of employee termination costs covering 546 technical, production, administrative and support employees located in Germany, France, Hungary, Portugal, the United Kingdom, Austria and the Far East. The remaining \$5,539,000 of restructuring and severance costs relates to termination costs for 162 technical, production, administrative and support employees located in the United States. Additionally, the Company recorded \$1,014,000 of asset write-downs for buildings no longer in use. At December 31, 2003, approximately \$15,974,000 of severance costs were accrued. Approximately \$3.6 million was accrued related to these programs at December 31, 2004.

## Year ended December 31, 2002

Restructuring and severance costs were \$18,607,000 for the year ended December 31, 2002. Restructuring of European and Israeli operations included \$10,698,000 of employee termination costs covering approximately 778 technical, production, administrative and support employees located in the Czech Republic, France, Hungary, Israel, Portugal, and Austria. In the United States, \$7,909,000 of restructuring and severance costs includes termination costs for approximately 660 technical, production, administrative and support employees. Additionally, asset write-downs of \$12,363,000 were recorded to reduce the carrying value of buildings and equipment that were no longer in use to salvage value. At December 31, 2003, approximately \$2,818,000 of severance costs were accrued. Substantially all costs associated with restructuring programs initiated in 2002 have been paid as of December 31, 2004.

#### Note 5 – Income Taxes

Earnings (loss) before income taxes and minority interest consists of the following components (in thousands):

	Years ended December 31,						
	2004 2003		2003	2002			
\$	(3,507)	\$	(20,119)	\$	(59,882)		
	73,524		66,545		(40,163)		
		_		_			
\$	70,017	\$	46,426	\$	(100,045)		

# Note 5 – Income Taxes (continued)

Significant components of income taxes are as follows (in thousands):

	· ·	Years ended December 31,					
	2004	2003	2002				
rent:							
Federal	\$ 39	\$ (1,389)	\$ (41,991)				
State and local	1,097	4,977	6,111				
oreign	12,542	2,141	776				
	13,678	5,729	(35,104)				
d:							
Federal	(2,472)	(8,640)	30,590				
State and local	(1,991)		(16,152)				
reign	4,514	1,672	3,766				
	<del></del>						
	51	5,799	18,204				
	\$ 13,729	\$ 11,528	\$ (16,900)				

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

	December 31,			
		2004		2003
Deferred tax assets:				
Pension and other retiree obligations	\$	26,294	\$	48,229
Net operating loss carryforwards		185,662		178,029
Tax credit carryforwards		19,922		19,204
Other accruals and reserves		67,214		69,873
Total gross deferred tax assets		299,092		315,335
Less valuation allowance		(94,923)		(107,388)
		204,169		207,947
Deferred tax liabilities:				
Tax over book depreciation		69,472		92,094
Intangible assets other than goodwill		13,172		24,503
Investment in subsidiaries		22,795		3,144
Other - net		26,978		28,343
Total gross deferred tax liabilities		132,417		148,084
			_	
Net deferred tax assets	\$	71,752	\$	59,863

# Note 5 - Income Taxes (continued)

A reconciliation of income tax expense at the U.S. federal statutory income tax rate to actual income tax provision (benefit) is as follows (in thousands):

	Years ended December 31,						
	 2004		2003		2003		2002
Tax at statutory rate	\$ 24,506	\$	16,249	\$	(35,016)		
State income taxes, net of U.S. federal tax benefit	(598)		3,319		2,540		
Effect of foreign operations	(921)		(7,816)		11,090		
Settlement of tax audit	(10,550)		_				
Effect of statutory rate change on deferred taxes	2,455		_		_		
Other	(1,163)		(224)		4,486		
	 			_			
	\$ 13,729	\$	11,528	\$	(16,900)		

At December 31, 2004, the Company had the following significant net operating loss carryforwards for tax purposes (in thousands):

		Expires
Austria	\$ 7,389	No expiration
Belgium	95,072	No expiration
France	14,163	No expiration
Germany	88,527	No expiration
Israel	112,917	No expiration
Netherlands	71,179	No expiration
Portugal	3,419	2005 - 2009
United States	198,792	2021 - 2024

Approximately \$22,900,000 of the German carryforward resulted from the Company's acquisition of Roederstein in 1993 and approximately \$171,621,000 of the carryforwards in Austria, Belgium, and the Netherlands resulted from the Company's acquisition of BCcomponents in 2002.

In total, valuation allowances of \$78,808,000 and \$96,061,000 have been recorded at December 31, 2004 and 2003, respectively, for deferred tax assets related to foreign net operating loss carryforwards. Of this, \$57,175,000 and \$55,790,000, as of December 31, 2004 and 2003, respectively, are valuation allowances, recorded through goodwill, for the acquired net operating losses. If tax benefits are recognized in the future for utilization of these acquired net operating losses, the benefits of such loss utilization will be recorded as a reduction to goodwill. In 2004 and 2003, tax benefits recognized through reductions of the valuation allowance recorded through goodwill were \$5,071,000 and \$0, respectively.

At December 31, 2004, the Company had the following significant tax credit carryforwards available (in thousands):

		Expires
Federal Alternative Minimum Tax	\$ 13,831	No expiration
California Investment Credit	2,996	2005 - 2010
California Research Credit	4,210	No expiration

# Note 5 - Income Taxes (continued)

At December 31, 2004, no provision had been made for U.S. federal and state income taxes on approximately \$1,042,116,000 of foreign earnings, which are expected to be reinvested outside of the United States indefinitely. Upon distribution of those earnings in the form of dividends or otherwise, the Company would be subject to U.S. income taxes (subject to an adjustment for foreign tax credits), state income taxes, and withholding taxes payable to the various foreign countries. Determination of the amount of unrecognized deferred U.S. income tax liability is not practicable because of the complexities associated with its hypothetical calculation.

We continue to evaluate the impact of potential repatriation of earnings and cash pursuant to the American Jobs Creation Act of 2004, which was signed into law in October 2004. At the present time, we expect our cash and profits generated by foreign subsidiaries to continue to be reinvested indefinitely.

Income taxes paid, net of amounts refunded, were net payments of \$3,780,000 for the year ended December 31, 2004, a net refund of \$31,626,000 for the year ended December 31, 2003, and a net payment of \$2,910,000 for the year ended December 31, 2002.

The Company's U.S. income tax returns for the years ended 1998 through 2002 are presently under examination by the Internal Revenue Service. Management believes that potential tax assessment plus related interest and penalties, if any, have been sufficiently provided for in the consolidated financial statements.

#### Note 6 - Long-Term Debt

Long-term debt consists of the following (in thousands):

	December 31,				
	2004			2003	
Convertible subordinated notes, due 2023	\$	500,000	\$	500,000	
Liquid Yield Option <sup>TM</sup> Notes, due 2021		132,213		229,206	
Exchangeable unsecured notes, due 2102		105,000		105,000	
Revolving credit facility		11,000		_	
Other debt		3,983		3,682	
				-	
		752,196		837,888	
Less current portion		51		1,282	
	\$	752,145	\$	836,606	
	\$	/52,145	\$	836,606	

#### Convertible subordinated notes, due 2023

On August 6, 2003, the Company sold \$450 million aggregate principal amount of 3-5/8% convertible subordinated notes due 2023 and granted the initial purchasers an option to purchase, within 30 days of the date of the offering memorandum relating to the notes, an additional \$50 million of the notes. This option was exercised, and the additional \$50 million of notes was issued on September 3, 2003. The notes pay interest semiannually.

Holders may convert the notes into Vishay common stock prior to the close of business on August 1, 2023 if (1) the sale price of Vishay common stock reaches 130% of the conversion price for a specified period; (2) the trading price of the notes falls below 98% of the average last reported sales price of Vishay common stock multiplied by the conversion rate for a specified period; (3) the notes have been called for redemption; (4) the credit ratings assigned to the notes are lowered by two or more levels from their initial ratings; or (5) specified corporate transactions occur. None of these conditions had occurred as of December 31, 2004. The conversion price of \$21.28 is equivalent to a conversion rate of 46.9925 shares per \$1,000 principal amount of notes.

The notes are subordinated in right of payment to all of the Company's existing and future senior indebtedness and are effectively subordinated to all existing and future liabilities of its subsidiaries. The notes may be redeemed at the Company's option beginning August 1, 2010 at a redemption price equal to 100% of the principal amount plus accrued and unpaid interest, if any. Holders of the notes will have the right to require the Company to repurchase all or some of their notes at a purchase price equal to 100% of their principal amount of the notes, plus accrued and unpaid interest, if any, on August 1, 2008, August 1, 2010, August 1, 2013, and August 1, 2018. In addition, holders of the notes will have the right to require the Company to repurchase all or some of their notes upon the occurrence of certain events constituting a fundamental change. On any required repurchase, the Company may choose to pay the purchase price in cash or shares of Vishay common stock or any combination of cash and Vishay common stock.

A significant portion of the proceeds of this debt issuance was used to repurchase other debt. The early extinguishment of a portion of the Liquid Yield Option<sup>TM</sup> Notes ("LYONs") and the General Semiconductor convertible subordinated notes resulted in a pretax loss of \$9,910,000 in 2003, which included a premium on redemption of approximately \$7.3 million and the write-off of deferred financing costs of approximately \$2.6 million.

## Note 6 – Long-Term Debt (continued)

## Liquid Yield Option™ Notes, due 2021

On June 4, 2001, the Company completed a private placement of \$550,000,000 face amount LYONs due 2021. In connection with the sale of the LYONs, the Company received net proceeds of \$294,096,000 and used the proceeds to pay down existing bank debt. Each LYON has a \$1,000 face amount and was offered at a price of \$551.26 (55.126% of the principal amount at maturity). The Company will not pay interest on the LYONs prior to maturity unless contingent interest becomes payable.

The issue price of each LYON represents a yield to maturity of 3.00%, excluding any contingent interest. The LYONs are subordinated in right of payment to all of the Company's existing and future senior indebtedness.

At any time on or before the maturity date, the LYONs are convertible into Vishay common stock at a rate of 17.6686 shares of common stock per \$1,000 principal amount at maturity. The conversion rate may be adjusted under certain circumstances, but it will not be adjusted for accrued original issue discount.

The Company is required to pay contingent interest to the holders of the LYONs during the six-month period commencing June 4, 2006 and during any six-month period thereafter if the average market price of a LYON for a certain measurement period immediately preceding the applicable six-month period equals 120% or more of the sum of the issue price and accrued original issue discount for such LYON. The amount of contingent interest payable during any six-month period will be the sum of any contingent interest payable in the first and second three-month periods during such six-month period. During any three-month period in which contingent interest becomes payable, the contingent interest payable per LYON for such period will be equal to the greater of (1) 0.0625% of the average market price of a LYON for the measurement period referred to above or (2) the sum of all regular cash dividends paid by the Company per share on its common stock during such three-month period multiplied by the number of shares of common stock issuable upon conversion of a LYON at the then-applicable conversion rate.

The Company used approximately \$97.4 million of the proceeds of the 2003 offering of the convertible subordinated notes to fund the purchase of approximately \$97.0 million accreted principal amount (\$165.0 million face amount) of its LYONs.

The holders of the LYONs had the option to require the Company to purchase all or a portion of their LYONs on June 4, 2004 at their accreted value of \$602.77 per \$1,000 principal amount at maturity. Pursuant to the terms of the notes, the Company could choose to pay the purchase price in cash, Vishay common stock, or a combination of both. On May 5, 2004, the Company notified holders of the notes that it had elected to pay the purchase price for the notes on the June 4, 2004 purchase date in shares of common stock. Each holder of LYONs that exercised the option received 32.6669 shares per \$1,000 principal amount at maturity, determined by dividing the total amount of cash the holder would have been entitled to receive had the purchase price been paid in cash by the average market price of a share of common stock for the five day trading period ending on the third business day prior to the purchase date, which was the period from May 25, 2004 to and including June 1, 2004. This average market price was \$18.452.

Holders of \$169,435,000 principal amount at maturity (\$102,130,000 accreted principal amount) exercised their option. The Company issued 5,534,905 shares of common stock. The transaction resulted in a non-cash charge to equity of \$2,540,000 for the write-off of a portion of unamortized debt issuance costs associated with the 2001 issuance of the LYONs.

#### Note 6 – Long-Term Debt (continued)

The remaining LYONs holders also have the right to require Vishay to repurchase the notes on June 4, 2006, June 4, 2011, and June 4, 2016 at their accreted value on these dates, as set forth in the notes. The Company may choose to pay the purchase price in cash, Vishay common stock, or a combination of both. The Company may redeem for cash all or a portion of the LYONs at any time on or after June 4, 2006 at the prices set forth in the notes.

## Exchangeable unsecured notes, due 2102

On December 13, 2002, the Company completed the acquisition of BCcomponents Holdings B.V. In connection with this acquisition, \$105,000,000 in principal amount of BCcomponents' mezzanine indebtedness and certain other securities of BCcomponents were exchanged for \$105,000,000 principal amount of floating rate unsecured loan notes of the Company, due 2102. The notes bear interest at LIBOR plus 1.5% through December 31, 2006 and at LIBOR thereafter. The interest rate could be further reduced to 50% of LIBOR after December 31, 2010 if the price of the Company's common stock trades above a specified target price, as provided in the notes. The notes are subject to a put and call agreement under which the holders may at any time put the notes to the Company in exchange for 6,176,471 shares of the Company's common stock in the aggregate, and the Company may call the notes in exchange for cash or for shares of its common stock after 15 years from the date of issuance.

## Revolving credit facility

In July 2003, Vishay agreed with the lenders under its secured revolving credit facility to an amendment and restatement of the agreement governing the facility. The maximum availability under the facility, in light of the Company's anticipated liquidity needs, was changed from \$500 million to \$400 million, and the final maturity of the facility was extended from June 2005 to May 2007. The restatement decreases the Company's minimum tangible net worth requirement to \$850 million plus 50% of net income (without offset for losses) and 75% of net proceeds of equity offerings from July 1, 2003, eliminates the covenant on minimum earnings before interest and tax, permits securitization of up to \$200 million of non-U.S. accounts receivable, allows for the release of all collateral (other than subsidiary stock and pledges by the Company and its subsidiaries of intercompany notes) under certain circumstances and creates an event of default upon the occurrence of a fundamental change as defined under the Company's convertible subordinated notes due 2023. The Company used approximately \$130 million of the proceeds of the offering of the convertible subordinated notes to repay amounts outstanding under the revolving credit facility.

On May 24, 2004, the Company entered into a Consent and First Amendment to the revolving credit facility, effective as of May 14, 2004. The amendment provides for lender consent to the corporate restructuring of certain subsidiaries of Vishay, permits subsidiary guarantees of certain equipment leases and revises and clarifies the conditions under which Vishay and its subsidiaries may extend loans to one another. In addition, in connection with the execution of the amendment, certain additional Vishay subsidiaries, which have become "significant subsidiaries" as that term is defined under the credit agreement, have become parties to various security and guaranty documents. Effective August 6, 2004, the Company entered into a second amendment, which made certain additional technical changes to the collateral arrangements under the revolving credit agreement.

Interest on the revolving credit facility is payable at prime or other variable interest rate options. The Company is required to pay facility fees. As of December 31, 2004, \$11,000,000 was outstanding under the revolving credit facility. No amounts were outstanding under the revolving credit facility at December 31, 2003. Letters of credit totaling \$7,314,000 and \$6,105,000 were issued under the revolving credit facility at December 31, 2004, \$381,686,000 was available under the credit facility.

#### Note 6 – Long-Term Debt (continued)

Borrowings under the revolving credit facility are secured by pledges of stock in certain significant subsidiaries and certain guarantees by significant subsidiaries. The subsidiaries would be required to perform under the guarantees in the event that the Company failed to make principal or interest payments under the revolving credit facility. Our Siliconix subsidiary is not a party to the revolving credit agreement. Certain of the Company's subsidiaries, not including Siliconix, are permitted to borrow under the revolving credit facility. Any borrowings by these subsidiaries under the revolving credit facility are guaranteed by Vishay, including the borrowing of an Asian subsidiary of \$11,000,000 in December 2004. The revolving credit facility restricts the Company from paying cash dividends and requires the Company to comply with other covenants, including the maintenance of specific financial ratios.

## **Other Borrowings Information**

Aggregate annual maturities of long-term debt, based on the terms stated in the respective debt agreements, are as follows: 2005 – \$51,000; 2006 – \$0; 2007 – \$11,272,000; 2008 – \$95,000; 2009 – \$0; and thereafter – \$740,778,000. As described above, LYONs with an aggregate accreted principal amount of \$132.2 million, due by their terms in 2021, may be put to the Company in 2006 at an aggregate price of approximately \$138 million. Also, as described above, the convertible subordinated notes, due by their terms in 2023, may be put to the Company in 2008 at an aggregate price of \$500 million.

At December 31, 2004, the Company had committed and uncommitted short-term credit lines with various U.S. and foreign banks aggregating approximately \$73.6 million, of which approximately \$69.9 million was unused. The weighted average interest rate on short-term borrowings outstanding as of December 31, 2004 and 2003 was 4.9% and 5.1%, respectively.

Interest paid was \$26,902,000, \$30,760,000, and \$17,977,000 for the years ended December 31, 2004, 2003, and 2002, respectively.

# Note 7 - Stockholders' Equity

The Company's Class B common stock carries ten votes per share while the common stock carries one vote per share. Class B shares are transferable only to certain permitted transferees while the common stock is freely transferable. Class B shares are convertible on a one-for-one basis at any time into shares of common stock.

On August 10, 2000, the Board of Directors of the Company authorized the repurchase of up to 5,000,000 shares of its common stock from time to time in the open market. As of December 31, 2004, the Company had repurchased 248,500 shares for a total of \$6,616,000.

Unearned compensation relating to common stock issued under employee stock plans is being amortized over periods ranging from three to five years. At December 31, 2004, 305,126 shares were available for issuance under stock plans.

At December 31, 2004, the Company had reserved shares of common stock for future issuance as follows:

Employee stock plan	305,126
Common stock options outstanding	8,100,000
Common stock options available to grant	1,296,000
Common stock warrants	8,823,529
Exchangeable unsecured notes, BCcomponents	6,176,471
Convertible subordinated notes, LYONs	3,808,732
Convertible subordinated notes, due 2023	23,496,250
Phantom stock outstanding	30,000
Phantom stock available to grant	270,000
Conversion of Class B common stock	14,679,440
	66,985,548

# Note 8 - Other Income (Expense)

On February 13, 2002, a fire occurred at the Company's Electro-Films, Inc. facility located in Warwick, Rhode Island causing a production stoppage. The Company received insurance proceeds based on its costs to replace the assets, which were in excess of the book value of the assets at the time of the fire. This insurance claim has been resolved, and the Company recognized a gain of \$33,906,000 in 2003.

As described in Note 6, on August 6, 2003, the Company issued 3-5/8% convertible subordinated notes due 2023. The proceeds of the offering were utilized to redeem a portion of the outstanding LYONs and all of the General Semiconductor notes, which resulted in a pretax loss of \$9,910,000 in 2003.

The caption "Other" on the consolidated statements of operations consists of the following (in thousands):

		Years ended December 31,						
	2004	2003			2002			
Foreign exchange losses	\$ (2,310)	\$	(5,235)	\$	(777)			
Gain (loss) on interest rate swap	_		3,783		(115)			
Interest income	8,702		7,228		7,952			
Dividend income	490		96		100			
Losses on disposal of property and equipment	(1,697)		(2,521)		(296)			
Royalty income	1,078		_		_			
Incentive from Chinese government	2,377		_		1,400			
Favorable settlement of note receivable	3,100		_		_			
Other	38		(1,062)		400			
	\$ 11,778	\$	2,289	\$	8,664			

See Note 14 for a description of the Company's interest rate swap agreements.

# Note 9 - Other Accrued Expenses

Other accrued expenses consist of the following (in thousands):

		December 31,				
	2004		2003			
Restructuring	\$ 3	0,518 \$	62,859			
Sales returns and allowances	4	3,254	41,761			
Accrued loss on tantalum purchase commitment - current portion	3	3,810	31,675			
Other	11	4,376	145,984			
	\$ 22	1,958 \$	282,279			

# Note 10 – Other Comprehensive Income (Loss)

The cumulative balance of each component of other comprehensive income (loss) and the income tax effects allocated to each component are as follows:

		Beginning Balance		Before-Tax Amount		Tax Effect		Net-of-Tax Amount		Ending Balance
December 31, 2002										
Minimum pension liability adjustment	\$	(13,694)	\$	(35,562)	\$	12,332	\$	(23,230)	\$	(36,924)
Currency translation adjustment		(116,072)		64,343		_		64,343		(51,729)
Loss on derivative financial instruments		(645)	_	(2,291)		474	_	(1,817)		(2,462)
	\$	(130,411)	\$	26,490	\$	12,806	\$	39,296	\$	(91,115)
December 31, 2003										
Minimum pension liability adjustment	\$	(36,924)	\$	416	\$	4,600	\$	5,016	\$	(31,908)
Currency translation adjustment	<u> </u>	(51,729)	4	111,369	Ψ		Ψ.	111,369	Ψ	59,640
Loss on derivative financial instruments		(51,7 <b>2</b> 5)		2,495		(873)		1,622		1,622
Derivative financial instruments:				_,		(=, =)		-,		2,022
Loss		(2,462)		(1,321)		<u> </u>		(1,321)		(3,783)
Reclassification adjustment for amounts realized				3,783		_		3,783		3,783
			_		_		_			
	\$	(91,115)	\$	116,742	\$	3,727	\$	120,469	\$	29,354
			_		_		_		_	
December 31, 2004										
Minimum pension liability adjustment	\$	(31,908)	\$	33,139	\$	(12,989)	\$	20,150	\$	(11,758)
Currency translation adjustment		59,640		85,549		_		85,549		145,189
Unrealized gain on available-for-sale securities		1,622		574		(201)		373		1,995
Reclassification adjustment for amounts realized		_		(2,606)		912		(1,694)		(1,694)
	ф.	20.05.4	Φ.	440.050	Φ.	(40.050)	Φ.	404.050	Φ.	400 800
	\$	29,354	\$	116,656	\$	(12,278)	<b>\$</b>	104,378	\$	133,732

## Note 11 - Pensions and Other Postretirement Benefits

The Company maintains various retirement benefit plans. The following table summarizes amounts recorded on the consolidated balance sheets associated with these plans:

	Dec	December 31,				
	2004		2003			
Prepaid pension costs (included in "Other Assets"):						
U.S. pension plans	\$ 47,24	9 \$	_			
Intangible pension asset (included in "Other Assets"):						
U.S. pension plans	\$ 3,43	6 \$	243			
Foreign pension plans	11	9	237			
Total intangible pension asset	\$ 3,55	5 \$	480			
Accrued pension and other postretirement costs:						
U.S. pension plans	\$ (17,13	6) \$	(26,152)			
Non-U.S. pension plans	(175,00	6)	(161,996)			
U.S. other postretirement plans	(19,70	4)	(19,179)			
Non-U.S. other postretirement plans	(9,16	2)	(9,738)			
Other retirement obligations	(11,13	4)	(22,885)			
Total accrued pension and other postretirement costs	\$ (232,14	2) \$	(239,950)			
Accumulated other comprehensive income:						
U.S. pension plans	\$ 6,21		41,611			
Non-U.S. pension plans	13,93	1	11,676			
Total accumulated other comprehensive income*	\$ 20,14	8 \$ 	53,287			
Net amounts recognized	\$ (161,19	0) \$	(186,183)			

<sup>\* -</sup> Amounts included in accumulated other comprehensive income are presented in this table pretax.

# **Defined Benefit Pension Plans**

The Company maintains several defined benefit pension plans which cover substantially all full-time U.S. employees. The U.S. pension plan of BLH is included as of the date of acquisition, July 31, 2002. The Company provides pension and similar benefits to employees of certain non-U.S. subsidiaries consistent with local practices. Certain non-U.S. subsidiaries of the Company have defined benefit pension plans. The pension plans of BCcomponents are included as of the date of acquisition, December 13, 2002. Pension benefits earned are generally based on years of service and compensation during active employment.

The Company also maintains pension plans which provide supplemental defined benefits primarily to U.S. employees whose benefits under the qualified pension plan are limited by the Employee Retirement Security Act of 1974 and the Internal Revenue Code. These non-qualified plans include both contributory and non-contributory plans, and are considered to be unfunded. The Company maintains a non-qualified trust, referred to as a "rabbi" trust, to fund benefit payments under one of these plans. Rabbi trust assets are subject to creditor claims under certain conditions and are not the property of employees. Therefore, they are accounted for as other noncurrent assets. Assets held in trust related to the non-qualified pension plan at December 31, 2004 and 2003 were approximately \$8 million and \$7 million, respectively.

In 2004, the Company entered into an employment agreement with Dr. Felix Zandman, its Chairman and then-Chief Executive Officer. Pursuant to this agreement, the Company will provide an annual retirement benefit equal to 50% of his average base pay and bonus for the five years preceding his retirement (but not to exceed \$1 million annually). These pension benefits are unfunded and fully vested. The obligations represent prior service costs which will be amortized over the remaining expected service period.

# Note 11 – Pensions and Other Postretirement Benefits (continued)

The following table sets forth a reconciliation of the benefit obligation, plan assets, and accrued benefit cost related to U.S. and non-U.S. pension plans (in thousands):

	December 31, 2004				December 31, 2003			
		U.S. Plans		Non-U.S. Plans		U.S. Plans		Non-U.S. Plans
Change in benefit obligation:								
Benefit obligation at beginning of year	\$	227,850	\$	208,290	\$	214,318	\$	168,552
Service cost (adjusted for actual employee contributions)		3,748		4,259		3,394		4,011
Interest cost		14,544		9,908		14,057		8,866
Plan amendments and initiations		4,417		429		_		_
Contributions by participants		1,849		_		1,641		_
Actuarial losses		14,545		8,952		9,689		8,941
Curtailment gains		_		(91)		_		(163)
Benefits paid		(15,139)		(12,592)		(15,249)		(7,877)
Currency translation		_		13,840		_		25,960
Benefit obligation at end of year	\$	251,814	\$	232,995	\$	227,850	\$	208,290
Change in plan assets:	ф	404.040	Φ.	22.040	ф	4.45.006	ф	0.4.455
Fair value of plan assets at beginning of year	\$	191,918	\$	32,048	\$	147,296	\$	24,175
Actual return on plan assets		22,149		637		30,149		557
Company contributions		30,290		12,932		28,081		11,408
Plan participants' contributions		1,849				1,641		
Benefits paid		(15,139)		(12,592)		(15,249)		(7,877)
Currency translation		<u> </u>		2,383		<u> </u>		3,785
Fair value of plan assets at end of year	\$	231,067	\$	35,408	\$	191,918	\$	32,048
Funded status	\$	(20,747)	\$	(197,587)	\$	(35,932)	\$	(176,242)
Unrecognized net actuarial loss	-	56,866	-	36,631	-	51,391	-	26,159
Unamortized prior service cost		3,647		_				_
Unrecognized net transition obligation						243		
Net amount recognized	\$	39,766	\$	(160,956)	\$	15,702	\$	(150,083)
	_							
Reconciliation of net amount recognized:	¢	47.240	ď		ď		ď	
Prepaid pension asset	\$	47,249	\$	110	\$	243	\$	
Intangible pension asset		3,436		119				237
Accrued benefit liability		(17,136)		(175,006)		(26,152)		(161,996)
Accumulated other comprehensive loss		6,217		13,931		41,611		11,676
Net amount recognized	\$	39,766	\$	(160,956)	\$	15,702	\$	(150,083)
Accumulated benefit obligation	\$	238,407	\$	209,169	\$	218,070	\$	206,181

# Note 11 – Pensions and Other Postretirement Benefits (continued)

The following table sets forth additional information regarding plans for which the accumulated benefit obligation exceeds plan assets (in thousands):

	December 31, 2004					December 31, 2003			
	U.S. Plans				U.S. Plans			Non-U.S. Plans	
Projected benefit obligation	\$	95,361	\$	232,995	\$	227,850	\$	208,290	
Accumualted benefit obligation		92,148		209,169		218,070		206,181	
Fair value of plan assets		75,394		35,408		191,918		32,048	

The following table sets forth the components of net periodic pension cost (in thousands):

Years ended	December 31.
-------------	--------------

	20	04		2003					20	02	
	 U.S. Plans		Non-U.S. Plans		U.S. Plans		Non-U.S. Plans		U.S. Plans		Non-U.S. Plans
Annual service cost	\$ 5,597	\$	4,259	\$	5,035	\$	4,011	\$	5,424	\$	3,049
Less employee contributions	1,849		<del>_</del>		1,641	_		_	1,991		
Net service cost	3,748		4,259		3,394		4,011		3,433		3,049
Interest cost	14,544		9,908		14,057		8,866		13,598		8,018
Expected return on plan assets	(16,181)		(1,075)		(12,521)		(671)		(14,227)		(698)
Amortization of actuarial losses (gains)	3,102		1,317		4,285		784		1,474		768
Amortization of prior service cost	1,014		_		32		23		_		_
Amortization of transition obligation	_		67		(1)		63		(201)		64
Curtailment gains	_		_		_		(163)		_		(1,336)
	 					_					
Net periodic benefit cost	\$ 6,227	\$	14,476	\$	9,246	\$	12,913	\$	4,077	\$	9,865

See Note 10 for the pretax, tax effect and after tax amounts included in other comprehensive income during the years ended December 31, 2004, 2003, and 2002.

The following weighted average assumptions were used to determine benefit obligations at December 31 of the respective years:

	2004		2003			
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans		
Discount rate	6.00%	4.75%	6.25%	4.91%		
Rate of compensation increase	4.00%	2.61%	4.00%	2.79%		

# Note 11 - Pensions and Other Postretirement Benefits (continued)

The following weighted-average assumptions were used to determine the net periodic pension costs for the years ended December 31, 2004 and 2003:

		Years ended December 31,						
	200	4	2003					
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans				
Discount rate	6.25%	4.91%	6.75%	5.44%				
Rate of compensation increase	4.00%	2.79%	4.50%	3.01%				
Expected return on plan assets	8.50%	3.44%	8.50%	3.44%				

Venue anded December 21

The plans' expected return on assets is based on management's expectations of long-term average rates of return to be achieved by the underlying investment portfolios. In establishing this assumption, management considers historical and expected returns for the asset classes in which the plans are invested, advice from pension consultants and investment advisors, and current economic and capital market conditions.

The investment mix between equity securities and fixed income securities is based upon achieving a desired return, balancing higher return, more volatile equity securities, and lower return, less volatile fixed income securities. The Company's U.S. defined benefit plans are invested in diversified portfolios of public-market equity and fixed income securities. Investment allocations are made across a range of markets, industry sectors, capitalization sizes, and, in the case of fixed income securities, maturities and credit quality. The target allocation is approximately 60% invested in equity securities, 30% invested in debt securities, and 10% invested in cash and cash equivalents. The Company's non-U.S. defined benefit plans are largely invested in cash, with a small percentage invested in fixed income securities, based on local laws and customs. The plans do not invest in securities of Vishay or its subsidiaries.

Plan assets are comprised of:

	December 31	, 2004	December 3	December 31, 2003			
	U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans			
Equity securities	61%	0%	65%	0%			
Fixed income securities	24%	9%	30%	9%			
Cash and cash equivalents	15%	91%	5%	91%			
Total	100%	100%	100%	100%			

Estimated future benefit payments are as follows (in thousands):

	 U.S. Plans		Non-U.S. Plans
2005	\$ 13,590	\$	8,528
2006	13,827		8,920
2007	15,382		9,998
2008	16,005		11,539
2009	16,552		12,455
2010-2014	89,774		77,214

The Company anticipates making contributions of approximately \$3 million and \$9 million, respectively, to its defined benefit U.S. and Non-U.S. pension plans in 2005.

# Note 11 - Pensions and Other Postretirement Benefits (continued)

## Other Postretirement Benefits

In the U.S., the Company maintains two unfunded non-pension postretirement plans funded as costs are incurred. One plan is contributory, with employee contributions adjusted for general inflation or inflation in costs under the plan. The plan was amended in 1993 to cap employer contributions at 1993 levels. The second plan covers all full-time U.S. General Semiconductor employees not covered by a collective bargaining agreement who meet defined age and service requirements. This plan is the primary provider of medical benefits for retirees up to age 65, after which Medicare becomes the primary provider. The Company also maintains two unfunded non-pension postretirement plans at two European subsidiaries.

In 2004, the Company entered into formal employment agreements with six of its executives. These employment agreements provide medical benefits for these executives and their surviving spouses for life, up to a \$15,000 annual premium value per person. These benefits are fully vested, and accordingly, the obligations represent prior service costs which will be amortized over the average remaining expected services period for these six executives.

The following table sets forth a reconciliation of the benefit obligation, plan assets, and accrued benefit cost related to U.S. and non-U.S. non-pension defined benefit postretirement plans (*in thousands*):

	December 31, 2004					December	mber 31, 2003			
		U.S. Plans		Non-U.S. Plans	U.S. Plans			Non-U.S. Plans		
Change in benefit obligation:										
Benefit obligation at beginning of year	\$	21,178	\$	9,738	\$	21,999	\$	9,625		
Service cost		267		497		247		481		
Interest cost		1,281		381		1,358		367		
Plan amendments and initiations		381		_		_		_		
Actuarial losses (gains)		(83)		(931)		(1,225)		(598)		
Curtailment gains		_		_		_		_		
Benefits paid		(1,317)		(1,215)		(1,201)		(907)		
Acquisitions		_		_		_				
Currency translation		_		692				770		
							_			
Benefit obligation at end of year	\$	21,707	\$	9,162	\$	21,178	\$	9,738		
	_		_		_		_			
Fair value of plan assets at end of year	\$	_	\$	_	\$	_	\$			
·							_			
Funded status	\$	(21,707)	\$	(9,162)	\$	(21,178)	\$	(9,738)		
Unrecognized net actuarial loss		19				131		_		
Unamortized prior service cost		442		_		134		_		
Unrecognized net transition obligation		1,542		_		1,734		_		
							_			
Net amount recognized	\$	(19,704)	\$	(9,162)	\$	(19,179)	\$	(9,738)		
	_		_		_		_			
Reconciliation of net amount recognized:										
Accrued benefit liability	\$	(19,704)	\$	(9,162)	\$	(19,179)	\$	(9,738)		
•			_		_		_			
Net amount recognized	\$	(19,704)	\$	(9,162)	\$	(19,179)	\$	(9,738)		

# Note 11 – Pensions and Other Postretirement Benefits (continued)

The following table sets forth the components of net periodic benefit cost (in thousands):

## Years ended December 31,

on-U.S.
Plans
264
195
_
_
459

The following weighted average assumptions were used to determine benefit obligations at December 31 of the respective years:

2004	2004		2003		
U.S. Plans	Non-U.S. Plans	U.S. Plans	Non-U.S. Plans		
6.00%	4.50%	6.25%	4.50%		

The following weighted-average assumptions were used to determine the net periodic pension costs for the years ended December 31, 2004 and 2003:

Years ended December 31,					
2004					
U.S. Plans					
6.25%					
Non- Pla					

The impact of a one-percentage-point change in assumed health care cost trend rates on the net periodic benefit cost and postretirement benefit obligation is not material

Estimated future benefit payments are as follows (in thousands):

	 U.S. Plans	 Non-U.S. Plans
2005	\$ 1,627	\$ 1,216
2006	1,535	1,216
2007	1,453	1,216
2008	1,392	1,216
2009	1,340	1,216
2010-2014	5,881	6,078

## Note 11 - Pensions and Other Postretirement Benefits (continued)

As the plans are unfunded, the Company's anticipated contributions for 2005 are equal to its estimated benefits payments.

On December 8, 2003, the President of the United States signed the Medicare Prescription Drug, Improvement and Modernization Act of 2003 (the "Act"). On May 19, 2004, the FASB issued Staff Position No. 106-2, *Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003* ("FSP No. 106-2"). The Act introduces a prescription drug benefit under Medicare as well as a federal subsidy to sponsors of retiree health care benefit plans that provide a benefit that is at least actuarially equivalent to Medicare Part D. FSP No. 106-2 provides that an employer shall measure the accumulated postretirement benefit obligation and net periodic postretirement benefit cost taking into account any subsidy received under the Act.

Management does not believe that the prescription drug benefits presently available under its retiree health care benefit plans would be considered actuarially equivalent to Medicare Part D. Accordingly, the Company's measures of accumulated postretirement benefit obligation and net periodic postretirement benefit cost as of and for the period ended December 31, 2004 do not include any subsidies which might be received under the Act.

#### **Other Retirement Obligations**

The Company participates in various other defined contribution and government-mandated retirement plans based on local law or custom. The Company periodically makes required contributions for certain of these plans, whereas other plans are unfunded retirement bonus plans which will be paid at the employee's retirement date. At December 31, 2004 and 2003, the consolidated balance sheets include \$11,134,000 and \$22,885,000 within accrued pension and other postretirement costs related to these plans.

Many of the Company's U.S. employees are eligible to participate in 401(k) savings plans, some of which provide for Company matching under various formulas. The Company's matching expense for the plans was \$2,968,000 \$3,401,000, and \$2,990,000, for the years ended December 31, 2004, 2003, and 2002, respectively. No material amounts are included in the consolidated balance sheets at December 31, 2004 and 2003 related to unfunded 401(k) contributions.

Certain key employees participate in deferred compensation plans. During the years ended December 31, 2004, 2003 and 2002, these employees could defer a portion of their compensation until retirement. Effective January 1, 2005, these employees may elect short deferral periods for future compensation deferrals. The Company maintains a liability within other noncurrent liabilities on its consolidated balance sheet related to these deferrals. The Company maintains a non-qualified trust, referred to as a "rabbi" trust, to fund payments under this plan. Rabbi trust assets are subject to creditor claims under certain conditions and are not the property of employees. Therefore, they are accounted for as other noncurrent assets. Assets held in trust related to the deferred compensation plans at December 31, 2004 and 2003 were approximately \$5 million and \$4 million, respectively. Assets held in trust approximate the Company's liability under these plans.

# Note 12 - Stock-Based Compensation

## Stock Options

Under the 1997 Stock Option Program, certain executive officers, key employees, and consultants of the Company were granted options on May 21, 1998 to purchase 2,687,000 shares of the Company's common stock. The options were fully vested on the date of grant and expire June 1, 2008, with one-third exercisable at \$10.89, one-third exercisable at \$12.53, and one-third exercisable at \$13.61. As of December 31, 2004, options to purchase 528,000 shares have been exercised under this plan.

Under the 1998 Stock Option Program, certain executive officers and key employees were granted options, as summarized in the following table:

Date of Grant	Number of Options	Exercise Price		Vesting	Expiration			
October 6, 1998	1,598,000	\$	5.60	Evenly over 6 years	March 16, 2008			
October 8, 1999	1,334,000		15.33	Evenly over 6 years	October 8, 2009			
August 4, 2000	50,000		30.00	Evenly over 5 years, beginning August 4, 2003	August 4, 2010			
October 12, 2000	1,114,000		25.13	Evenly over 6 years	October 12, 2010			
October 1, 2001 through July 30, 2004	33,000		13.46 – 25.07	Evenly over 6 years	October 1, 2011 through July 30, 2014			

As described in Note 2, the Company issued 120,000 stock options from the 1998 plan allocation as part of acquisitions during 2004.

On May 18, 2000, the stockholders of the Company approved an increase in the number of shares available for grant under Vishay's 1998 Stock Option Program. As a result, the number of shares available for grant under this program increased from 2,953,500 to 4,453,500. As of December 31, 2004, options to purchase 508,000 shares had been exercised under this plan.

On November 2, 2001, Vishay acquired General Semiconductor, which became a wholly owned subsidiary of the Company. As a result of the acquisition, each outstanding option to acquire General Semiconductor common stock became exercisable for shares of Vishay common stock. Based on the conversion ratio in the acquisition of 0.563 of a Vishay share for each General Semiconductor share, the former General Semiconductor options become exercisable in the aggregate for 4,282,000 shares of Vishay common stock. All such options were immediately vested and exercisable as a result of the merger but the terms of the options otherwise remained unchanged. As of December 31, 2004, options to purchase 915,000 shares had been exercised under this plan.

# Note 12 - Stock-Based Compensation (continued)

The following table summarizes the Company's stock option activity (number of options in thousands):

# Years ended December 31,

	2004			2003			2002			
	Number of Options		Weighted Average Exercise Price	Number of Options	Weighted Average Exercise Price		Number of Options		Weighted Average Exercise Price	
Outstanding:										
Beginning of year	8,768	\$	16.17	9,231	\$	16.07	9,569	\$	15.97	
Granted	6		15.50	12		14.00	15		17.75	
Exercised	(515)		17.63	(356)		13.30	(261)		12.12	
Cancelled	(279)		18.31	(119)		17.10	(92)		17.14	
Acquisitions	120		12.75			<del></del>	<u> </u>		_	
End of year	8,100	\$	15.95	8,768	\$	16.17	9,231	\$	16.07	
						ı				
Exercisable:										
End of year	7,475			7,725			7,626			
Available for future grants	1,296			1,143			1,036			

The following table summarizes information concerning stock options outstanding and exercisable at December 31, 2004 (number of options in thousands):

	Options Outstanding						Options Exercisable			
Ranges of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price		Number of Options		Weighted Average Exercise Price			
\$5.60	837	3.76	\$	5.60	837	\$	5.60			
\$10.89-\$12.53	1,237	3.39		11.76	1,237		11.76			
\$12.54-\$13.46	409	5.61		12.62	284		12.55			
13.61	843	3.39		13.61	843		13.61			
\$14.22-\$14.99	16	5.99		14.61	11		14.78			
\$15.33	935	4.77		15.33	773		15.33			
\$15.43-\$16.41	1,090	5.86		16.03	1,084		16.02			
\$16.52-\$20.86	1,203	4.23		18.93	1,200		18.93			
\$21.43-\$23.53	345	2.42		22.27	345		22.27			
\$25.13-\$34.52 -	1,185	5.48		25.99	861		26.15			
Total	8,100		\$	15.95	7,475	\$	15.59			

#### Note 12 – Stock-Based Compensation (continued)

#### Phantom Stock

On May 12, 2004, the Company's shareholders approved the Senior Executive Phantom Stock Plan. The Phantom Stock Plan authorizes the grant of up to 300,000 shares of phantom stock to the extent provided for in employment agreements with the Company. Each share of phantom stock entitles the recipient to receive a share of common stock at the individual's termination of employment or any other future date specified in the employment agreement. The shares of phantom stock are fully vested at all times.

The Phantom Stock Plan provides for the granting of shares of phantom stock to individuals whose employment arrangements with the Company provide for such grants. The Company has such employment arrangements with six of its executives. The arrangements provide for an annual grant of 5,000 shares of phantom stock to each of these executives. If the Company later enters into other employment arrangements with other individuals that provide for the granting of phantom stock, those individuals also will be eligible for grants under the Phantom Stock Plan. No grants may be made under the Phantom Stock Plan other than under the terms of employment arrangements with the Company.

If the Company declares dividends on its common stock, the dividend amounts with respect to the phantom stock will be deemed reinvested in additional shares of phantom stock.

The Board of Directors of the Company can amend or terminate the Phantom Stock Plan at any time, except that phantom stock already granted to any individual cannot be adversely affected without the individual's consent. Furthermore, stockholder approval of an amendment is required if the amendment increases the number of shares subject to the Phantom Stock Plan or otherwise materially amends the Phantom Stock Plan or if stockholder approval is otherwise required by applicable law or stock exchange rules. If the Board of Directors does not terminate the Phantom Stock Plan, it will terminate when all phantom stock has been awarded with respect to all 300,000 shares of common stock reserved for the Phantom Stock Plan.

On May 12, 2004, the Company granted 30,000 phantom stock units and recognized compensation expense of \$561,000, equal to the value of the underlying stock at the date of grant. The fair value of such grants pursuant to SFAS No. 123 is equal to the intrinsic value as determined pursuant to APB No. 25.

## Note 13 - Commitments and Contingencies

#### Leases

Total rental expense under operating leases was \$30,304,000, \$34,621,000, and \$27,652,000 for the years ended December 31, 2004, 2003, and 2002, respectively.

Future minimum lease payments for operating leases with initial or remaining noncancelable lease terms in excess of one year are as follows: 2005 - \$23,280,000; 2006 - \$18,817,000; 2007 - \$15,251,000; 2008 - \$3,819,000; 2009 - \$1,810,000; and thereafter - \$2,563,000.

## **Environmental Matters**

The Company is subject to various federal, state, local and foreign laws and regulations governing environmental matters, including the use, discharge and disposal of hazardous materials. The Company's manufacturing facilities are believed to be in substantial compliance with current laws and regulations. Complying with current laws and regulations has not had a material adverse effect on the Company's financial condition.

The Company has engaged environmental consultants and attorneys to assist management in evaluating potential liabilities related to environmental matters. Management assesses the input from these consultants along with other information known to the Company in its effort to continually monitor these potential liabilities. Management assesses its environmental exposure on a site-by-site basis, including those sites where the Company has been named as a "potentially responsible party." Such assessments include the Company's share of remediation costs, information known to the Company concerning the size of the hazardous waste sites, their years of operation and the number of past users and their financial viability.

As part of the acquisition of General Semiconductor by Vishay on November 2, 2001, the Company assumed ongoing environmental matters. The Company has accrued \$19,400,000 as of December 31, 2004 for environmental matters relating to ongoing environmental matters at its General Semiconductor subsidiary. As part of the acquisition of BCcomponents in 2002, the Company has recorded environmental liabilities of \$7,800,000. The Company has also accrued approximately \$10,400,000 at December 31, 2004 for other environmental matters, the most significant of which is related to its Vitramon subsidiary in the United States. The liabilities recorded for these matters total \$37,600,000, of which \$4,400,000 is included in other accrued liabilities on the consolidated balance sheet.

While the ultimate outcome of these matters cannot be determined, management does not believe that the final disposition of these matters will have a material adverse effect on the Company's consolidated financial position, results of operations, or cash flows beyond the amounts previously provided for in the consolidated financial statements. The Company's present and past facilities have been in operation for many years, and over that time in the course of those operations, such facilities have used substances which are or might be considered hazardous, and the Company has generated and disposed of wastes which are or might be considered hazardous. Therefore, it is possible that additional environmental issues may arise in the future, which the Company cannot now predict.

## Note 13 - Commitments and Contingencies (continued)

#### Litigation

In January 2005, an amended class action complaint was filed on behalf of all non-Vishay shareholders of the Company's 80.4% owned subsidiary, Siliconix, against Vishay, Ernst & Young LLP (independent registered public accounting firm that audits the Company's consolidated financial statements), Dr. Felix Zandman, Chairman and Chief Technical and Business Development Officer of Vishay, and, as a nominal defendant, Siliconix. The suit purports to state various derivative and class claims against the defendants including the purported taking by Vishay of Siliconix sales subsidiaries and the profits of those subsidiaries; the purported taking by Vishay of Siliconix's SAP software system without compensation to Siliconix; the alleged use by Vishay of Siliconix's assets as security for Vishay loans without compensation to Siliconix; the purported misappropriation by Vishay of Siliconix's identity; the alleged taking by Vishay of Siliconix testing equipment; the alleged use by Vishay of Siliconix to save Vishay certain credits made available by an Israeli business development agency; the alleged misuse by Vishay of Siliconix's patents to help Vishay acquire General Semiconductor; and the allegedly improper identification of Dr. Zandman as a co-inventor on certain Siliconix patents. The action seeks injunctive relief and unspecified damages. The defendants have not yet responded to the complaint, but intend to deny all allegations. See also Note 19.

The Company is a party to various other claims and lawsuits arising in the normal course of business. The Company is of the opinion that these litigations or claims will not have a material negative effect on its consolidated financial position, results of operations, or cash flows.

## **Purchase Commitments**

On May 17, 2004, the Company's 80.4% owned subsidiary Siliconix announced that it had signed a definitive long-term foundry agreement for semiconductor manufacturing with Tower Semiconductor, pursuant to which Siliconix will purchase semiconductor wafers from and transfer certain technology to Tower Semiconductor.

Siliconix will place orders valued at approximately \$200 million for the purchase of semiconductor wafers to be manufactured in Tower's Fab 1 facility over a seven to ten year period. The agreement specifies minimum quantities per month and a fixed quantity for the term of the agreement. Siliconix must pay for any short-fall in minimum order quantities specified under the agreement.

The technology transfer from Siliconix to Tower has started and is estimated to be completed by the second quarter of 2005. After the completion of the technology transfer, the expected purchase commitments are approximately \$8 million for year one of the agreement; approximately \$16 million for year two of the agreement; and approximately \$29 million per year through the end of the agreement. Based on the expected date of completion of the technology transfer in the second quarter of 2005, the purchase commitments would be approximately as follows: 2005 - \$4,000,000; 2006 - \$12,000,000; 2007 - \$22,000,000; 2008 - \$29,000,000; 2009 - \$29,000,000; and thereafter - \$104,000,000. An acceleration or delay in the completion of the technology transfer will accelerate or delay, respectively, the timing of the future purchase commitments.

#### Note 13 – Commitments and Contingencies (continued)

All remaining conditions of this agreement were satisfied in the third quarter of 2004. Pursuant to the agreement, Siliconix advanced \$20 million to Tower in the third quarter of 2004, to be used for the purchase of additional equipment required to satisfy Siliconix's orders. This advance is considered a prepayment on future wafer purchases, reducing the per wafer cost to Siliconix over the term of the agreement. The consolidated balance sheet as of December 31, 2004 includes \$408,000 in other current assets for prepayments expected to be utilized within one year and \$19,592,000 in other assets related to credits to be utilized during the remaining term of the agreement. An acceleration or delay in the completion of the technology transfer will accelerate or delay, respectively, the utilization of these prepayment amounts. Management believes that these commitments are at prices which are not in excess of current market prices.

In 2004, Siliconix entered into a five-year foundry agreement for semiconductor manufacturing with a subcontractor in Japan. This agreement was a continuation and expansion of a previous technology transfer and business agreement for the manufacture of silicon wafers. The agreement calls for Siliconix to provide a rolling twelve-month forecast of estimated requirements. The first six months of this forecast are fixed as to quantity, and the subsequent six months are guaranteed not to be less than a quantity stated in the agreement. Thereafter, the monthly quantity may vary based on market demand. Under the agreement, Siliconix must guarantee that its business with this subcontractor represents a minimum percentage of wafer requirements and is required to make its best efforts not to reduce the average monthly demand rate below a specified threshold. Management believes that its minimum purchase commitments with this subcontractor are approximately as follows: 2005 – \$47,000,000; 2006 – \$27,000,000; 2007 – \$27,000,000; 2008 – \$27,000,000; 2009 – \$9,000,000. Management believes that actual purchases will be in excess of these minimum commitments. Purchases from this subcontractor in 2004 were approximately \$50,000,000, which includes amounts purchased under the previous agreement. Management believes that these commitments are at prices which are not in excess of current market prices.

See Note 15 for a discussion of tantalum and palladium purchase commitments.

The Company has various other purchase commitments incidental to the ordinary conduct of business. Such commitments are at prices which are not in excess of current market prices.

#### **Note 14 – Financial Instruments**

The Company uses financial instruments in the normal course of its business, including derivative financial instruments, for purposes other than trading. These financial instruments include debt and interest rate swap agreements. The notional or contractual amounts of these commitments and other financial instruments are discussed below.

## Concentration of Credit Risk

Financial instruments with potential credit risk consist principally of cash and cash equivalents and accounts receivable. The Company maintains cash and cash equivalents with various major financial institutions. Concentrations of credit risk with respect to receivables are generally limited due to the Company's large number of customers and their dispersion across many countries and industries. At December 31, 2004 and 2003, the Company had no significant concentrations of credit risk.

## **Interest Rate Swap Agreements**

In August 1998, the Company entered into six interest rate swap agreements, with a total notional amount of \$300,000,000, to manage interest rate risk related to its multicurrency revolving line of credit. These interest rate swap agreements required the Company to make payments to the counterparties at the fixed rate stated in the agreements, and in return to receive payments from the counterparties at variable rates. As of December 31, 2002, five of these six agreements had been terminated. The final agreement expired in 2003. During the year ended December 31, 2003, the Company had a pretax gain of \$3,783,000 related to the expiration of the final swap agreement. During the year ended December 31, 2002, the Company recorded pretax loss of \$115,000 relating to interest rate swap agreements that were ineffective hedges. See Note 8.

## Cash and Cash Equivalents, Accounts Receivable, Notes Payable, and Long-Term Debt

The carrying amounts of cash and cash equivalents, accounts receivable, and notes payable reported in the consolidated balance sheets approximate their fair values. The fair value of the long-term debt is approximately \$798,163,000, as compared to its carrying value of \$752,196,000. The fair value of long-term debt was estimated based on trading prices and market prices of debt with similar terms and features.

#### **Market Concentrations**

A material portion of the Company's revenues is derived from the worldwide communications and computer markets. These markets have historically experienced wide variations in demand for end products. If demand for these end products should decrease, the producers thereof could reduce their purchases of the Company's products, which could have a material adverse effect on the Company's results of operations and financial position.

#### Note 15 - Current Vulnerability Due to Certain Concentrations

## Sources of Supplies

Many of the Company's products require the use of raw materials that are produced in only a limited number of regions around the world or are available from only a limited number of suppliers. The Company's consolidated results of operations may be materially and adversely affected if the Company has difficulty obtaining these raw materials, the quality of available raw materials deteriorates or there are significant price increases for these raw materials. For periods in which the prices of these raw materials are rising, the Company may be unable to pass on the increased cost to the Company's customers, which would result in decreased margins for the products in which they are used. For periods in which the prices are declining, the Company may be required to write down its inventory carrying cost of these raw materials which, depending on the extent of the difference between market price and its carrying cost, could have a material adverse effect on the Company's net earnings.

From time to time, there have been short-term market shortages of raw material utilized by the Company. While these shortages have not historically adversely affected the Company's ability to increase production of products containing these raw materials, they have historically resulted in higher raw material cost for the Company. The Company cannot assure that any of these market shortages in the future would not adversely affect the Company's ability to increase production, particularly during periods of growing demand for the Company's products.

## **Tantalum**

Vishay is a major consumer of the world's annual production of tantalum. Tantalum, a metal purchased in powder or wire form, is the principal material used in the manufacture of tantalum capacitors. There are currently three major suppliers that process tantalum ore into capacitor grade tantalum powder. Due to the strong demand for the Company's tantalum capacitors and difficulty in obtaining sufficient quantities of tantalum powder from our suppliers, the Company stockpiled tantalum in 2000 and early 2001. From 2001 to 2003, the Company and its competitors experienced a significant decline in the tantalum capacitor business as well as significant decreases in the market prices for tantalum. As a result, the Company recorded, in costs of products sold, write-downs of \$5,406,000 and \$25,700,000 on tantalum inventories during the years ended December 31, 2003 and 2002, respectively. The Company also recorded losses on purchase commitments of \$16,213,000, \$11,392,000 and \$106,000,000 for the years ended December 31, 2004, 2003, and 2002, respectively. The Company's purchase commitments were entered into at a time when market demand for tantalum capacitors was high and tantalum powder was in short supply. The pricing trend for tantalum has been relatively stable since 2003. The mix of the Company's purchases of tantalum grades during 2004 was significantly different than initially expected, which resulted in additional losses on purchase commitments being recorded in 2004. If the downward pricing trend were to resume, the Company could again be required to write down the carrying value of its tantalum inventory and record additional losses on its purchase commitments. Changes in the Company's mix of tantalum-grade purchases could also require the Company to record additional losses on its purchase commitments.

The Company is obligated under two contracts with Cabot Corporation to make purchases of tantalum of approximately \$123,500,000 in 2005 and \$60,100,000 in 2006. The Company purchased \$107,438,000, \$107,906,000, and \$53,280,000 under these contracts during the years ended December 31, 2004, 2003, and 2002, respectively. As long as Vishay is in compliance with its purchase obligations under the Cabot contracts, its minimum purchase commitments will not increase. The Company believes that it has been in compliance with all requirements of these contracts through December 31, 2004. If Vishay were to default under its commitments, then the minimum requirements would revert to the quantities specified in the contracts prior to their modification in July 2002, and increase to \$149,300,000 in 2005 and \$81,300,000 in 2006. Vishay believes that the likelihood that it would default on its obligations under the contracts is remote.

## Note 15 - Current Vulnerability Due to Certain Concentrations (continued)

One of the Company's contracts with Cabot provides for price reductions in 2006 if certain conditions are met. The Company's estimates of losses on purchase commitments are based on the assumption that the Company will not receive these conditional price reductions in 2006. The Company may be required to reverse a portion of these recorded losses if it meets all conditions to receive these price reductions.

At December 31, 2004 and 2003, the Company had tantalum with a book value of \$97,656,000 and \$95,432,000, respectively. Of these amounts, the Company classified \$42,039,000 and \$28,724,000. respectively, as other assets, representing the value of quantities which would not be used within one year.

At December 31, 2004 and 2003, the Company had \$64,510,000 and \$89,400,000, respectively, of total liabilities recorded related to tantalum purchase commitments. Of the total liabilities recorded, the Company has classified \$33,410,000 and \$31,675,000 as current liabilities within other accrued expenses at December 31, 2004 and 2003, respectively, for amounts expected to be utilized within one year.

#### <u>Palladium</u>

Palladium, a metal used to produce multi-layer ceramic capacitors, is currently found primarily in South Africa and Russia. Palladium is a commodity product that is subject to price volatility. The price of palladium has fluctuated in the range of approximately \$148 to \$435 per troy ounce during the last three years. As of December 31, 2004, the price of palladium was approximately \$184 per troy ounce. During the years ended December 31, 2004, 2003 and 2002, the Company recorded in costs of products sold write-downs of \$400,000, \$1,585,000 and \$1,700,000, respectively, to reduce palladium inventories on hand to market value. The net book value of palladium inventories was \$3,218,000 and \$4,384,000 at December 31, 2004 and 2003, respectively.

The Company has commitments to purchase palladium in 2005. The contract price is greater than current market price. The Company recognized a loss of \$400,000 during the year ended December 31, 2004 related to these purchase commitments. This amount is included in other accrued expenses on the consolidated balance sheet.

## Geographic Concentration

To address the increasing demand for its products and to lower its costs, the Company has expanded, and plans to continue to expand, its manufacturing operations in Israel in order to take advantage of that country's lower wage rates, highly skilled labor force, government-sponsored grants, and various tax abatement programs. Israeli incentive programs have contributed substantially to the growth and profitability of the Company. The Company might be materially and adversely affected if these incentive programs were no longer available to the Company or if events were to occur in the Middle East that materially interfered with the Company's operations in Israel.

## Note 16 - Segment and Geographic Data

Vishay designs, manufactures, and markets electronic components that cover a wide range of products and technologies. The Company has two reportable segments: Passive Electronic Components (Passives) consisting principally of fixed resistors, solid tantalum surface mount chip capacitors, solid tantalum leaded capacitors, wet/foil tantalum capacitors, multi-layer ceramic chip capacitors, film capacitors, inductors, transducers, strain gages, and load cells, and Active Electronic Components (Actives) consisting principally of diodes, transistors, power MOSFETs, power conversion, motor control integrated circuits, optoelectronic components and IRDCs.

The Company evaluates business segment performance on operating income, exclusive of certain items. Management believes that evaluating segment performance excluding items such as restructuring, inventory write-downs, losses on purchase commitments, write-offs of in-process research and development, and other charges is meaningful because its provides insight with respect to ongoing operating results. The accounting policies of the business segments are the same as those described in the summary of significant accounting policies (see Note 1). Business segment assets are the owned or allocated assets used by each business. The following table sets forth business segment information as of and for the years ended December 31, 2004, 2003, and 2002 (in thousands):

	 Passives	 Actives	_	Corporate/ Other	 Total
<u>2004</u>					
Net sales	\$ 1,209,962	\$ 1,203,614	\$	_	\$ 2,413,576
Segment operating income (loss)	54,020	155,276		(116,805)	92,491
Restructuring and severance costs	16,162	31,088		_	47,250
Asset write-downs	22,743	4,553		_	27,296
Depreciation expense	98,181	91,720		1,231	191,132
Interest expense	2,418	326		31,508	34,252
Capital expenditures	52,605	104,094		1,928	158,627
Total assets	2,240,889	2,317,668		80,033	4,638,590
<u>2003</u>					
Net sales	\$ 1,104,856	\$ 1,065,741	\$	_	\$ 2,170,597
Segment operating income (loss)	13,767	114,498		(68,898)	59,367
Restructuring and severance costs	25,274	3,272		_	28,546
Asset write-downs	1,014			_	1,014
Depreciation expense	90,133	85,821		4,752	180,706
Interest expense	2,977	7,452		28,797	39,226
Capital expenditures	53,500	72,051		1,084	126,635
Total assets	2,163,952	2,280,737		121,671	4,566,360
<u>2002</u>					
Net sales	\$ 767,246	\$ 1,055,567	\$	_	\$ 1,822,813
Segment operating (loss) income	(33,917)	139,140		(184,429)	(79,206)
Restructuring and severance costs	17,686	921			18,607
Asset write-downs	12,363	_		_	12,363
Depreciation expense	80,084	87,609		4,481	172,174
Interest expense	963	10,545		17,995	29,503
Capital expenditures	45,105	62,933		2,036	110,074

## Note 16 - Segment and Geographic Data (continued)

Corporate assets include corporate cash, property and equipment, and certain other assets. The Corporate component of operating income includes corporate selling, general, and administrative (SG&A) expenses. Corporate SG&A expenses were \$23,745,000, \$20,955,000, and \$20,059,000 for the years ended December 31, 2004, 2003, and 2002, respectively. The "Corporate/Other" column for segment operating income (loss) also includes certain items which management excludes from segment results when evaluating segment performance. These items in 2004 included restructuring and severance costs, asset write-downs, inventory write-downs to current market value of \$400,000, losses on purchase commitments of \$16,613,000, and a write-off of purchased in-process research and development of \$1,500,000. In 2003, these items included restructuring and severance costs, asset write-downs, write-downs of tantalum and palladium inventories to then-current market value of \$6,991,000, and losses on purchase commitments of \$11,392,000. These items in 2002 included restructuring and severance costs, asset write-downs, write-downs, write-downs, write-downs, write-downs, write-downs of tantalum and palladium inventories to then-current market value of \$27,400,000, and losses on purchase commitments of \$106,000,000.

The following geographic data include net sales based on revenues generated by subsidiaries located within that geographic area and property and equipment based on physical location (in thousands):

#### **Net Sales**

Years ended December 31,					
	2004		2003		2002
\$	525,491	\$	444,952	\$	482,154
	588,720		534,019		382,932
	105,130		156,124		69,635
	390,384		309,409		269,995
	185,801		130,852		75,238
	618,050		595,241		542,859
		_	-		
\$	2,413,576	\$	2,170,597	\$	1,822,813

## Property and Equipment - Net

	December 31,			
		2004	2004	
United States	\$	184,570	\$	249,733
Germany		130,811		152,722
Czech Republic		74,073		66,571
France		35,784		38,200
Other Europe		122,904		115,633
Israel		272,186		312,632
Asia Pacific		351,487		278,109
	_		_	
	\$	1,171,815	\$	1,213,600

## Note 17 - Earnings (Loss) Per Share

Basic earnings (loss) per share is computed using the weighted average number of common shares outstanding during the periods presented. Diluted earnings (loss) per share is computed using the weighted average number of common shares outstanding adjusted to include the potentially dilutive effect of stock options granted under the Company's 1997 and 1998 stock option plans (see Note 12), stock options assumed in the acquisition of General Semiconductor (see Note 12), and other potentially dilutive securities.

The following table sets forth the computation of basic and diluted earnings (loss) per share (in thousands, except per share amounts):

	Years ended December 31,					
		2004		2003		2002
Numerator:						
Numerator for basic and diluted earnings per share - net earnings (loss)	\$	44,696	\$	26,842	\$	(92,614)
Denominator:						
Denominator for basic earnings per share - weighted average shares		163,701		159,631		159,413
Effect of dilutive securities						
Employee stock options		1,926		684		
Warrants		261		45		
Other	_	50		83		
Dilutive potential common shares		2,237		812		_
Denominator for diluted earnings per share - adjusted weighted average shares		165,938		160,443		159,413
Paris assertings (lass) and share	¢	0.27	ď	0.17	ď	(0.50)
Basic earnings (loss) per share	\$	0.27	\$	0.17	\$	(0.58)
				0.15	*	(0.50)
Diluted earnings (loss) per share	\$	0.27	\$	0.17	\$	(0.58)

#### Note 17 – Earnings (Loss) Per Share (continued)

Diluted earnings (loss) per share for the years presented do not reflect the following weighted-average potential common shares, as the effect would be antidilutive (in thousands):

	2004	2003	2002
Convertible and exchangeable notes:			
Convertible Subordinated Notes, due 2023	23,496	9,283	_
LYONs, due 2021	8,979	8,544	9,718
Exchangeable unsecured notes, due 2102	6,176	6,176	6,176
General Semiconductor Notes	_	4,329	6,191
Weighted average employee stock options	3,444	5,663	9,231
Weighted average warrants	7,074	7,074	435

The anti-dilutive potential common shares related to convertible and exchangeable notes presented in the table above represent weighted-averages, based on the periods and amounts outstanding in the respective years.

If the potential common shares related to the convertible and exchangeable notes were included in the computation, the related interest savings, net of tax, assuming conversion/exchange would be added to the net earnings used to compute earnings per share.

As described in Note 6, the Convertible Subordinated Notes, due 2023, were issued in 2003. These notes are only convertible upon the occurrence of certain events. While none of these events have occurred as of December 31, 2004, certain conditions which could trigger conversion have been deemed to be nonsubstantive, and accordingly, the Company has always assumed the conversion of these notes in its diluted earnings per share computation during periods in which they are dilutive. EITF 04-8 (see Note 1) also now requires the inclusion of these notes in the diluted earnings per share computation during periods in which they are dilutive.

As described in Note 6, the Company purchased a portion of the LYONs for stock in 2004 and for cash in 2003. By their terms, the LYONs were convertible into 3,809,000, 6,802,000 and 9,718,000 shares of common stock at December 31, 2004, 2003, and 2002, respectively. Subsequent to the Company's decision to utilize stock to settle the holders' put option in June 2004, the Company assumes all future put options will be settled in stock based on the settlement formula set forth in the indenture governing the LYONs.

As described in Note 6, the Company redeemed all notes of its General Semiconductor subsidiary in 2003.

## Note 18 - Related Party Transactions

On December 12, 2002, the Company's Board of Directors passed resolutions to terminate the stock purchase programs for corporate officers and key employees (together the "Plan") and to offer to all Plan participants the opportunity to surrender to the Company the shares of Vishay common stock purchased with their Plan loans in satisfaction of such loans and all accrued interest thereon. Under the resolutions, the Company agreed that it would compensate the Plan participants for any income tax that the participants are required to recognize as a result of the surrender. Two directors of the Company were among the participants in the Plan. For all Plan participants, at the time the Plan was terminated, the market value of the Vishay common stock purchased with Plan loans was significantly below the outstanding balances of the loans. The Company recorded a write-down for the loans and accrued interest, and an accrual for compensation expense attributable to taxes owing by Plan participants on surrender, totaling \$2,591,000 as of December 31, 2002. This amount was recorded in selling, general, and administrative expense in 2002.

## Note 19 - Subsequent Events

On March 3, 2005, Vishay announced its intention to commence a tender offer for all outstanding shares of Siliconix not owned by Vishay following the filing of Vishay and Siliconix Annual Reports on Form 10-K for the year ended December 31, 2004. Under the terms of the intended tender offer, Vishay would exchange 2.64 shares of Vishay common stock for each outstanding share of Siliconix stock. The closing prices for Vishay and Siliconix shares on March 3, 2005 were \$13.25 and \$29.15, respectively. The intended tender offer would be pursuant to tender offer documentation filed with the Securities and Exchange Commission, which will contain information about the offer.

The intended tender offer will be subject to the non-waivable condition that the offer be accepted by holders of a majority of the outstanding shares not owned by Vishay. Also, promptly following the consummation of the offer, Vishay will effect a merger of Siliconix with a subsidiary of Vishay in which all remaining holders of Siliconix stock would receive the same consideration for their shares as the holders who tendered their shares received in the offer.

In March 2005, the Siliconix Board of Directors appointed a special committee of independent directors to consider and evaluate the tender offer when it is formally received by the Company.

Following the announcement of Vishay's intention to make this tender offer, several purported class-action complaints were filed against Vishay, Siliconix, and the Siliconix directors, alleging, among other things, that the intended offer is unfair and a breach of fiduciary duty, and seeking, among other things, to enjoin the transaction. The Company and the other defendants have not yet responded to the complaints.

# Note 20 – Summary of Quarterly Financial Information (Unaudited)

(in thousands)

	2004					2003						
		First		Second		Third	]	Fourth	First	Second	Third	Fourth
Income Statement Data												
Net sales	\$	640,921	\$	646,699	\$	584,320 \$	5	541,636 \$	532,127 \$	538,103	533,168	567,199
Gross profit		159,711		168,924		140,978		85,270	118,510	123,299	102,463	124,666
Operating income (loss)		62,081		67,803		38,602		(75,995)	21,393	15,392	4,492	18,090
Net earnings (loss)		35,966		41,118		22,070		(54,458)	6,848	2,880	6,775	10,339
Per Share Data												
Earnings (loss) per share - Basic	\$	0.22	\$	0.25	\$	0.13 \$		(0.33) \$	0.04 \$	0.02 \$	0.04	0.06
Earnings (loss) per share - Diluted	\$	0.20	\$	0.22	\$	0.13 \$	5	(0.33) \$	0.04 \$	0.02 \$	0.04	0.06
Certain Items Recorded during the												
Quarters:												
Gross profit:												
Write-downs of tantalum and palladium	\$	_	\$	_	\$	— \$	5	(400) \$	(1,585) \$	\$	(4,185) 3	(1,221)
Losses on purchase commitments								(16,613)			(11,392)	
Operating profit:												
Restructuring and severance costs	\$	(301)	\$	(1,759)	\$	(4,997) \$	5	(40,193) \$	(687) \$	(12,258) \$	(5,299)	(10,302)
Asset write-downs		_		_		_		(27,296)	_	_	(1,014)	_
Purchased in-process research and												
development						(1,500)						
Other income (expense):												
Loss on extinguishment of debt	\$		\$		\$	— \$	5	— \$	— \$	\$	(9,910)	S —
Gain on insurance claim		_		_		_		_	_	_	30,361	3,545
Gain on settlement of note receivable						3,100						_
Quarter end date*		Apr. 3		Jul. 3		Oct. 2		Dec. 31	Mar. 29	Jun. 28	Sept. 27	Dec. 31

<sup>\* -</sup> The Company reports interim financial information for 13-week periods beginning on a Sunday and ending on a Saturday, except for the first quarter, which always begins on January 1, and the fourth quarter, which always ends on December 31. The interim periods of 2003 were reported as calendar quarters; however, the actual period end dates are set forth in the table above.

## CONSENT AND SECOND AMENDMENT TO VISHAY INTERTECHNOLOGY, INC. SECOND AMENDED AND RESTATED LONG TERM REVOLVING CREDIT AGREEMENT

This **Consent and Second Amendment to Credit Agreement** ("Second Amendment") is made as of this 6th day of August, 2004 by and among Vishay Intertechnology, Inc. (the "Company"), the Permitted Borrowers, Comerica Bank as Co-Lead Arranger, Co-Book Running Manager and Administrative Agent (the "Agent"), Wachovia Bank, National Association, J.P. Morgan and Bank of America, N.A., as Documentation Agents and Bank Leumi USA, as Managing Agent, and the other lenders party hereto (collectively, with the agent, the "Lenders").

## **RECITALS**

- A. The Company, the Permitted Borrowers, Agent and Lenders entered into that certain Vishay Intertechnology, Inc. Second Amended and Restated Long Term Revolving Credit Agreement dated as of July 31, 2003, which was amended by that certain Consent and First Amendment to Vishay Intertechnology, Inc. Second Amended and Restated Long Term Revolving Credit Agreement dated as of May 14, 2004 (collectively, and as the same may be amended, restated or otherwise modified from time to time, the "Credit Agreement").
- B. The Company and the Permitted Borrowers have requested that Agent and Lenders make certain amendments to the Credit Agreement, and Agent and Lenders are willing to do so, but only on the terms and conditions set forth in this Second Amendment.

NOW, THEREFORE, the Company, the Permitted Borrowers, Agent and the Lenders agree as follows:

1. The definitions of "Hedging Obligation(s)," "Indebtedness," "Loan Documents," and "Pledge Agreement(s)" in Section 1.1 of the Credit Agreement are hereby deleted and the following are inserted in their places, as applicable:

""Hedging Obligation(s)" shall mean Interest Rate Protection Agreements and any foreign currency exchange agreements (including without limitation foreign currency hedges and swaps) or other foreign exchange transactions, or any combination of such transactions or agreements or any option with respect to any such transactions or agreements entered into between Company and/or any of its Subsidiaries and a Lender or an Affiliate of a Lender to manage existing or anticipated foreign exchange risk and not for speculative purposes, provided, that, for purposes of the Collateral Documents and the Foreign Guaranty, "Hedging Obligations" shall also include the Commodities Hedging Obligations to the extent such Commodities Hedging Obligations are "Indebtedness" as defined in this Agreement."

""Indebtedness" shall mean (a) all indebtedness and liabilities whether direct or indirect, absolute or contingent, owing by Company or any of the Permitted Borrowers to the Lenders (or any of them) or to the Agent, in any manner and at any time, under this Agreement or the Loan Documents, due or hereafter to become due, now owing or that may hereafter be incurred by the Company, any of the Permitted Borrowers or any of the Subsidiaries to, or acquired by, the Lenders (or any of them) or by Agent, (b) any Special Letters of Credit, (c) net obligations with respect to (i) Hedging Obligations and (ii) Commodities Hedging Obligations, provided that (x) the maximum aggregate amount which shall be available from proceeds of the Collateral under the Collateral Documents or from any other sums collected from the Company, the Permitted Borrowers or any of Company's Subsidiaries pursuant to the Loan Documents (excluding the Loan Documents specifically governing the Commodities Hedging Obligations) for application against Commodities Hedging Obligations shall not exceed \$10,000,000 (with the application of such proceeds to be made by Agent on a basis consistent with Section 10.2 hereof, such application to be made on a pro rata basis among the eligible hedging providers under those Commodities Hedging Obligations designated by the Company pursuant to clause (y) of this definition, but otherwise in Agent's sole discretion), (y) the documentation relating to such Commodities Hedging Obligations, including a letter agreement between the hedging provider and the Company or applicable Subsidiary covering multiple commodities hedging transactions (I) specifies that such obligations have been designated by the Company as (and, subject to the terms hereof, shall constitute) "Indebtedness" hereunder and (II) contains an express acknowledgment by the eligible hedging provider (satisfactory in form and substance to the Agent) of the limitation imposed on all Commodities Hedging Obligations under clause (x) of this definition, and (z) copies of such documentation shall have been provided to Agent promptly following the execution thereof, accompanied by an updated list of all such documents having been so designated by the Company (which the Agent is hereby authorized to furnish to any hedging provider requesting such documentation), provided further that both the Commodities Hedging Obligations and the Hedging Obligations are entered into between Company and/or any of its Subsidiaries and a Lender or an Affiliate of a Lender, (d) any judgments that may hereafter be rendered on such indebtedness or any part thereof, with interest according to the rates and terms specified, or as provided by law, and (e) any and all consolidations, amendments, renewals, replacements or extensions of any of the foregoing. For the purposes of Section 9.2(b), "Indebtedness" shall exclude any Hedging Obligations or Commodities Hedging Obligations."

""Loan Documents" shall mean collectively, this Agreement, the Letter of Credit Agreements, the Guaranties, the Collateral Documents, agreements relating to Hedging Obligations entered into between Company and/or any of its Subsidiaries

and a Lender or an Affiliate of a Lender, agreements relating to Commodities Hedging Obligations (to the extent such Commodities Hedging Obligations are "Indebtedness" as defined in this Agreement), and any other documents, instruments or agreements executed pursuant to or in connection with any such document, the Indebtedness or this Agreement as such documents may be amended or otherwise modified from time to time. For the purposes of Section 13.11, "Loan Documents" shall exclude any Hedging Obligations and Commodities Hedging Obligations."

""Pledge Agreement(s)" shall mean the various stock pledge agreements, including any <u>nantissements</u>, notarial deeds, pledges of financial instrument accounts, or other local law pledges (and any of them) previously executed and delivered, executed and delivered as of the Effective Date or to be executed or delivered pursuant to Sections 7.16 and/or 7.18 hereof all, in favor of the Agent, for and on behalf of the Lenders under this Agreement and, in each case as amended, restated or otherwise modified from time to time."

- 2. Each of the following definitions are added to Section 1.1 of the Credit Agreement in the appropriate alphabetical order:
  - ""Chinese Restructuring" shall mean that certain merger of Shanghai Vishay Semiconductor Co., Ltd. ("SVS") with and into Shanghai Vishay Opto Co., Ltd. ("SVO") with SVO as the surviving company to the extent consummated on substantially the terms described in the signed letter delivered to the Lenders on July 15, 2004."
  - ""Commodities Hedging Obligation(s)" shall mean any precious metal commodity swap agreement, forward purchase agreement, cap agreement or collar agreement, and any other agreement or arrangement entered into for protection against fluctuations in precious metal prices, and, except as used in the definition of "Indebtedness," not for speculative purposes."
- 3. Section 2.1(a) of the Credit Agreement is hereby amended by inserting the following language at the end of the section:

"provided, however, that upon payment in full in cash of all Indebtedness of the Foreign Permitted Borrowers hereunder for Advances to any Foreign Permitted Borrower, and, if any Letter of Credit Obligations of any Foreign Permitted Borrower are outstanding, upon deposit with the Agent of sufficient funds to cash collateralize such outstanding Letter of Credit Obligations, the Borrowers may, upon 10 Business Days written notice to the Agent, revoke the FPB Advance Notice, provided, further, that following delivery of such written notice of revocation, no Foreign Permitted Borrower may request any additional Advances under this Agreement, unless the Required Lenders consent to the issuance by the Company of a new FPB Advance Notice, and the Company complies with the requirements of Section 7.16 and the other provisions of this Agreement following delivery of such notice."

- 4. Section 7.16(b)(ii) of the Credit Agreement is hereby amended by deleting it in its entirety and inserting the following in its place:
  - "(ii) with respect to each Person which becomes a Significant Foreign Subsidiary subsequent to the Effective Date or which is a Significant Foreign Subsidiary on the Effective Date, and is also a Significant Foreign Subsidiary on the date of Agent's receipt of the applicable initial FPB Advance Notice or becomes a Significant Foreign Subsidiary after Agent's receipt of such FPB Advance Notice, cause each such Significant Foreign Subsidiary to execute and delivery to Agent (a) a Joinder Agreement whereby such Significant Foreign Subsidiary becomes obligated as a Guarantor under the Foreign Guaranty and (b) if such Significant Foreign Subsidiary is incorporated under the laws of the United States of America, a Security Agreement or a Joinder Agreement whereby such Significant Foreign Subsidiary becomes obligated under the applicable Security Agreement, as the case may be, such documents to be executed and delivered to Agent within eighty (80) days of the Agent's receipt of the applicable FPB Advance Notice or, for a Subsidiary which has become a Foreign Significant Subsidiary after Agent's receipt of such FPB Advance Notice, within two hundred and ten (210) days of the first day on which such Subsidiary was a Foreign Significant Subsidiary, provided, that, upon revocation of an FPB Advance Notice as described in Section 2.1(a), (x) the Company shall not be required to cause the execution and delivery of additional Joinder Agreements and Security Agreements as otherwise required by this subsection, and (y) the Lenders agree that Agent may, in its sole discretion and upon the written request of the Company, release the Joinder Agreements and Security Agreements described in this subsection then in effect; and"
- 5. Section 7.16(c)(ii) of the Credit Agreement is hereby amended by deleting it in its entirety and inserting the following in its place:
  - (ii) with respect to the share capital (or other ownership interests) of each Person which becomes a Significant Foreign Subsidiary subsequent to the Effective Date, or which is a Significant Foreign Subsidiary on the Effective Date, and which also is a Significant Foreign Subsidiary on the date of Agent's receipt of the applicable FPB Advance Notice or which becomes a Significant Foreign Subsidiary after Agent's receipt of such FPB Advance Notice, the Company shall execute or cause to be executed and delivered to the Agent a Pledge Agreement encumbering, subject to Section 7.17 hereof, with a first priority Lien on 65% of the share capital of each such Significant Foreign Subsidiary, but only with respect to, and only to the extent of, share capital that is directly owned by the Company and/or one or more Domestic Subsidiaries, to secure the Indebtedness of the Company and the Domestic Permitted Borrowers and 100% of the share capital of each such Significant Foreign Subsidiary to the extent owned, directly or indirectly, by the Company to secure the Indebtedness of the Foreign Permitted Borrowers hereunder, such documents to be executed and delivered to Agent within eighty (80) days of the Agent's receipt of the applicable FPB Advance Notice or, for a Subsidiary which has become a Foreign Significant Subsidiary after Agent's

receipt of such FPB Advance Notice, within two hundred and ten (210) days of the first day on which such Subsidiary was a Foreign Significant Subsidiary <u>provided</u>, that, upon revocation of an FPB Advance Notice as described in Section 2.1(a) (x) the Company shall not be required to cause the execution and delivery of additional Pledge Agreements securing the Indebtedness of the Foreign Permitted Borrowers as otherwise required by this subsection and (y) the Lenders agree that Agent may, in its sole discretion and upon the written request of the Company, release any Pledge Agreement (or a portion of such Pledge Agreement) then in effect which secures the Indebtedness of the Foreign Permitted Borrowers as described in this subsection; and"

6. Section 7.16 of the Credit Agreement is hereby amended by inserting the following language as a post-amble at the end of the section:

"Execution and delivery of Pledge Agreements and Joinder Agreements as specified by this Section 7.16 shall only be required to the extent permitted and enforceable under applicable local law, as determined in Agent's reasonable discretion. If delivery of certain Pledge Agreements and Joinder Agreements as specified by this Section 7.16 cannot be obtained despite the exercise of, in the Agent's determination, commercially reasonable efforts, the Agent may, at its option, waive delivery of such Pledge Agreements and Joinder Agreements. In either case, upon a change of law or circumstance in a particular jurisdiction which permits or makes commercially reasonable the execution and delivery of any Pledge Agreement or Joinder Agreement previously not required by or waived pursuant to this Section, Agent may, at its option, request the execution and delivery of such Pledge Agreement or Joinder Agreement, and any related documents within such reasonable time period as Agent may specify. In addition, at Agent's sole discretion, Agent may release a Pledge Agreement (or a portion of a Pledge Agreement) or a Joinder Agreement relating to a Foreign Subsidiary to allow a merger as permitted under Section 8.2(a) of this Agreement, to permit a Foreign Subsidiary to change its corporate form or where, due to a reorganization or restructuring performed in compliance with this Agreement, a Domestic Subsidiary becomes a Foreign Subsidiary and retaining a pledge of its or its Subsidiaries' equity interests would violate Section 956 of the Internal Revenue Code (such release limited to that portion of a Pledge Agreement which would result in such a violation), provided, however, that upon completion of such merger, change in form or reorganization, the Company shall cause compliance with the requirements of Section 7.16 within such reasonable time period as the Agent may specify."

- 7. Section 8.3 of the Credit Agreement is hereby amended by deleting it in its entirety and inserting the following language in its place:
  - "8.3 <u>Guaranties.</u> Guarantee, endorse, or otherwise become liable for or upon the obligations of others, except by endorsement of cash items for deposit in the ordinary course of business and except for:

- (a) the Guaranties;
- (b) guaranties by the Company or any Subsidiary of (i) Hedging Obligations entered into by Company or any Subsidiary, (ii) Commodities Hedging Obligations entered into by Company or any Subsidiary, or (iii) reimbursement obligations in respect of Special Letters of Credit issued for the account of any Subsidiary;
- (c) guaranties of indebtedness (i) as set forth on Schedule 8.3 attached hereto or (ii) as permitted under clauses (d), (e), (f) or (g) of Section 8.7 hereof or clause (d) of Section 8.4;
- (d) the GATX Guaranties (provided that the aggregate stated lease payments to which the GATX Guaranties relate shall not exceed Three Million Dollars (\$3,000,000); and"
- (e) customary clean up call provisions under any Permitted Securitization."
- 8. Section 8.4(d) of the Credit Agreement is hereby amended by deleting it in its entirety and inserting the following in its place:
  - "(d) purchase money Debt for fixed assets (including operating leases and capitalized leases or other non-cancelable leases having a term of 12 months or longer), Debt in respect of equipment leasing agreements (based on the aggregate lease payments during the term of such leases and all available extensions), or Debt (including guaranties) in respect of real property leases (based on the aggregate lease payments during the term of such leases and all available extensions) provided that the aggregate of such purchase money Debt, Debt in respect of equipment leases and Debt (including guaranties) in respect of real property leases at any time shall not exceed seven and one-half percent (7.5%) of Tangible Net Worth;"
- 9. Section 8.4 of the Credit Agreement is hereby amended by inserting the following as new subsection (k), deleting the "and" at the end of subsection 8.4(i) and deleting the period at the end of subsection 8.4(j) and inserting "; and" in its place:
  - "(k) unsecured Commodities Hedging Obligations."
- 10. Section 8.5(a) is hereby amended by deleting it in its entirety and inserting the following in its place:
  - "(a) Liens in favor of the Agent, as security for the Indebtedness hereunder, and, including without limitation, any Indebtedness under any Hedging Obligations or Commodities Hedging Obligations (to the extent such Commodities Hedging Obligations are "Indebtedness" as defined in this Agreement") or to secure Special Letters of Credit;"

- 11. Section 8.5(f) is hereby amended by deleting it in its entirety and inserting the following in its place:
  - "(f) Liens securing Debt (such Debt being permitted under this Agreement), <u>provided</u> that the aggregate principal amount of all such Debt which is secured by such Lien shall not exceed Five Million Dollars (\$5,000,000); and"
- 12. Section 8.7(j) is hereby amended by deleting it in its entirety and inserting the following in its place:
  - "(j) Hedging Obligations and guaranties by the Company or any Subsidiary of Hedging Obligations entered into by Company or any Subsidiary and Commodities Hedging Obligations and guaranties by the Company or any Subsidiary of Commodities Hedging Obligations entered into by Company or any Subsidiary, as applicable;"
- 13. Section 10.2 is hereby amended by deleting it in its entirety and inserting the following language in its place:
  - "10.2 <u>Application of Proceeds</u>. Subject to the Collateral Documents, but notwithstanding anything to the contrary in this Agreement or other Loan Document, after an Event of Default, the proceeds of any Collateral, together with any offsets, voluntary payments by the Company or the Permitted Borrowers or others and any other sums received or collected in respect of the Indebtedness, shall be applied, first, to payment of principal and interest of outstanding Advances, any reimbursement obligations under Section 3.6 hereof and any net obligations with respect to Hedging Obligations or Commodities Hedging Obligations (to the extent such Commodities Hedging Obligations are "Indebtedness" as defined in this Agreement) entered into between the Company or its Subsidiaries and a Lender or an affiliate of a Lender, on a pro rata basis, next, to any other Indebtedness on a pro rata basis, and then, if there is any excess, to the Company or the Permitted Borrowers, as the case may be. The application of such proceeds and other sums to the outstanding Indebtedness hereunder shall be based on each Lender's Percentage of the aggregate Indebtedness."
- 14. Section 12.15(b) is hereby amended by deleting it in its entirety and inserting the following language in its place:

"The Lenders agree to release, and hereby irrevocably authorize the Agent to release, (x) any Lien granted to or held by the Agent upon any Collateral (i) upon termination of the Revolving Credit Aggregate Commitment and payment in full of all Indebtedness payable under this Agreement and under any other Loan Document; (ii) constituting property sold or to be sold or disposed of as part of or in connection with any express disposition permitted hereunder, (iii) as described in Section 7.16 of this Credit Agreement, and (iv) to permit the merger of a Foreign Subsidiary as permitted under Section 8.2(a) or to permit a Foreign Subsidiary to change its corporate form, provided that such surviving Subsidiary shall comply with the requirements of Section 7.16; (y) the Guaranty of any Subsidiary, (i) in connection with the sale of all of the share capital of such Subsidiary to the extent that such sale is expressly permitted hereunder, (ii) as described in Section 7.16 of this Agreement, and (iii) to permit the merger of a Foreign Subsidiary as permitted under Section 8.2(a) or to permit a Foreign

Subsidiary to change its corporate form, provided that such surviving Subsidiary shall comply with the requirements of Section 7.16, and (z) any Lien granted to or held by the Agent upon any Collateral or any Guaranty issued hereunder, but only if and to the extent (i) required to be released under Section 7.17(b) hereof, or (ii) approved, authorized or ratified in writing by the Required Lenders, or all the Lenders, as the case may be, as provided in Section 13.11. Upon request by the Agent at any time, the Lenders will confirm in writing the Agent's authority to release particular types or items of Collateral pursuant to this Section 12.15(b)."

- 15. In connection with the PDD Restructuring (previously approved by the Agent and the Lenders), the Lenders hereby consent to the release by Agent, at Agent's sole discretion, of the Pledge Agreement relating to the equity interests of General Semiconductor China Co. Ltd. to the extent necessary to effectuate the PPD Restructuring, provided that any re-pledging of the equity interests of General Semiconductor China Co. Ltd. which may be required pursuant to the terms of the Credit Agreement following the PDD Restructuring shall occur at the later of (a) 180 days of such release, or (b) within the time frame specified pursuant to Section 7.16(c)(ii) of the Credit Agreement.
- 16. The Agent and the undersigned Lenders hereby (i) waive the delivery of Joinder Agreements by General Semiconductor China Co. Ltd., Vishay Semiconductor Malaysia Sdn. Bhd. and Vishay Electronic SPOL SrO, and Pledge Agreements relating to the equity interests of General Semiconductor of Taiwan, Ltd. and Vishay Semiconductor Malaysia Sdn. Bhd. to the extent the same may be required under Section 7.16 of the Credit Agreement and (ii) upon the effectiveness of this Second Amendment, agree to make Advances available to the Foreign Permitted Borrowers subject to the terms and conditions to the making of Advances specified in the Credit Agreement but regardless of the execution and delivery of the Pledge Agreements and Joinder Agreements required under the Credit Agreement later than eighty (80) days after the receipt of the FPB Advance Notice currently in effect as specified by Section 7.16, provided, however, that the Company shall (a) cause Pledge Agreements, in form and substance acceptable to Agent, regarding the equity interests of Vishay Electronic SPOL SrO to be delivered to Agent, to the extent permitted and enforceable under applicable local law, within one hundred and eighty days of the Second Amendment Effective Date (as defined below), (b) cause General Semiconductor of Taiwan, Ltd. to execute and deliver a Joinder Agreement to the Foreign Guaranty, in form and substance acceptable to Agent, to the extent permitted or enforceable under applicable local law, within sixty days of the Second Amendment Effective Date, (c) cause (x) a Pledge Agreement, in form and substance acceptable to Agent, regarding the equity interests of BCcomponents NV (or any successor thereto) and (y) a Joinder Agreement to the Foreign Guaranty to be executed by BCcomponents NV (or any successor thereto), each in form and substance acceptable to Agent, to be executed and delivered to Agent no later than January 1, 2005

and (d) otherwise be in compliance with its obligations under Section 7.16 of the Credit Agreement, unless any of the documentation otherwise required under Section 7.16 has been specifically waived. Failure to deliver the Pledge Agreements and Joinder Agreements described in this paragraph within the time specified herein or in the Credit Agreement as amended hereby shall, unless extended by the Required Lenders, be an Event of Default under the Credit Agreement.

- 17. The Agent and the Lenders hereby consent (retroactively, to the extent necessary) to the Chinese Restructuring, and, as required by the Chinese Restructuring, the Agent and Lenders hereby (a) agree to waive any requirement that additional issued shares of SVS be pledged to Agent and Lenders (such waiver to be retroactive to the date of issuance of such stock), and (b) consent to the release by the Agent, at the Agent's discretion, of the Lien granted to Agent for the benefit of the Lenders under that certain Pledge Agreement executed and delivered in connection with the shares of SVS, and the Joinder Agreement to Foreign Guaranty executed by SVS, to the extent necessary to effectuate the Chinese Restructuring.
- 18. This Second Amendment shall become effective (according to the terms hereof) on the date (the "Second Amendment Effective Date") confirmed by the Company that the following conditions have been fully satisfied by the Company:
  - (a) Agent shall have received counterpart originals of this Second Amendment, in each case duly executed and delivered by the Company, the Permitted Borrowers and requisite Lenders and in form and substance satisfactory to Agent and the requisite Lenders;
  - (b) Agent shall have received counterpart originals of those certain Reaffirmations of Guaranty executed and delivered by the applicable Guarantors; and
  - (c) Company shall have delivered to Agent such other documentation as Agent and the Lenders may reasonably request.
- 19. Each of the Company and the Permitted Borrowers hereby represents and warrants that, after giving effect to the amendments contained herein, (a) execution and delivery of this Second Amendment and the other Loan Documents required to be delivered hereunder (if any), and the performance by the Company and the Permitted Borrowers of their respective obligations under the Credit Agreement as amended hereby (herein, as so amended, the "Amended Credit Agreement") are within such undersigned's corporate powers, have been duly authorized, are not in contravention of law or the terms of its articles of incorporation or bylaws or other organic documents of the parties thereto, as applicable, and except as have been previously obtained do not require the consent or approval, material to the amendments contemplated in this Second Amendment or the Amended Credit Agreement, of any governmental body, agency or authority, and this Second Amendment, the Amended Credit Agreement and the other Loan Documents required to be delivered hereunder (if any), will constitute the valid and binding obligations of such undersigned parties enforceable in accordance with their respective terms, except as enforcement thereof may be limited by applicable bankruptcy,

reorganization, insolvency, moratorium, ERISA or similar laws affecting the enforcement of creditors' rights generally and by general principles of equity (whether enforcement is sought in a proceeding in equity or at law), (b) the continuing representations and warranties set forth in Sections 6.1 through 6.20, inclusive, of the Amended Credit Agreement are true and correct on and as of the date hereof (except to the extent such representations specifically relate to an earlier date), and such representations and warranties are and shall remain continuing representations and warranties during the entire life of the Amended Credit Agreement, and (c) as of the Second Amendment Effective Date, no Default or Event of Default shall have occurred and be continuing, except as may have been waived by the terms of this Second Amendment.

- 20. Except as specifically set forth above, this Second Amendment shall not be deemed to amend or alter in any respect the terms and conditions of the Credit Agreement, any of the Notes issued thereunder or any of the other Loan Documents, or to constitute a waiver by the Agent and the Lenders of any right or remedy under or a consent to any transaction not meeting the terms and conditions of the Credit Agreement, any of the Notes issued thereunder or any of the other Loan Documents.
- 21. Each of the Company and the Permitted Borrowers hereby acknowledges and confirms that it does not possess (and hereby forever waives, releases and holds harmless the Agent and the Lenders and each of their former, current and future parents, subsidiaries, affiliates, directors, officers, employees, attorneys and other representatives and each of their respective successors and assigns (collectively, the "Lender Parties") from and against, and agrees not to allege or pursue) any claim, cause of action, demand, defense, and other right of action whatsoever, in law or equity which it and its respective successors or assigns have or may have against the Lender Parties, or any of them, prior to or as of the date of this Second Amendment by reason of any cause or matter of any kind or nature whatsoever, including, but not limited to, any cause or matter arising from, relating to, or connected with, in any manner the Credit Agreement, any of the Loan Documents, any related document, instrument or agreement or this Second Amendment (including, without limitation, any payment, performance, validity or enforceability of any or all of the indebtedness, covenants, agreements, rights, remedies, obligations and liabilities under the Credit Agreement, any of the Loan Documents, any related document, instrument or agreement or this Second Amendment) or any transactions relating to any of the foregoing, or any or all actions, courses of conduct or other matters in any manner whatsoever relating to or otherwise connected with any of the foregoing.
- 22. Each of the Company and the Permitted Borrowers hereby acknowledges and agrees that this Second Amendment and the amendments contained herein do not constitute any course of dealing or other basis for altering any obligation of the Company, any Permitted Borrower or any other party or any rights, privilege or remedy of the Agent or the Lenders under the Credit Agreement, any other Loan Document, any other agreement or document, or any contract or instrument.
- 23. Each of the Company and the Permitted Borrowers hereby ratifies, confirms and reaffirms its covenants, agreements and obligations under the Credit Agreement, as amended as of the date hereof by the First Amendment and the Second Amendment, and

each other Loan Document previously executed and delivered by it, or executed and delivered in accordance with the First Amendment or this Second Amendment. Each reference in the Credit Agreement to "this Agreement" or "the Credit Agreement" shall be deemed to refer to Credit Agreement as amended by the First Amendment and this Second Amendment and each other amendment from time to time executed and delivered thereto.

- 24. Unless otherwise defined to the contrary herein, all capitalized terms used in this Second Amendment shall have the meaning set forth in the Credit Agreement.
- 25. This Second Amendment may be executed in counterpart in accordance with Section 13.10 of the Credit Agreement.
- 26. This Second Amendment shall be construed in accordance with and governed by the laws of the State of Michigan.

## COMPANY:

## VISHAY INTERTECHNOLOGY, INC.

By: /s/ RICHARD N. GRUBB

Its: Executive Vice President,

Chief Financial Officer and Treasurer

63 Lincoln Highway

Malvern, Pennsylvania 19355

## PERMITTED BORROWERS:

## VISHAY EUROPE GmbH

/s/ RICHARD N. GRUBB By:

Its: Vice President

## VISHAY ELECTRONIC GmbH

/s/ RICHARD N. GRUBB By:

Vice President Its:

## VISHAY INTERTECHNOLOGY ASIA PTE LTD

By: /s/ BEE LENG SAW

Director Its:

## AGENT:

COMERICA BANK, As Co-Lead

Arranger, Co-Book Running Manager and

Administrative Agent

By: /s/

Vice President Its:

One Detroit Center

500 Woodward Avenue

Detroit, Michigan 48226

Attention: Corporate Finance

Issuir	ng Bank
By:	/s/
Its:	
BANE	COF AMERICA N.A., as Documentation Agent and as a Lender
By:	/s/
Its:	
FLEE	T NATIONAL BANK, as a Lender
By:	/s/ 
Its:	
	K HAPOALIM B.M., YORK BRANCH, as a Lender
By:	/s/
Its:	
By:	/s/
Its:	

COMERICA BANK, individually, as a Lender, Swing Line Bank and as

BANK	K LEUMI USA, as Managing Agent and as a Lender
By:	/s/
Its:	
ISRAI	EL <b>DISCOUNT BANK OF NEW YORK</b> , as a Lender
By:	/s/
Its:	
WEST	TLB AG, New York Branch, as a Lender
By:	/s/ 
Its:	
	HOVIA BANK, NATIONAL ASSOCIATION, as Documentation t and a Lender
By:	/s/
Its:	
JP M	ORGAN CHASE BANK, as Documentation Agent and a Lender
<b>JP M</b> By:	

By:	/s/
Its:	
Кеун	BANK NATIONAL ASSOCIATION, as a Lender
By:	/s/
Its:	
THE I	BANK OF NOVA SCOTIA, as a Lender
By:	/s/
Itc	

BANK OF TOKYO-MITSUBISHI TRUST COMPANY, as a Lender

## SUBSIDIARIES OF THE REGISTRANT

Note: Names of Subsidiaries are indented under name of Parent. Subsidiaries are wholly owned unless otherwise noted. (Directors' or other shares required by statute in foreign jurisdictions and totaling less than 1% of equity are omitted.)

Vishay Americas, Inc. Delaware Vishav Cera-Mite Inc. Wisconsin Vishay EFI, Inc. Rhode Island Vishay Infrared Components Inc. California Spectec Logistics, Inc. Delaware Vishay Intertechnology Asia Pte Ltd. Singapore Vishay Japan K.K. Japan Vishay Hong Kong Ltd. Hong Kong Vishav Korea Co. Ltd. Korea Vishay (Taiwan) Taiwan Vishay (Thailand) Limited Thailand **BCcomponents Taiwan Limited** Taiwan General Semiconductor (Singapore) Pte. Ltd. Singapore Vishay Temic Semiconductor Acquisition Holding Corporation Delaware Siliconix incorporated Delaware (a) Siliconix Technology C.V. Netherlands Siliconix Technology B.V. Netherlands Siliconix Israel Ltd. Israel Siliconix Holding GmbH Germany Siliconix Itzehoe GmbH Germany Shanghai Simconix Electronic Company Ltd. China (b) Siliconix Ltd. England Vishay Siliconix (Taiwan) Ltd. Taiwan Vishay Siliconix Electronic Co. Ltd. Taiwan Vishay Siliconix, LLC Delaware Siliconix Sales Corp. U.S. Virgin Islands Siliconix Semiconductor, Inc. Delaware Vishay GSI, Inc. Delaware Vishay GSI Holdings, LLC Delaware Vishay General Semiconductor, L.P. Cayman Islands (c) Vishay General Semiconductor, LLC Delaware Delaware Century Components, LLC General Semiconductor of Taiwan, Ltd. Taiwan General Semiconductor (China) Holdings, LLC Delaware General Semiconductor (China) Co., Ltd. China General Semiconductor International Corp. New York General Semiconductor Japan, Ltd. Japan (d) ATC Corp. Delaware GSI-General Semiconductor Ireland Ireland

Ireland

GSI-General Semiconductor (Europe) Ltd.

General Semiconductor Korea Co., Ltd. Vishay General Semiconductor France S.A.S. General Semiconductor Hong Kong Ltd. General Semiconductor (UK) Ltd. General Instrument Europe, N.V. General Semiconductor (Deutschland) GmbH

Vishay BCcomponents Holdings Ltd. Vishay BCcomponents B.V. BCcomponents Lux Sarl

> Vishay BCcomponents SAS **BCcomponents Estate NV** BCcomponents BVBA

Vishay BCcomponents UK Ltd

Valen Ltd.

Vishay Passives Shanghai Co., Ltd **BCcomponents South Europe SRL** Vishay Components India Pvt Ltd BCcomponents Hong Kong Ltd. BCcomponents China Ltd BCcomponents Singapore Pte Ltd.

Vishay Trading (Shanghai) Co. Ltd

Nippon Vishay, K.K. Vishay F.S.C., Inc. Vishay VSH Holdings, Inc. Vishay Roederstein Electronics, Inc. Vishay Measurements Group, Inc. Vishay Transducers Ltd.

Sensortronica de Costa Rica, S.A.

Vishay BLH Inc.

Pharos de Costa Rica S.A.

Celtron Technologies, Inc.

High Goals Investments Limited Billion Way Industrial Limited UCC Investment Co. Ltd. Celtron Technologies (U.S.A.) Inc.

Vishay Celtron (Tianjin) Technologies Co., Ltd.

Korea France Hong Kong United Kingdom Netherlands Germany Delaware Netherlands Luxembourg France Belgium Belgium United Kingdom Hong Kong

China Italy India Hong Kong Hong Kong Singapore

China Japan Barbados Delaware Delaware Delaware Delaware Costa Rica Delaware Costa Rica Taiwan

British Virgin Islands

Samoa Samoa California China

Vishay Israel Limited	Israel	
Z.T.R. Electronics Ltd.	Israel	
Vishay International Trade Ltd.	Israel	
Dale Israel Electronics Industries, Ltd.	Israel	
Vishay Components (Huizhou) Co. Ltd.	China	
Draloric Israel Ltd.	Israel	
V.I.E.C. Ltd.	Israel	
Vishay Advanced Technology, Ltd.	Israel	
Vilna Equities Holding, B.V.	Netherlands	
Tedea - Huntleigh Europe Ltd.	England	
Measurements Group (U.K.) Ltd.	England & Wales	
Vishay Nobel Ltd.	England	
Vishay Europe GmbH	Germany	(f)
Vishay Europe Sales GmbH	Germany	( )
BCcomponents Austria GmbH	Austria	
BCcomponents Holding Gmbh	Germany	
BCcomponents Beyschlag GmbH	Germany	
BCcomponents Vertriebs GmbH	Germany	
Vishay Electronic GmbH	Germany	
Roederstein Electronics Portugal Lda.	Portugal	
ECOMAL Deutschland GmbH	Germany	
Grupo Da Medidas Iberica S.L.	Spain	
ECOMAL Schweiz A.G.	Switzerland	
ECOMAL Austria Ges.mbH	Austria	
Klevestav-Roederstein Festigheter AB	Sweden	(g)
Vishay Components, S.A.	Spain	(0)
ECOMAL Nederland BV	Netherlands	
ECOMAL Belgium N.V.	Belgium	
ECOMAL Denmark A/S	Denmark	
ECOMAL Finland OY	Finland	
ECOMAL France S.A.	France	
ECOMAL S.r.O.	Czech Republic	
ECOMAL UK	England	
Okab Roederstein Finland OY	Finland	(h)
Rogin Electronic S.A.	Spain	(i)
Roederstein GmbH	Germany	
Roederstein-Hilfe-GmbH	Germany	
Vishay Electronic SPOL S RO	Czech Republic	
Vishay S.A.	France	(j)
Ultronix, Inc.	Delaware	
Tedea-Huntleigh B.V.	Netherlands	
Tedea-Huntleigh International Ltd	Israel	
T-H Technology Ltd	Israel	
Vishay Measurements Group France, S.A.	France	
T-H Industrial Properties Ltd	Israel	
Tedea-Huntleigh, Inc.	California	
Tedea-Huntleigh (Beijing) Electronics Co. Ltd	China	

E-Sil Components Ltd.	England & Wales	
Vishay Roederstein Limited	England	
Vitramon Limited	England	
Vishay Ltd.	England & Wales	
Spectrol GmbH	Germany	
Grued Corporation	Delaware	
Con-Gro Corp.	Delaware	
Gro-Con, Inc.	Delaware	
Sfernice, Ltd.	England & Wales	
Heavybarter, Unlimited	England & Wales	
Dale ACI Components	England	
Vishay Nobel AB	Sweden	
AB Givareteknik	Sweden	
Vishay Nobel Oy AB	Finland	
Vishay Nobel AS	Norway	
Measurements Group GmbH	Germany	
Vishay Semiconductor GmbH	Germany	
Facility Services, GmbH	Germany	(k)
Vishay (Phils.) Inc.	Philippines	
Vishay Semiconductor Ges.mbH	Austria	(l)
Shanghai Vishay Semiconductors Ltd.	China	
Vishay Hungary	Hungary	
Vishay Semiconductor Malaysia Sdn Bhd	Malaysia	
Vishay Dale Holdings, Inc.	Delaware	
Vishay Dale Electronics, Inc.	Delaware	
Components Dale de Mexico S.A. de C.V.	Mexico	
Electronica Dale de Mexico S.A. de C.V.	Mexico	
Vishay Bradford Electronics, Inc.	Delaware	
Vishay Resistive Systems Inc.	Maryland	
Vishay Sprague Holdings Corp.	Delaware	
Vishay Precision Resistors Holdings Corporation	Delaware	
Vishay Thin Film LLC	New York	
Vishay Techno Components LLC	Delaware	
Vishay Service Center, Inc.	Massachusetts	
Vishay Sprague, Inc.	Delaware	
Vishay Sprague Canada Holdings Inc.	Canada	
Sprague Electric of Canada Limited	Canada	
Sprague France S.A.S.	France	
Tansitor Barbados Limited	Barbados	
Vishay Acquisition Holdings Corp.	Delaware	
Vishay Vitramon, Inc.	Delaware	
Vishay do Brazil Ltda.	Brazil	

- (a) Registrant's direct ownership percentage in Siliconix incorporated is 80.4%.
- (b) Siliconix incorporated's indirect ownership percentage in Shanghai Simconix Electronic Company Ltd. is 96%.
- (c) Registrant's indirect ownership percentage in Vishay General Semiconductor, L.P. is 100%; 1% is owned by its indirectly wholly owned subsidiary Vishay GSI Holdings, LLC, and 99% is owned by its wholly owned subsidiary Vishay GSI, Inc.
- (d) Registrant's indirect ownership percentage in General Semiconductor Japan, Ltd. is 100%; 50% owned by its wholly owned subsidiary General Semiconductor International and 50% owned by its wholly owned subsidiary General Semiconductor Inc.
- (e) Registrant's indirect ownership percentage in Celtron Technologies (Tianjin) Inc. is 100%; 68% owned by its wholly owned subsidiary Celtron U.S.A. and 32% owned by its wholly owned subsidiary UCC Investment Co. Ltd.
- (f) Registrant's indirect ownership percentage in Vishay Europe GmbH is 100%; 85.9% is owned by its wholly owned subsidiary Vishay Israel Limited; 13.1% is owned by directly; and 1% is owned by its wholly owned subsidiary Vishay Dale Holdings, Inc.
- (g) Registrant's indirect ownership percentage in Klevestav-Roederstein Festigheter AB is 50%.
- (h) Registrant's indirect ownership percentage in Okab Roederstein Finland OY is 44.4%.
- (i) Registrant's indirect ownership percentage in Rogin Electronic S.A. is 33%.
- (j) Registrant's indirect ownership percentage in Vishay S.A. is 99.8%.
- (k) Registrant's indirect ownership percentage in Facility Services, GmbH is 50%.
- (l) Registrant's indirect ownership percentage in Vishay Semiconductor Ges.mbH is 100%; 54% is owned by its indirectly wholly owned subsidiary Sprague Electric of Canada; 44% is owned by its indirectly wholly owned subsidiary Vishay Semiconductor GmbH; and 2% is owned by its indirectly wholly owned subsidiary Vishay Electronic GmbH.

## Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following registration statements of Vishay Intertechnology, Inc. and in the related Prospectuses of our reports dated March 14, 2005, with respect to the consolidated financial statements of Vishay Intertechnology, Inc., Vishay Intertechnology, Inc. management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Vishay Intertechnology, Inc., included in this Annual Report (Form 10-K) for the year ended December 31, 2004.

Registration Statement Number	Form	Description
33-7850	S-8	1986 Employee Stock Plan of Vishay Intertechnology, Inc.
33-7851	S-8	1986 Employee Stock Plan of Dale Electronics, Inc.
333-78045	S-8	1997 Stock Option Program and 1998 Employee Stock Option Program of Vishay Intertechnology, Inc.
333-68090	S-3/A	\$550,000,000 Liquid Yield Option Notes Due 2021
333-73496	S-8	Amended and Restated General Semiconductor, Inc. 1993 Long-Term Incentive Plan and General Semiconductor, Inc. Amended and Restated 1998 Long-Term Incentive Plan
333-52594	S-3/A	2,887,134 Common Shares and \$945,779,624 Other Securities
333-102507	S-3/A	Class A Warrants to Purchase 7,000,000 Shares of Common Stock; Class B Warrants to Purchase 1,823,529 Shares of Common Stock; 6,176,467 Shares of Common Stock Issuable Upon Exchange of \$105,000,000 Floating Rate Unsecured Notes due 2102; and 8,823,529 Shares of Common Stock Issuable Upon Exercise of Class A Warrants and Class B Warrants
333-110259	S-3/A	\$500,000,000 Principal Amount of 3 5/8% Convertible Subordinated Notes Due 2023; and Shares of Common Stock Issuable Upon Conversion of \$500,000,000 Principal Amount of 3 5/8% Convertible Subordinated Notes due 2023.

/s/ ERNST & YOUNG LLP

Philadelphia, Pennsylvania March 14, 2005

## CERTIFICATIONS

## I, Dr. Gerald Paul, certify that:

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

Date: March 15, 2005 /s/ Dr. GERALD PAUL

Dr. Gerald Paul Chief Executive Officer

## CERTIFICATIONS

## I, Richard N. Grubb, certify that:

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

Date: March 15, 2005
/s/ RICHARD N. GRUBB
Richard N. Grubb
Chief Financial Officer

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

In connection with the Annual Report of Vishay Intertechnology, Inc. (the "Company") on Form 10-K for the year ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Dr. Gerald Paul, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Dr. GERALD PAUL

Dr. Gerald Paul Chief Executive Officer March 15, 2005

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

In connection with the Annual Report of Vishay Intertechnology, Inc. (the "Company") on Form 10-K for the year ended December 31, 2004 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Richard N. Grubb, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ RICHARD N. GRUBB

Richard N. Grubb Chief Financial Officer March 15, 2005