
UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 27, 2003

or

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

For the transition period from to

Commission file number: 000-50307

FormFactor, Inc.

(Exact name of registrant as specified in its charter)

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

13-3711155
*(I.R.S. Employer
Identification No.)*

2140 Research Drive, Livermore, California 94550

(Address of principal executive offices, including zip code)

(925) 294-4300

(Registrant's telephone number, including area code)

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

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

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

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

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

The aggregate market value of the registrant's common stock, par value \$0.001 per share, held by non-affiliates of the registrant as of December 27, 2003, based on the closing sales price of the registrant's common stock on June 27, 2003, the last business day of the registrant's most recently completed second fiscal quarter, as reported by the Nasdaq National Market, was \$355,194,087. Shares of the registrant's common stock held by each officer and director and each person who owns 5% or more of the outstanding common stock of the registrant have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of shares of the registrant's common stock, par value \$0.001 per share, outstanding as of March 19, 2004 was 37,442,515 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2004 Annual Meeting of Stockholders, which will be filed within 120 days of the end of the fiscal year ended December 27, 2003, are incorporated by reference in Part III hereof. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as a part of this Form 10-K.

FormFactor, Inc.

Form 10-K for the Fiscal Year Ended December 27, 2003

Index

	<u>Page</u>
Part I	
Item 1: Business	1
Item 2: Properties	9
Item 3: Legal Proceedings	9
Item 4: Submission of Matters to a Vote of Security Holders	9
Part II	
Item 5: Market for Registrant's Common Equity and Related Stockholder Matters	10
Item 6: Selected Financial Data	11
Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations	12
Item 7A: Quantitative and Qualitative Disclosures about Market Risk	38
Item 8: Consolidated Financial Statements and Supplementary Data	39
Item 9: Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	40
Item 9A: Controls and Procedures	40
Part III	
Item 10: Directors and Executive Officers of the Registrant	41
Item 11: Executive Compensation	41
Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	41
Item 13: Certain Relationships and Related Transactions	41
Item 14: Principal Accountant Fees and Services	41
Part IV	
Item 15: Exhibits, Financial Statement Schedules, and Reports on Form 8-K	42
Signatures	43
Consolidated Financial Statements	45
Financial Statement Schedule	72
EXHIBIT 10.11	
EXHIBIT 10.12	
EXHIBIT 10.35	
EXHIBIT 10.45	
EXHIBIT 23.01	
EXHIBIT 31.01	
EXHIBIT 31.02	
EXHIBIT 32.01	

FormFactor, the FormFactor logo and its product and technology names, including MicroSpring, MicroForce, MicroLign, MOST and TRE, are trademarks or registered trademarks of FormFactor in the United States and other countries. All other trademarks, trade names or service marks appearing in this Annual Report on Form 10-K are the property of their respective owners.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K of FormFactor, Inc. and its consolidated subsidiaries (the “Company”) contains forward-looking statements within the meaning of the Securities Exchange Act of 1934 and the Securities Act of 1933, which are subject to risks, uncertainties and assumptions that are difficult to predict. The forward-looking statements include statements, among other things, concerning our business strategy (including anticipated trends and developments in, and management plans for, our business and the markets in which we operate, financial results, operating results, revenues, gross margin, operating expenses, products, projected costs and capital expenditures, research and development programs, sales and marketing initiatives and competition. In some cases, you can identify these statements by forward-looking words, such as “may,” “might,” “will,” “could,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “intend” and “continue,” the negative or plural of these words and other comparable terminology. The forward-looking statements are only predictions based on our current expectation and our projections about future events. All forward-looking statements included in this Annual Report on Form 10-K are based upon information available to us as of the filing date of this Form 10-K. You should not place undue reliance on these forward-looking statements. We undertake no obligation to update any of these statements for any reason. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from those expressed or implied by these statements. These factors include the matters discussed in the section entitled “Item 7: Management’s Discussion and Analysis of Financial Condition and Results of Operations — Trends, Risks and Uncertainties,” and elsewhere in this Form 10-K. You should carefully consider the numerous risks and uncertainties described under such section.

PART I

Item 1. *Business*

FormFactor designs, develops, manufactures, sells and supports precision, high performance advanced semiconductor wafer probe cards. Semiconductor manufacturers use the Company’s wafer probe cards to perform wafer probe test on the whole wafer in the front end of the semiconductor manufacturing process.

The Company introduced its first wafer probe card based on its MicroSpring interconnect technology in 1995, and, by the end of 2000, became a leading supplier of advanced wafer probe cards, based on revenues, according to VLSI Research, an independent research firm. The Company offers its customers high parallelism, large area array wafer probe cards to reduce their overall cost of test.

Products

FormFactor’s products are based on its proprietary technologies, including its MicroSpring interconnect technology and proprietary design tools. The Company’s MicroSpring interconnect technology, which includes resilient spring-like contact elements, enables the Company to produce wafer probe cards for applications that require reliability, speed, precision and signal integrity. FormFactor manufactures its MicroSpring contact elements through precision micro-machining and scalable semiconductor-like wafer fabrication processes. The Company’s MicroSpring contacts are springs that optimize the relative amounts of force on, and across, a bond pad during the test process and maintain their shape and position over a range of compression. These characteristics allow FormFactor to achieve reliable, electrical contact on either clean or oxidized surfaces, including bond pads on a wafer. MicroSpring contacts enable the Company’s wafer probe cards to make hundreds of thousands of touchdowns with minimal maintenance. The MicroSpring contact can be attached to many surfaces, or substrates, including printed circuit boards, silicon wafers, ceramics and various metalized surfaces.

Since its original conception, the MicroSpring contact has evolved into a library of spring shapes and technologies. The Company’s designers use this library to design an optimized custom wafer probe card for each application. Since developing this fundamental technology, FormFactor has broadened and refined it to

[Table of Contents](#)

respond to the increasing demands of smaller, faster and more complex semiconductors. The Company's MicroSpring contacts have scaled in size with the evolution of semiconductors.

FormFactor MicroSpring contacts include geometrically precise tip structures. These tip structures are the parts of the Company's wafer probe cards that contact the chips, and are manufactured using proprietary semiconductor-like processes. These tip structures enable precise contact with small bond pad sizes and pitches. The Company's technology allows it to specifically design the geometries of the contact tip in order to ensure the most precise and predictable electrical contact is achieved for a customer's particular application.

The Company's wafer probe cards are custom products that are designed to order for its customers' unique wafer designs. Contacting up to 256 chips in parallel requires large area contact array sizes because they must accommodate over 11,000 simultaneous contacts. This requirement poses fundamental challenges that include the planarity of the array, the force needed to make contact and the need to touch all bond pads with equal accuracy. FormFactor has developed wafer probe cards that use array sizes ranging from 50 mm x 50 mm up to greater than 150 mm x 100 mm, in combination with complex multi-layer printed circuit boards designed by the Company's design team. While leading edge DRAM designs use larger array sizes for highly-parallel applications, smaller array sizes used for DRAM applications a few years ago can be used for today's leading edge applications in the flash memory and logic markets. The Company's current DRAM contacting technology allows its products to contact up to 256 DRAM chips in parallel. FormFactor's current flash contacting technology allows its wafer probe cards to contact up to 144 flash chips in parallel.

The Company has invested and intends to continue to invest considerable resources in its wafer probe card design tools and processes. These tools and processes enable automated routing and trace length adjustment within the Company's printed circuit boards and greatly enhance the Company's ability to rapidly design and lay out complex printed circuit board structures. FormFactor's proprietary design tools also enable it to design wafer probe cards particularly suited for testing today's low voltage, high power chips. Low voltage, high power chips require superior power supply performance, and the Company's MicroSpring interconnect technology is used to provide a very low inductance, low resistance electrical path between the power source and the chip under test.

In July 2003, the Company publicly announced its MicroForce™ probing technology. This MicroForce probing technology combines a low probe force with stable low resistance electrical contact to address wafer test challenges for high-performance, flip chip applications, thereby reducing the risk of damage to both interconnect bumps and the low-k dielectrics that lie beneath them. By combining the Company's new BladeRunner MicroSpring contact structure with our proprietary technology directed to the automated wafer prober chuck, FormFactor believes that its MicroForce probing technology will enable FormFactor's customers to achieve a higher level of test accuracy, potentially increasing overall electrical yields by minimizing false failures. In July 2003, the Company also publicly announced its MicroLign™ alignment technology. The MicroLign alignment technology includes a proprietary probe tip design method developed to optimize automated optical alignment during wafer probing. When implemented, this technology enables a faster, more accurate optical alignment process, which reduces instances of optical alignment errors and can drive manufacturing efficiencies for high volume wafer test operations.

In November 2003, the Company introduced its S200™ high speed test technology, which combines high-speed signal performance with high parallelism to create a cost effective solution for full-speed functional test of mobile dynamic random access memory, or DRAM, die in wafer form. FormFactor's S200 technology enables manufacturers of multi-chip packages to perform full-frequency production test on each memory die at data sheet specification speeds before the die is singulated from the wafer and assembled into the multi-chip package. In November 2003, the Company also introduced wafer-level burn-in (WLBI) wafer probe cards. FormFactor's WLBI wafer probe cards enable DRAM chip manufacturers to perform burn-in type stress testing on die while still on the wafer and, consequently, improve final yields and reduce or completely eliminate the need for package level burn-in.

Because FormFactor customers typically use the Company's wafer probe cards in a wide range of operating temperatures, as opposed to conducting wafer probe test at one predetermined temperature, the Company has designed complex thermal compensation characteristics into its products. The Company selects

[Table of Contents](#)

its wafer probe card materials after careful consideration of the potential range of test operating temperatures and designs its wafer probe cards to provide for a precise match with the thermal expansion characteristics of the wafer under test. As a result, FormFactor wafer probe cards generally are able to accurately probe over a large range of operating temperatures. This feature enables the Company's customers to use the same wafer probe card for both low and high temperature testing without a loss of performance. In addition, for those testing situations that require positional accuracy at a specific temperature, the Company has designed wafer probe cards optimized for testing at such temperatures.

FormFactor's many spring shapes, different geometrically-precise tip structures, various array sizes and diverse printed circuit board layouts enable a wide variety of solutions for its customers. The Company's designers select the most appropriate of these elements, or modify or improve upon such existing elements, and integrate them with the Company's other technologies to deliver a custom solution optimized for the customer's requirements.

Customers

FormFactor's customers include manufacturers in the DRAM, flash and logic markets. The Company's customers use its wafer probe cards to test DRAM chips including DDR, RDRAM, SDRAM and EDRAM, static RAM chips, NOR and NAND flash memory chips, Serial Data devices, chipsets, microprocessors and microcontrollers.

In fiscal 2003, sales to four customers accounted for 66.2% of the Company's revenues, with 30.1% attributable to Intel Corporation, 13.4% attributable to Spirox Corporation, the Company's distributor, 12.4% attributable to Elpida and 10.3% attributable to Infineon Technologies AG. In fiscal 2002, sales to three customers accounted for 67.9% of the Company's revenues, with 26.9% attributable to Intel Corporation, 20.9% attributable to Spirox Corporation and 20.1% attributable to Infineon Technologies AG. In fiscal 2001, sales to four customers accounted for approximately 75.1% of the Company's revenues, with 26.4% attributable to Spirox Corporation, 20.2% attributable to Samsung Electronics Industries Co., Ltd., 16.1% attributable to Infineon Technologies AG and 12.4% attributable to Intel Corporation. No other customer accounted for more than 10% of the Company's revenues in any of these referenced periods.

Backlog

FormFactor's backlog increased from \$13.8 million at December 28, 2002 to \$25.3 million at December 27, 2003. FormFactor manufactures its wafer probe cards based on order backlog and customer commitments. Backlog includes only orders for which written authorizations have been accepted, shipment dates within 12 months have been assigned and revenue has not been recognized. In addition, backlog includes service revenue for existing product service agreements to be earned within the next 12 months.

Manufacturing

FormFactor's wafer probe cards are custom products that the Company designs to order for its customers' unique wafer designs. The Company manufactures its products at its facilities in Livermore, California. FormFactor's proprietary manufacturing processes include wirebonding, photolithography, plating and metallurgical processes, dry and electro-deposition, and complex interconnection system design. The critical steps in the Company's manufacturing process are performed in a Class 100 clean room environment. FormFactor also expends resources on the assembly and test of its wafer probe cards and on quality control.

The Company has deployed state of the art shop floor controls and systems that allow its operators to monitor and optimize manufacturing flows and capacity. FormFactor also uses statistical process control to further enhance the quality of its production processes.

FormFactor depends upon suppliers for some components of its manufacturing processes, including ceramic substrates and complex printed circuit boards, and for materials used in its manufacturing processes. Some of these components and materials are supplied by a single vendor. Generally, the Company relies on

[Table of Contents](#)

purchase orders rather than long-term contracts with its suppliers, which subjects the Company to risks including price increases and component shortages. Management continues to evaluate alternative sources of supply for these components and for materials.

FormFactor maintains a repair and service capability in Livermore, California. The Company provides service and maintenance capabilities in its service center in Seoul, South Korea. The Company also has a repair and service center in Dresden, Germany. Management plans to expand or enhance these capabilities to provide faster response time to its customers, maximizing the uptime of its wafer probe cards.

Research, Development and Engineering

The semiconductor industry is subject to rapid technological change and new product introductions and enhancements. Management believes that the Company's continued commitment to research and development and timely introduction of new and enhanced wafer probe test solutions and other technologies related to its MicroSpring interconnect technology is integral to maintaining its competitive position. FormFactor is investing considerable time and resources in creating structured processes for undertaking, tracking and completing the Company's development projects, and plans to implement those developments into new product or technology offerings. Management expects to continue to allocate significant resources to these efforts and to use automation and information technology to provide additional efficiencies in the Company's research and development activities.

FormFactor has historically devoted on average approximately 20% of its revenues to research and development programs. Research and development expenses were \$15.6 million for fiscal 2003, \$14.6 million for fiscal 2002 and \$14.6 million for fiscal 2001.

The Company's research and development and product engineering activities are directed by individuals with significant expertise and industry experience. As of December 27, 2003, the Company had 74 employees in research and development, of which 62 worked on the design and development of new interconnect and contact technologies related to its core MicroSpring interconnect technology. Of these employees, 54 are engineers and 29 have PhD or MS degrees.

Sales and Marketing

FormFactor sells its products primarily through a sales model that emphasizes the customer's total cost of ownership as it relates to test costs. With this sales model, the Company strives to demonstrate how test costs can be reduced by simulating the customer's test floor environment, including testers and probers, utilizing its product and comparing the overall cost of test to that of conventional wafer probe cards.

The Company sells its products worldwide primarily through its direct sales force, a distributor and independent sales representatives. As of December 27, 2003, FormFactor had 14 sales professionals. In North America, the Company sells its products through its direct sales force. In Europe, the Company's local sales team works with independent sales representatives. In South Korea, the Company sells its products through its direct sales force, while in Taiwan, China and Singapore FormFactor sells through Spirox Corporation, the Company's distributor in the region. In Japan, effective April 1, 2002, the Company converted from a distributor arrangement to a direct sales team that is based in Tokyo, Japan.

The Company's marketing staff, located in Livermore, California and Tokyo, Japan, works closely with customers to understand their businesses, anticipate trends and define products that will provide significant technical and economic advantages to its customers.

FormFactor also utilizes a highly skilled team of field application engineers that support the Company's customers as they integrate its products into their manufacturing processes. Through this process, the Company develops a close understanding of product and customer requirements, accelerating its customers' production ramps. The Company plans to expand its customer support by adding engineering services. Management believes that this expanded service offering will enable the Company's customers to more fully benefit from its products and technology and create new business opportunities for FormFactor.

Environmental Matters

FormFactor is subject to U.S. federal and state and foreign governmental laws and regulations relating to the protection of the environment. Management believes that the Company complies with all material environmental laws and regulations that apply to FormFactor. In late 2003 and early 2004 FormFactor received notices from the California Department of Toxic Substances Control and the Bay Area Air Quality Management District regarding violations of certain environmental regulations. FormFactor promptly took appropriate steps to address all of the violations noted, believes that all such violations were addressed, and sent correspondence to the agencies confirming such corrective steps. In 2003, the Company resolved a Notice of Violation from the Bay Area Air Quality Management District through its corrective action and a payment of \$2,100. At the present time it is not clear whether any monetary penalty will be imposed by the applicable agencies for the unresolved notices, and if so, the relative significance of the penalty, or whether the Company may be required to take further action.

It is possible that in the future, the Company may receive environmental violation notices, and that final resolution of the violations identified by these notices could harm its operating results. New laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination at the Company's or others' sites or the imposition of new cleanup requirements could have a negative effect on the Company's operating results.

Competition

The highly competitive wafer probe card market is comprised of many domestic and foreign companies, and has historically been fragmented with many local suppliers servicing individual customers. Current and potential competitors in the wafer probe card market include Advantest Corporation, AMST Co., Ltd., Cascade Microtech, Inc., ESJ Corporation, Feinmetall GmbH, Japan Electronic Materials Corporation, Kulicke and Soffa Industries, Inc., Micronics Japan Co., Ltd., MicroProbe, Inc., NanoNexus Inc., Phicom Corporation, SCS Hightech, Inc., Tokyo Cathode Laboratory Co., Ltd. and Wentworth Laboratories, Inc., among others. In addition to the ability to address wafer probe card performance issues, the primary competitive factors in the Company's industry include product quality and reliability, price, total cost of ownership, lead times, the ability to provide prompt and effective customer service, field applications support and timeliness of delivery.

Some of FormFactor's competitors are also suppliers of other types of test equipment or other semiconductor equipment, or offer both advanced wafer probe cards and needle probe cards, and may have greater financial and other resources than the Company does. Management expects that the Company's competitors will enhance their current wafer probe products and that they may introduce new products that will be competitive with FormFactor's wafer probe cards. In addition, it is possible that new competitors, including test equipment manufacturers, may offer new technologies that reduce the value of the Company's wafer probe cards.

Additionally, semiconductor manufacturers may implement chip designs that include built-in self-test capabilities or similar functions or methodologies that increase test throughput and eliminate some or all of the Company's current competitive advantages. The Company's ability to compete favorably is also negatively impacted by low volume orders that do not meet its present minimum volume requirements, by very short cycle time requirements that the Company cannot meet because of its design or manufacturing processes, by long-standing relationships between its competitors and certain semiconductor manufacturers, and by semiconductor manufacturer test strategies that include low performance semiconductor testers.

Intellectual Property

FormFactor's success depends in part upon its ability to maintain and protect its proprietary technology and to conduct the Company's business without infringing the proprietary rights of others. The Company relies on a combination of patents, trade secret laws, trademarks and contractual restrictions on disclosure to protect its intellectual property rights.

[Table of Contents](#)

As of December 27, 2003, the Company had 189 issued patents, of which 102 are United States patents and 87 are foreign patents. The expiration dates of these patents range from 2013 to 2022. FormFactor's issued patents cover the Company's core interconnect technology, as well as some of its inventions related to wafer probe cards and testing, wafer-level packaging and test, sockets and assemblies and chips. In addition, as of December 27, 2003, FormFactor had 315 patent applications pending worldwide, including 118 United States applications, 177 foreign national or regional stage applications and 20 Patent Cooperation Treaty applications. Management does not know whether the Company's current patent applications, or any future patent applications that the Company may file, will result in a patent being issued with the scope of the claims FormFactor seeks, or at all, or whether any patents that the Company may receive will be challenged or invalidated. Even if additional patents are issued, FormFactor's patents might not provide sufficiently broad coverage to protect its proprietary rights or to avoid a third party claim against one or more of its products or technologies.

FormFactor has both registered and unregistered trademarks, including FormFactor, MicroSpring, MicroForce, MicroLign, MOST, TRE and the FormFactor logo.

FormFactor routinely requires its employees, customers, suppliers and potential business partners to enter into confidentiality and non-disclosure agreements before the Company discloses to them any sensitive or proprietary information regarding its products, technology or business plans. The Company requires employees to assign to it proprietary information, inventions and other intellectual property they create, modify or improve.

Legal protections afford only limited protection for the Company's proprietary rights. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy aspects of its products or to obtain and use information that the Company regards as proprietary. Others might independently develop similar or competing technologies or methods or design around the Company's patents. In addition, leading companies in the semiconductor industry have extensive patent portfolios and other intellectual property with respect to semiconductor technology. In the future, FormFactor might receive claims that it is infringing intellectual property rights of others or that its patents or other intellectual property rights are invalid. FormFactor has received in the past, and may receive in the future, communications from third parties inquiring about our interest in licensing certain of their intellectual property or more generally identifying intellectual property that may be of interest to the Company.

FormFactor has invested significant time and resources in its technology, and as a part of its ongoing efforts to protect the intellectual property embodied in its proprietary technology, including its MicroSpring interconnect technology, the Company will be required to enforce its intellectual property rights against any infringing third parties. On February 24, 2004, the Company filed in the Seoul Southern District Court, located in Seoul, South Korea, two separate complaints against Phicom Corporation, a Korean corporation, alleging infringement of a total of four Korean patents issued to FormFactor, and is seeking injunctive relief. Litigation may be necessary to defend against claims of infringement or invalidity, to determine the validity and scope of the Company's proprietary rights or those of others, to enforce the Company's intellectual property rights or to protect its trade secrets. If FormFactor threatens or initiates litigation, the Company may be subject to claims by third parties against which it must defend. Intellectual property litigation, whether or not it is resolved in the Company's favor, is expensive and time-consuming and could divert management's attention from running FormFactor's business. If an infringement claim against the Company resulted in a ruling adverse to it, FormFactor could be required to pay substantial damages, cease the use or sale of infringing products, spend significant resources to develop non-infringing technology, discontinue the use of certain technology or obtain a license to the technology. Management cannot predict whether a license agreement would be available, or whether the terms and conditions would be acceptable to the Company. In addition, many of FormFactor customer contracts contain provisions that require the Company to indemnify its customers for third party intellectual property infringement claims, which would increase the cost to FormFactor of an adverse ruling in such a claim. An adverse determination could also prevent the Company from licensing its technologies and methods to others.

Employees

As of December 27, 2003, FormFactor had 341 full-time employees, including 74 in research and development, 45 in sales and marketing, 26 in general and administrative functions, and 196 in operations. By region, 306 of the Company's employees were in North America, 20 in Japan, 11 in South Korea and 4 in Europe. No employees are currently covered by a collective bargaining agreement. The Company believes that its relations with its employees is good.

Executive Officers

The names of the Company's executive officers, their ages as of December 27, 2003 and their positions with FormFactor are set forth below.

Name	Age	Position
Dr. Igor Y. Khandros	49	President, Chief Executive Officer and Director
Benjamin N. Eldridge	42	Senior Vice President of Development and Chief Technical Officer
Yoshikazu Hatsukano	64	Senior Vice President of Asia-Pacific Operations and President of FormFactor K.K.
Peter B. Mathews	41	Senior Vice President of Worldwide Sales
Stuart L. Merkadeau	42	Senior Vice President, General Counsel and Secretary
Jens Meyerhoff	39	Senior Vice President of Operations and Chief Financial Officer
Michael M. Ludwig	42	Vice President of Finance, and Controller

Dr. Igor Y. Khandros founded FormFactor in April 1993. Dr. Khandros has served as the Company's President and Chief Executive Officer as well as a Director since April 1993. From 1990 to 1992, Dr. Khandros served as the Vice President of Development of Tessera, Inc., a provider of chip scale packaging technology that he co-founded. From 1986 to 1990, he was employed at the Yorktown Research Center of IBM Corporation as a member of the technical staff and a manager. From 1979 to 1985, Dr. Khandros was employed at ABEX Corporation, a casting foundry and composite parts producer, as a research metallurgist and a manager, and he was an engineer from 1977 to 1978 at the Institute of Casting Research in Kiev, Russia. Dr. Khandros holds a M.S. equivalent degree in metallurgical engineering from Kiev Polytechnic Institute in Kiev, Russia, and a Ph.D. in metallurgy from Stevens Institute of Technology.

Benjamin N. Eldridge has served as the Company's Senior Vice President of Development and Chief Technical Officer since September 2000. Mr. Eldridge also served as the Company's Vice President of Development from June 1997 to September 2000, as our Director of Development from June 1995 to June 1997 and as our Manager of Development Engineering from November 1994 to May 1995. From 1984 to October 1994, he was employed at the TJ Watson Research Center of IBM Corporation, where he held various engineering positions in the Physical Sciences and Computer Science departments. Mr. Eldridge holds a B.S. in electrical engineering from Union College and a M.S. in physics from Rensselaer Polytechnic Institute.

Yoshikazu Hatsukano has served as the Company's Senior Vice President of Asia-Pacific Operations since April 2001, and as the President of FormFactor K.K., a wholly owned subsidiary, since December 1998. From 1961 to October 1998, Mr. Hatsukano was employed by various companies affiliated with Hitachi, Ltd., where he held several management positions including the President of Hitachi Micro Systems, Inc. from 1991 to October 1998 and the Vice General Manager of the Hitachi Semiconductor Design and Development Center from 1990 to 1991. Mr. Hatsukano holds a B.S. in electronics from Kyoto University in Kyoto, Japan.

Peter B. Mathews has served as the Company's Senior Vice President of Worldwide Sales since October 2003. Mr. Mathews served as the Company's Vice President of Worldwide Sales from April 1999 to September 2003, and as our Director, Worldwide Sales and Business Development from March 1997 to April

[Table of Contents](#)

1999. From May 1992 to March 1997, Mr. Mathews was employed at MicroModule Systems, a manufacturer of multichip modules and interconnect test products, where he most recently held the position of Director of Marketing and Business Development. From 1989 to May 1992, he served as the U.S. Sales Manager for the Advanced Packaging Systems Division of Raychem Corporation, a component manufacturer for electronic and energy applications that was acquired by Tyco Electronics Ltd. Mr. Mathews holds a B.S. in chemical engineering from Cornell University.

Stuart L. Merkadeau has served as a Senior Vice President since October 2003 and as the Company's General Counsel and Secretary since October 2002. Mr. Merkadeau served as one of the Company's Vice Presidents from October 2002 to September 2003, and as the Company's Vice President of Intellectual Property from July 2000 to October 2002. From 1990 to July 2000, Mr. Merkadeau practiced law as an associate and then a partner with Graham & James LLP, where he specialized in licensing and strategic counseling in intellectual property matters. Mr. Merkadeau is admitted to practice in California and registered to practice before the U.S. Patent and Trademark Office. Mr. Merkadeau holds a B.S. in industrial engineering from Northwestern University and a J.D. from the University of California at Los Angeles.

Jens Meyerhoff has served as the Company's Senior Vice President of Operations since January 2003 and as the Company's Chief Financial Officer since August 2000. He served as a Senior Vice President from August 2000 to January 2003, and as the Company's Secretary from April 2002 to October 2002. From March 1998 to August 2000, Mr. Meyerhoff served as the Chief Financial Officer and the Senior Vice President, Materials at Siliconix Incorporated, a manufacturer of power and analog semiconductor products. From 1991 to February 1998, Mr. Meyerhoff was employed in various corporate controller and financial positions with the North American subsidiaries as well as the German headquarters of Daimler-Benz AG. Mr. Meyerhoff holds a German Wirtschaftsinformatiker degree, which is the equivalent of a finance and information technology degree, from Daimler-Benz's Executive Training program.

Michael M. Ludwig has served as the Company's Vice President of Finance, Controller and Chief Accounting Officer since December 2003. From March 2001 to November 2003, Mr. Ludwig served as Vice President of Human Resources and Finance, and Controller. From January 1999 to March 2001, Mr. Ludwig was employed at Elo TouchSystems, Inc., a touch screen manufacturing company, where he most recently served as the Vice President, Systems and Services Group. From 1989 to January 1999, Mr. Ludwig was employed by Beckman Coulter, Inc., a medical diagnostics and life sciences equipment manufacturer, and various of its subsidiaries, holding positions including Finance Director, Clinical Chemistry Division; Director, Strategic Planning and Finance; and Controller. Mr. Ludwig holds a B.S. in business administration from California State Polytechnic University at Pomona.

Available Information

FormFactor's Internet website is located at <http://www.formfactor.com>. Please note that information on the Company's website is not incorporated by reference in this Form 10-K. FormFactor makes available free of charge on its website its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission.

The public may also read and copy any materials that FormFactor files with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers, such as FormFactor, that file electronically with the SEC. The SEC's Internet website is located at <http://www.sec.gov>.

Item 2: Properties

FormFactor's corporate headquarters is located in Livermore, California and includes administrative, manufacturing, engineering, and research and development facilities. The Company leases its corporate headquarters. In addition, FormFactor also leases office, repair and service, and/or research and development space internationally. Management plans to move FormFactor's operations to a new facility in Livermore, California in 2004. The new facility, currently under construction, will be comprised of a campus of three buildings totaling approximately 119,000 square feet. The Company presently leases these three buildings. The leases expire at various times through 2012. We believe that our existing and planned facilities are suitable for our current needs.

Information concerning FormFactor's principal properties as of December 27, 2003 is set forth below:

Location	Principal Use	Square Footage	Ownership
Livermore, CA	Corporate headquarters, product design, manufacturing, engineering, distribution, research and development	266,597	Leased
Munich, Germany	Sales office	162	Leased
Dresden, Germany	Service and repair center	755	Leased
Tokyo, Japan	Sales office, marketing, research and development, product design and field service	8,891	Leased
Seoul, Korea	Sales office, product design, field service, service and repair center	2,953	Leased

Item 3: Legal Proceedings

From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. As of the date of this Form 10-K, the Company was not involved in any material legal proceedings, other than as set forth below.

On February 24, 2004, the Company filed in the Seoul Southern District Court, located in Seoul, South Korea, two separate complaints against Phicom Corporation, a Korean corporation, alleging infringement of a total of four Korean patents issued to FormFactor. One Complaint alleges that Phicom is infringing FormFactor's Korean Patent Nos. 252,457, entitled "Method of Fabricating Interconnections Using Cantilever Elements and Sacrificial Substrates," and 324,064, entitled "Contact Tip Structures for Microelectronic Interconnection Elements and Methods of Making Same." The other Complaint alleges Phicom is infringing FormFactor's Korean Patent Nos. 278,342, entitled "Method of Altering the Orientation of Probe Elements in a Probe Card Assembly," and 399,210, entitled "Probe Card Assembly." Both of the Complaints seek injunctive relief. The court actions are a part of FormFactor's ongoing efforts to protect the intellectual property embodied in its proprietary technology, including its MicroSpring interconnect technology. FormFactor could incur material expenses in these litigations.

Item 4: Submission of Matters to a Vote of Security Holders

None.

PART II**Item 5: Market for Registrant's Common Equity and Related Stockholder Matters****Price Range of Common Stock**

The Common Stock of FormFactor has been listed on the Nasdaq National Market under the symbol "FORM" since June 12, 2003. Prior to this time, there was no public market for FormFactor's Common Stock. The following table sets forth the range of high and low sales prices per share as reported on the Nasdaq National Market for the periods indicated.

Fiscal Year 2003	High	Low
Second Quarter (from June 12, 2003)	\$21.00	\$16.21
Third Quarter	23.07	17.00
Fourth Quarter	27.69	17.55

The closing sales price of FormFactor's Common Stock on the Nasdaq National Market was \$18.98 per share on March 19, 2004. As of March 19, 2004, there were approximately 258 registered holders of record of the Company's Common Stock.

Dividend Policy

FormFactor has never declared or paid cash dividends on its capital stock. FormFactor currently expects to retain all available funds and any future earnings for use in the operation and development of its business. Accordingly, FormFactor does not anticipate declaring or paying cash dividends on its Common Stock in the foreseeable future.

Unregistered Sales of Securities

In November 2003 and December 2003, FormFactor issued 45,338 shares of common stock to two companies, which held warrants of the Company, pursuant to cashless net exercises of the warrants by such companies. The sales and the issuances of such securities were determined to be exempt from registration under Section 4(2) of the Securities Act or Regulation D thereunder as transactions by an issuer not involving a public offering.

Use of Initial Public Offering Proceeds

The Securities and Exchange Commission declared FormFactor's first registration statement, which it filed on Form S-1 (Registration No. 333-86738) under the Securities Act of 1933 in connection with the initial public offering of its common stock, effective on June 11, 2003. Through this registration statement, FormFactor registered 6,505,305 shares on its behalf and 394,695 shares on behalf of certain stockholders of FormFactor. All of the shares of FormFactor's common stock that it registered were sold for an aggregate public offering price of \$96.6 million. The net proceeds to the Company after paying underwriting discounts and commissions and offering costs was approximately \$82.0 million. In addition, the selling stockholders paid approximately \$2.7 million to FormFactor from their net proceeds in the offering to repay loans from FormFactor. As of December 27, 2003, the Company invested the net proceeds of the offering in short-term and long-term investment-grade, interest bearing instruments.

Item 6: Selected Financial Data

The following selected consolidated financial data are derived from FormFactor's consolidated financial statements. This data should be read in conjunction with FormFactor's consolidated financial statements and the related notes, and "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Fiscal Year Ended				
	Dec. 25, 1999	Dec. 30, 2000	Dec. 29, 2001	Dec. 28, 2002	Dec. 27, 2003
(In thousands, except per share data)					
Consolidated Statement of Operations Data:					
Revenues	\$ 35,722	\$ 56,406	\$ 73,433	\$ 78,684	\$ 98,302
Cost of revenues	20,420	28,243	38,385	39,456	49,929
Gross margin	15,302	28,163	35,048	39,228	48,373
Operating expenses					
Research and development	9,466	11,995	14,619	14,592	15,569
Selling, general and administrative	11,020	15,434	18,500	17,005	19,044
Stock-based compensation	341	259	469	1,039	1,484
Restructuring charges	—	—	1,380	—	—
Total operating expenses	20,827	27,688	34,968	32,636	36,097
Operating income (loss)	(5,525)	475	80	6,592	12,276
Interest and other income (expense), net	(119)	1,719	477	642	1,566
Income (loss) before income taxes	(5,644)	2,194	557	7,234	13,842
Benefit (provision) for income taxes	—	(115)	(307)	3,125	(5,283)
Net income (loss)	\$ (5,644)	\$ 2,079	\$ 250	\$ 10,359	\$ 8,559
Net income (loss) per share:					
Basic	\$ (2.16)	\$ 0.61	\$ 0.06	\$ 2.33	\$ 0.41
Diluted	\$ (2.16)	\$ 0.08	\$ 0.01	\$ 0.35	\$ 0.25
Weighted-average number of shares used in per share calculation					
Basic	2,609	3,408	4,029	4,448	21,047
Diluted	2,609	26,821	28,654	29,554	34,165
Consolidated Balance Sheet Data:					
Cash, cash equivalents, restricted cash and marketable securities	\$ 19,248	\$ 16,897	\$ 27,576	\$ 37,178	\$181,820
Working capital	17,694	23,391	31,074	40,536	190,581
Total assets	38,332	47,499	62,264	77,518	236,111
Long-term debt, less current portion	2,183	521	1,167	625	—
Redeemable convertible preferred stock and warrants	47,913	55,129	65,201	65,201	—
Deferred stock based compensation, net	(184)	(184)	(4,071)	(12,294)	(11,249)
Total stockholders' equity (deficit)	(21,286)	(18,586)	(17,582)	(5,037)	213,947

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical consolidated financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions as described under the "Note Regarding Forward-Looking Statements" that appears earlier in this Form 10-K. Our actual results could differ materially from those anticipated by these forward-looking statements as a result of many factors, including those discussed under "Trends, Risks and Uncertainties" and elsewhere in this Form 10-K.

Overview

We design, develop, manufacture, sell and support precision, high performance advanced semiconductor wafer probe cards. At the core of our product offering is our proprietary MicroSpring interconnect technology. Our MicroSpring interconnect technology includes a resilient contact element manufactured at our production facilities in Livermore, California. To date, we have derived our revenues primarily from the sale of wafer probe cards incorporating our MicroSpring interconnect technology.

We operate in a single industry segment for the design, development, manufacture, sale and support of precision, high performance advanced semiconductor wafer probe cards.

We were formed in 1993 and in 1995 introduced our first commercial product. During 1996, we introduced the industry's first memory wafer probe card capable of testing up to 32 devices in parallel. Our revenues increased from \$1.1 million in fiscal 1995 to \$98.3 million in fiscal 2003.

We work closely with our customers to design, develop and manufacture custom wafer probe cards. Each wafer probe card is a custom product that is specific to the chip and wafer designs of the customer. As a result, our revenue growth is driven by the number of new semiconductor designs, technology transitions and increased semiconductor production volumes.

While the majority of our sales are directly to semiconductor manufacturers, we also have significant sales to our distributor in Taiwan. Sales to our distributor were 13.4% of revenues in fiscal 2003. Sales to our distributors were 22.6% of revenues in fiscal 2002 and 32.9% of revenues in fiscal 2001. We sold our products in Japan to a distributor until March 31, 2002, when we began to sell directly in Japan. Currently, we have one distributor, Spirox Corporation, which serves Taiwan, Singapore and China. We also have the ability to sell our products directly to customers in that region.

Because our products serve the highly cyclical semiconductor industry, our business is subject to demand fluctuations that have resulted in significant variations of revenues, expenses and results of operations in the periods presented. Fluctuations are likely to continue in future periods. Due to a high concentration of large customers in the semiconductor industry, we believe that sales to a limited number of customers will continue to account for a substantial part of our business. We generally have limited backlog and therefore we rely upon orders that are booked and shipped in the same quarter for a majority of our revenues.

Fiscal Year. Our fiscal year ends on the last Saturday in December. The fiscal years ended December 27, 2003, December 28, 2002 and December 29, 2001 had 52 weeks each.

Revenues. We derive our revenues from product sales, license and development fees and royalties. To date, wafer probe card sales have comprised substantially all of our revenues. Wafer probe card sales accounted for 99.8% of our revenues in fiscal 2003, 99.9% of our revenues in fiscal 2002 and 99.2% of our revenues in fiscal 2001. Revenues from license and development fees and royalties have historically not been significant. Increases in revenues have resulted from increased demand for our existing products, the introduction of new, more complex products and the penetration of new markets. Revenues from our customers are subject to both quarterly and annual fluctuations due to design cycles, technology adoption rates and cyclicity of the different end markets into which our customers' products are sold. We expect that

[Table of Contents](#)

revenues from the sale of wafer probe cards will continue to account for substantially all of our revenues for the foreseeable future.

Cost of Revenues. Cost of revenues consists primarily of manufacturing materials, payroll and manufacturing-related overhead. Our manufacturing operations rely upon a limited number of suppliers to provide key components and materials for our products, some of which are sole source. We order materials and supplies based on backlog and forecasted customer orders. Tooling and setup costs related to changing manufacturing lots at our suppliers are also included in the cost of revenues. We expense all warranty costs and inventory reserves or write-offs as cost of revenues.

We design, manufacture and sell a fully custom product into a market that has been subject to cyclical and significant demand fluctuations. Wafer probe cards are complex products, custom to every specific chip design and have to be delivered on lead-times shorter than most manufacturers' cycle times. It is therefore common to start production and to acquire production materials ahead of the receipt of an actual purchase order. Wafer probe cards are manufactured in low volumes, therefore, material purchases are often subject to minimum purchase order quantities in excess of our actual demand. Inventory valuation adjustments for these factors are considered a normal component of cost of revenues.

Research and Development. Research and development expenses include expenses related to product development, engineering and material costs. All research and development costs are expensed as incurred. We plan to invest a significant amount in research and development activities to develop new technologies for current and new markets and new applications in the future. We expect research and development expenses to increase in absolute dollars, but to decline as a percentage of revenues.

Selling, General and Administrative. Selling, general and administrative expenses include expenses related to sales, marketing and administrative personnel, internal and outside sales representatives' commissions, market research and consulting, and other marketing and sales activities. We expect that selling expenses will increase as revenues increase, and we expect that general and administrative expenses will increase in absolute dollars to support future operations, as well as from the additional costs of being a publicly traded company. As revenues increase, we expect selling, general and administrative expenses to decline as a percentage of revenues.

Stock-Based Compensation. In connection with the grant of stock options to employees in fiscal 2001, fiscal 2002, and in fiscal 2003 through our initial public offering in June 2003, we recorded an aggregate of \$14.3 million in deferred stock-based compensation. These options are considered compensatory because the fair value of our stock determined for financial reporting purposes is greater than the fair value determined on the date of the grant. As of December 27, 2003, we had an aggregate of \$11.2 million of deferred stock-based compensation remaining to be amortized. This deferred stock-based compensation balance will be amortized as follows: \$2.4 million during fiscal 2004; \$4.0 million during fiscal 2005; \$3.7 million during fiscal 2006; and \$1.1 million during fiscal 2007. We are amortizing the deferred stock-based compensation on a straight-line basis over the vesting period of the related options, which is generally four years. For options granted to employees to date, the amount of stock-based compensation amortization to be recognized in future periods could decrease if options for which deferred but unvested compensation has been recorded are forfeited.

Provision for Income Taxes. As of December 27, 2003, we had state net operating loss carryforwards of approximately \$825,000. The state net operating loss carryforwards will expire at various dates from 2006 through 2013. We also had research and development tax credit carryforwards of approximately \$108,000 and \$1,126,000 for federal and state income tax purposes, respectively. The federal research and development tax credit carryforward will expire at various dates from 2021 through 2023. The state research credit can be carried forward indefinitely.

Under the Internal Revenue Code, as amended, and similar state provisions, certain substantial changes in our ownership could result in an annual limitation on the amount of net operating loss and credit carryforwards that can be utilized in future years to offset future taxable income. Annual limitations may result in the expiration of net operating loss and credit carryforwards before they are used.

[Table of Contents](#)

In the third quarter of fiscal 2002, we released our valuation allowance recorded against our deferred tax assets because we believe that it is more likely than not that our deferred tax assets will be realized.

Use of Estimates. Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amount of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to uncollectible receivables, inventories, investments, intangible assets, income taxes, financing operations, warranty obligations, excess component and order cancellation costs, restructuring, and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. For excess component costs, the estimates are dependent on our expected use of such components and the size of the minimum order quantity imposed by the vendor in relation to our inventory requirements. Because this can vary in each situation, actual results may differ from these estimates under different assumptions or conditions.

Critical Accounting Policies and Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires us to make judgments, assumptions and estimates that affect the amounts reported. Note 2 of Notes to Consolidated Financial Statements describes the significant accounting policies used in the preparation of our consolidated financial statements. Certain of these significant accounting policies are considered to be critical accounting policies, as defined below.

A critical accounting policy is defined as a policy that is both material to the presentation of our consolidated financial statements and requires management to apply judgments that could have a material effect on our financial condition and results of operations.

Estimates and assumptions about future events and their effects cannot be determined with certainty. We base our estimates on historical experience and on various other assumptions believed to be applicable and reasonable under the circumstances. These estimates may change as new events occur, as additional information is obtained and as our operating environment changes. These changes have historically been minor and have been included in the consolidated financial statements as soon as they became known. In addition, we are periodically faced with uncertainties, the outcomes of which are not within our control and will not be known for prolonged periods of time. These uncertainties are discussed in the section below entitled "Trends, Risks and Uncertainties." Based on a critical assessment of our accounting policies and the underlying judgments and uncertainties affecting the application of those policies, we believe that our consolidated financial statements are fairly stated in accordance with accounting principles generally accepted in the United States of America, and provide a meaningful presentation of our financial condition and results of operations.

We believe that the following are critical accounting policies:

Revenue Recognition. We recognize revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, "Revenue Recognition in Financial Statements," which supersedes SAB 101. SAB 104 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the fee is fixed or determinable; and (4) collectibility is reasonably assured. Determination of criteria (2) and (4) are based on management's judgments regarding the fixed nature of the fee charged for services rendered and products delivered and the collectibility of those fees. Should changes in conditions cause management to determine these criteria are not met for certain future transactions, revenue recognized for any reporting period could be adversely affected.

[Table of Contents](#)

Revenues from product sales to customers other than distributors are recognized upon shipment and reserves are provided for estimated allowances. We defer recognition of revenues on sales to distributors until the distributor confirms an order from its customer. Revenues from licensing of our design and manufacturing technology, which have been insignificant to date, are recognized over the term of the license agreement or when the significant contractual obligations have been fulfilled.

Warranty Reserve. We provide for the estimated cost of product warranties at the time revenue is recognized. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. We continuously monitor product returns for warranty and maintain a reserve for the related expenses based upon our historical experience and any specifically identified field failures. As we sell new products to our customers, we must exercise considerable judgment in estimating the expected failure rates. This estimating process is based on historical experience of similar products as well as various other assumptions that we believe to be reasonable under the circumstances. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required.

From time to time, we may be subject to additional costs related to warranty claims from our customers. If and when this occurs, we generally make significant judgments and estimates in establishing the related warranty liability. This estimating process is based on historical experience, communication with our customers, and various assumptions that we believe to be reasonable under the circumstances. This additional warranty would be recorded in the determination of net income in the period in which the additional cost was identified.

Inventory Reserve. We state our inventories at the lower of cost, computed on a first in, first out basis, or market. We record inventory reserve for estimated obsolescence or unmarketable inventories equal to the difference between the cost of inventories and the estimated market value based upon assumptions about future demand and market conditions. If actual market conditions are less favorable than those projected by management, additional inventory reserve may be required.

Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed of. We account for the impairment of long-lived assets in accordance with Statement of Financial Accounting Standard, or SFAS, No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". We evaluate the carrying value of our long-lived assets whenever certain events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Such events or circumstances include, but are not limited to, a prolonged industry downturn, a significant decline in our market value or significant reductions in projected future cash flows.

Significant judgments and assumptions are required in the forecast of future operating results used in the preparation of the estimated future cash flows, including profit margins, long-term forecasts of the amounts and timing of overall market growth and our percentage of that market, groupings of assets, discount rates and terminal growth rates. In addition, significant estimates and assumptions are required in the determination of the fair value of our tangible long-lived assets, including replacement cost, economic obsolescence, and the value that could be realized in orderly liquidation. Changes in these estimates could have a material adverse effect on the assessment of our long-lived assets, thereby requiring us to write down the assets. Our net long-lived assets as of December 27, 2003 and December 28, 2002, included property and equipment of \$20.5 million and \$16.5 million, respectively.

Accounting for Income Taxes. We account for income taxes under the provisions of SFAS No. 109, "Accounting for Income Taxes." Under this method, we determine deferred tax assets and liabilities based upon the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. The tax consequences of most events recognized in the current year's financial statements are included in determining income taxes currently payable. However, because tax laws and financial accounting standards differ in their recognition and measurement of assets, liabilities, equity, revenue, expenses, gains and losses, differences arise between the amount of taxable income and pretax financial income for a year and between the tax bases of

[Table of Contents](#)

assets or liabilities and their reported amounts in the financial statements. Because it is assumed that the reported amounts of assets and liabilities will be recovered and settled, respectively, a difference between the tax basis of an asset or a liability and its reported amount in the balance sheet will result in a taxable or a deductible amount in some future years when the related liabilities are settled or the reported amounts of the assets are recovered, hence giving rise to a deferred tax asset. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent we believe that recovery is not likely, we must establish a valuation allowance.

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes. This process involves estimating our actual current tax exposure together with assessing temporary differences that may result in deferred tax assets. Management judgment is required in determining any valuation allowance recorded against our net deferred tax assets. Any such valuation allowance would be based on our estimates of taxable income and the period over which our deferred tax assets would be recoverable. While management has considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, if we were to determine that an increase in our valuation allowance in the future is necessary, an adjustment to the deferred tax asset would result in additional income tax expense in such period.

As of December 29, 2001, we had recorded a full valuation allowance of \$9.1 million against our deferred tax assets, due to uncertainties related to our ability to utilize our deferred tax assets, primarily consisting of certain net operating losses carried forward, before they expire. In fiscal 2002, we released our valuation allowance because, based upon our recurring level of profitability, we believe that it is more likely than not that we will be able to utilize our deferred tax assets before they expire. In fiscal 2003, given our increasing levels of profitability, we continue to believe that it is more likely than not that we will be able to utilize our deferred tax assets before they expire.

Results of Operations

The following table presents our historical operating results for the periods indicated as a percentage of revenues:

	Fiscal Year Ended		
	Dec. 29, 2001	Dec. 28, 2002	Dec. 27, 2003
Revenues	100.0%	100.0%	100.0%
Cost of revenues	52.3	50.1	50.8
Gross margin	47.7	49.9	49.2
Operating expenses:			
Research and development	19.9	18.6	15.8
Selling, general and administrative	25.2	21.6	19.4
Stock-based compensation	0.6	1.3	1.5
Restructuring charges	1.9	—	—
Total operating expenses	47.6	41.5	36.7
Operating income	0.1	8.4	12.5
Interest and other income, net	0.6	0.8	1.6
Income before income taxes	0.7	9.2	14.1
Benefit (provision) for income taxes	(0.4)	4.0	(5.4)
Net income	0.3%	13.2%	8.7%

Fiscal Years Ended December 27, 2003 and December 28, 2002

Revenues. Revenues for fiscal 2003 were \$98.3 million compared with \$78.7 million, an increase of \$19.6 million, or 24.9%. The \$19.6 million increase was due primarily to an increase of \$5.5 million in revenues from DRAM manufacturers, an increase of \$8.9 million from manufacturers of flash memory devices, an increase of \$5.1 million in revenues from a manufacturer of chipsets and an increase of \$200,000 in other revenues.

The majority of revenues for fiscal 2003 were generated by sales of wafer probe cards to manufacturers of DRAM devices. Sales of wafer probe cards to test DRAM devices accounted for \$60.3 million, or 61.3% of revenues for fiscal 2003 compared to \$54.8 million, or 69.6% of revenues, for fiscal 2002. The increase in revenues from DRAM manufacturers was driven primarily by an increased demand from the continued transitioning of DRAM manufacturers to higher device density, new advanced technology nodes, to 300 mm wafer size and new architectures, like DDR II.

Continued business momentum, increased design and customer wins at manufacturers of flash memory devices increased our revenues in the market segment for fiscal 2003 compared to fiscal 2002. Revenues generated from sales to flash memory device manufacturers for fiscal 2003 were \$18.1 million compared with \$9.2 million for fiscal 2002, an increase of 97%.

Revenues from manufacturers of microprocessor and other flip chip devices increased to \$18.8 million for fiscal 2003 from \$13.7 million for fiscal 2002. Revenues for fiscal 2003 benefited from new product introductions, such as our 175 μ pitch MicroSpring contact technology and MicroForce probing technology solutions for flip chip logic applications introduced in the second quarter of 2003 with production shipments occurring in the third quarter of 2003. The significant customer concentration for these products will continue to drive quarter to quarter cyclicity from these tooling cycles.

Revenues by geographic region for fiscal 2003 as a percentage of revenues were 50.1% in North America, 10.3% in Europe, 20.1% in Japan and 19.5% in Asia Pacific. Revenues by geographic region for fiscal 2002 as a percentage of revenues were 55.6% in North America, 15.5% in Europe, 21.8% in Asia Pacific and 7.1% in Japan. The increase in the percentage of revenues in Japan was primarily due to increased sales to a manufacturer of DRAM devices.

The following customers accounted for more than 10% of our revenues for fiscal 2003 or fiscal 2002:

	Fiscal 2003	Fiscal 2002
Intel Corporation	30.1%	26.9%
Spirox Corporation	13.4%	20.9%
Elpida	12.4%	*
Infineon Technologies AG	10.3%	20.1%

* Less than 10% of revenues.

Gross Margin. Gross margin as a percentage of revenues was 49.2% for fiscal 2003 compared with 49.9% for fiscal 2002. The decrease in gross margin percentage was primarily due to increased fixed costs and a change in product mix. We increased our manufacturing fixed costs in response to a continued positive demand for our products and continued design wins. This investment, primarily in headcount, has been essential to convert our operations to a 7 day, 24 hour manufacturing shift structure, which began in the second quarter of 2003 and completed in the third quarter of 2003. This structure further increased our capacity and supports the first steps in establishing the required staffing levels to transfer our manufacturing processes into our new production facility in 2004.

Gross margin performance will be impacted in 2004 as we begin to incur non-recurring expenses related to the bring-up of our new production facility, as well as we invest in further capacity increases in our existing production site.

[Table of Contents](#)

Research and Development. Research and development expenses increased to \$15.6 million, or 15.8% of revenues, for fiscal 2003 compared to \$14.6 million, or 18.6% of revenues, for fiscal 2002. The increase in absolute dollars is mainly due to increased personnel costs associated with an increase of product development activities in fiscal 2003. During fiscal 2003, we continued our development of next generation parallelism product, fine pitch memory and logic products, advanced MicroSpring interconnect technology and higher speed wafer probe. We introduced our new S200 technology, which is a high parallelism, high frequency probe card for fully tested memory die, and also our new wafer-level burn-in technology for certain DRAM device applications.

Selling, General and Administrative. Selling, general and administrative expenses were \$19.0 million for fiscal 2003, or 19.4% of revenues, compared to \$17.0 million, or 21.6% of revenues, for fiscal 2002. The increase in absolute dollars was mainly due to increased personnel costs, higher sales and marketing spending, in line with higher revenues and new product introductions, and costs associated with being a public company.

Interest and Other Income (Expense), Net. Interest and other income (expense), net was \$1.6 million for fiscal 2003 compared with \$642,000 for fiscal 2002. We generated greater interest income in 2003 resulting from a larger cash, cash equivalents and marketable securities balance throughout the second half of fiscal 2003 as a result of our initial public offering in June of 2003 and our follow-on offering in November of 2003. In addition, the increased business in Japan combined with the weaker dollar generated foreign currency gains of \$758,000 in fiscal 2003 compared to foreign currency gains of \$22,000 in fiscal 2002.

Benefit (Provision) for Income Taxes. Provision for income taxes was \$5.3 million for fiscal 2003 compared to a benefit of \$3.1 million for fiscal 2002. The \$3.1 million benefit for fiscal 2002 resulted from the release of the valuation allowance against our deferred tax assets in the amount of \$5.9 million. The effective tax rate for fiscal 2003 was 38%. Our future effective income tax rate depends on various factors, such as pending tax law changes including but not limited to the tax benefit from export sales and research and development credits and the geographic composition of our pre-tax income.

Fiscal Years Ended December 28, 2002 and December 29, 2001

Revenues. Revenues were \$78.7 million for fiscal 2002 compared with \$73.4 million for fiscal 2001, an increase of 7.2%. The \$5.3 million increase was due primarily to an increase of \$3.7 million in revenues from manufacturers of flash memory devices and an increase of \$3.5 million in revenues from a manufacturer of chipsets, offset in part by a reduction of \$1.6 million in revenues from DRAM manufacturers.

In fiscal 2001, we introduced our wafer probe cards to manufacturers of flash memory devices. The design wins and penetration at these customers, combined with increased demand for dense flash devices, generated the increased flash memory device related revenues in fiscal 2002.

The industry trend of faster and smaller devices resulting in increased power handling requirements has caused large scale integrated logic devices to migrate from wirebond-based package technologies to flip chip packaging. Our capabilities in flip chip microprocessor wafer probe cards enabled us to qualify and sell our wafer probe cards for chipset device probing applications, such as memory controller integrated circuits, in fiscal 2002. We generated minimal revenue from sales to chipset device manufacturers in fiscal 2001.

Consistent with fiscal 2001, the majority of fiscal 2002 revenues were generated by sales of wafer probe cards to manufacturers of DRAM devices. The decrease in revenues from DRAM manufacturers in fiscal 2002 was due primarily to reduced design activity and weaker bit growth. In addition, sales of Rambus DRAM, or RDRAM, wafer probe cards declined in fiscal 2002 compared to fiscal 2001. During the first two quarters of fiscal 2001, parts of the semiconductor industry adopted RDRAM architecture-based memory devices for higher speed applications. This adoption drove increased design activity and demand for wafer probe cards. During the second half of fiscal 2001, demand for Rambus-based chipsets and RDRAM devices decreased, a trend that persisted through fiscal 2002. This resulted in declining overall sales due to a significant decline in demand for RDRAM wafer probe cards. For fiscal 2002, our sales of RDRAM wafer probe cards decreased by \$8.7 million compared to fiscal 2001 while sales of other DRAM wafer probe cards increased by \$7.1 million. The increase in our other DRAM wafer probe card revenues was primarily the result of increased

[Table of Contents](#)

sales of our DRAM large area array wafer probe cards and the industry's conversion to DDR based DRAM devices in the second half of fiscal 2002.

Revenues by geographic region for fiscal 2002 as a percentage of total revenues were 55.6% in North America, 15.5% in Europe, 21.8% in Asia Pacific and 7.1% in Japan. Revenues by geographical region for fiscal 2001 as a percentage of total revenues were 52.7% in North America, 13.8% in Europe, 26.6% in Asia Pacific and 6.9% in Japan. The increase in the percentage of revenues in North America was due primarily to increased sales to a manufacturer of flash memory and chipset devices. The decrease in percentage of revenues in Asia Pacific was due primarily to decreased sales to our distributor of DRAM wafer probe cards.

The following customers accounted for 10% or more of our revenues in fiscal 2001 or fiscal 2002:

	Fiscal 2001	Fiscal 2002
Intel Corporation	12.4%	26.9%
Spirox Corporation	26.4	20.9
Infineon Technologies AG	16.1	20.1
Samsung Electronics Industries Co., Ltd	20.2	*

* Less than 10% of revenues.

The increase in revenues from certain of these customers for fiscal 2002 resulted from increased sales of microprocessor and flash memory wafer probe cards to one of these customers and increased sales of large area array DRAM devices to another one of these customers. In fiscal 2002, sales to certain customers were negatively impacted by an overall decreased demand for DRAM wafer probe cards.

Gross Margin. Gross margin as a percentage of revenues was 49.9% for fiscal 2002 compared with 47.7% for fiscal 2001. The increase in gross margin percentage was primarily due to cost reduction actions associated with our restructuring in the third quarter of fiscal 2001, continued reductions in the cost of materials, and shipments of high complexity products incorporating newer technology. These benefits were partially offset by a generally less favorable pricing environment due to the overall decline in demand. We also experienced an increase in warranty expenses caused primarily by an increase in field failures at one of our customers. Gross margin in absolute dollars and as a percentage of revenues will be subject to fluctuations as we continue to introduce new technologies into our manufacturing processes and to experience cyclicity in our end markets.

Research and Development. Research and development expenses remained flat at \$14.6 million, equivalent to 18.6% of revenues for fiscal 2002 compared to 19.9% of revenues for fiscal 2001. Personnel costs for fiscal 2002 increased by approximately \$230,000 from fiscal 2001 and were partially offset by a reduction of approximately \$175,000 for development program materials and related costs. During the first half of fiscal 2001, we completed the development of our MicroSpring Contact on Silicon Technology, or MOST technology. During the second half of fiscal 2001, we reduced spending while focusing our research and development efforts on developing wafer probe card products. Through fiscal 2002, we continued our development of new large area array memory products and fine pitch logic products.

Selling, General and Administrative. Selling, general and administrative expenses decreased to \$17.0 million, or 21.6% of revenues, for fiscal 2002 compared to \$18.5 million, or 25.2% of revenues, for fiscal 2001. The decrease was due primarily to a reduction of approximately \$611,000 in personnel and recruiting costs and a reduction of approximately \$752,000 in advertising, tradeshow and travel related expenses resulting from cost reduction actions taken in the second half of fiscal 2001.

Restructuring Charges. During the third quarter of fiscal 2001, we recorded a restructuring charge of \$1.4 million. We implemented the restructuring plan to better align our infrastructure with the market conditions in the semiconductor industry and to further focus the company on the wafer probe card business. The restructuring charge consisted of \$880,000 for headcount reductions covering 14 employees in research and development, 23 employees in operations and 17 employees in selling, general and administrative. The majority of the affected employees were based in Livermore, California. Further, we recorded charges of

[Table of Contents](#)

\$223,000 for the consolidation of excess facilities and \$277,000 for asset write-offs, primarily for property and equipment. The consolidation of excess facilities included the closure of certain corporate facilities that had been vacated. The charge of \$223,000 primarily related to lease termination and noncancelable lease costs. The charge of \$277,000 primarily related to the disposal of property and equipment, which primarily consisted of leasehold improvements for the excess facilities. As of December 28, 2002, the restructuring plan had been fully executed.

Interest and Other Income, Net. Interest and other income, net for fiscal 2002 was \$642,000 compared to \$477,000 for fiscal 2001, reflecting lower currency losses from the revaluation and translation of certain receivables and assets denominated in foreign currencies.

Benefit (Provision) for Income Taxes. We recorded a benefit for income taxes for fiscal 2002 of \$3.1 million compared to the provision of \$307,000 for fiscal 2001. The benefit resulted from the release of the valuation allowance recorded against deferred tax assets, partially offset by the provision for income taxes on pre-tax profits. The valuation allowance was released because we believe that it is more likely than not that the deferred tax assets will be realized.

Liquidity and Capital Resources

As of December 27, 2003, we had \$181.8 million in cash, cash equivalents, marketable securities and restricted cash, compared with \$37.2 million as of December 28, 2002. On June 17, 2003, we completed our initial public offering in which we sold 5,605,305 shares of our common stock and we subsequently sold an additional 900,000 shares pursuant to the exercise of the underwriters' over-allotment option. These sales resulted in net proceeds of approximately \$82.0 million. On November 10, 2003 we completed our follow-on public offering in which we sold 2,249,866 shares of our common stock, including 750,000 shares sold pursuant to the underwriters' over-allotment option. We received net proceeds of approximately \$55.9 million.

Net cash provided by operating activities was \$13.0 million for fiscal 2003 compared with net cash provided by operating activities of \$12.9 million for fiscal 2002 and \$10.3 million for fiscal 2001. The increase in net cash provided by operations in fiscal 2003 compared to fiscal 2002 and 2001 resulted primarily from an increase in net income for fiscal 2003, when adjusted for any non-cash items, offset by increases in working capital in fiscal 2003 compared to fiscal 2002 and 2001.

Significant non-cash adjustments that impacted net income for fiscal 2002 were the release of the valuation allowance against our deferred tax assets and inventory write-offs. Working capital increases in fiscal 2003 resulted primarily from increases in accounts receivables and inventories, partially offset by increases in accounts payable and accrued liabilities.

Accounts receivable increased by \$7.5 million for fiscal 2003 due to an increase in worldwide revenues, particularly to customers in Japan, which typically have longer payment terms. Revenues to Japanese customers increased from \$5.6 million in fiscal 2002 to \$19.7 million in fiscal 2003. Accounts receivable remained flat for fiscal 2002, compared to a decline of \$501,000 for fiscal 2001.

The \$5.8 million increase in inventories for fiscal 2003 reflected an increase in raw materials and work-in-process to support revenue growth. Accounts payable increased as a result of the increased inventory purchases to support the revenue growth. Inventories increased in fiscal 2002 and 2001 to meet the expected demand for our products.

Accrued liabilities increased by \$2.4 million for fiscal 2003 due primarily to the increase in accrued income taxes and accrued incentive compensation. Accrued liabilities increased from \$5.8 million in fiscal 2001 to \$7.7 million in fiscal 2002. The increase was due to the increase in accrued incentive compensation as part of our shift to more variable compensation as well as an increase in warranty costs reflecting higher revenue levels.

Net cash used by investing activities was \$64.1 million for fiscal 2003, compared to \$7.5 million used by investing activities for fiscal 2002. Net cash used by investing activities was \$11.6 million for fiscal 2001. Net cash used by investing activities resulted primarily from the net purchase of marketable securities and capital

[Table of Contents](#)

expenditures in each of these periods. Capital expenditures were \$9.1 million for fiscal 2003, \$4.2 million for fiscal 2002 and \$9.4 million for fiscal 2001. We invested in the expansion of manufacturing facilities as well as in leasehold improvements to our new headquarters and manufacturing facility.

Net cash provided by financing activities was \$140.6 million for fiscal 2003 compared with net cash provided by financing activities of \$863,000 for fiscal 2002. Net cash provided by financing activities was \$10.0 million for fiscal 2001. In June 2003, we completed our initial public offering in which we sold 6,505,305 of our common stock. The sale of shares of common stock by us, including the sale of 900,000 shares pursuant to the exercise of the over-allotment option by the underwriters resulted in aggregate gross proceeds of approximately \$91.1 million, approximately \$6.4 million of which we applied to underwriting discounts and approximately \$2.7 million of which we applied to related costs. As a result, we received approximately \$82.0 million of the offering proceeds. On November 10, 2003 we completed our follow-on public offering in which we sold 2,249,866 shares of our common stock, including an over-allotment of 750,000 shares of our common stock. We received approximately \$55.9 million of the offering proceeds. Net cash provided by financing activities was primarily due to the issuance of common stock in fiscal 2002 and to the sale of our redeemable convertible preferred stock in fiscal 2001, partially offset by debt repayments in each of these periods.

In May 2001, we signed a ten-year lease for an additional 119,000 square feet of manufacturing, research and development and office space. The total rent obligation over the term of the lease is \$21.8 million and is accounted for as an operating lease. We expect to invest approximately \$25.0 million in leasehold improvements for our new headquarters and manufacturing facility through 2004. Of this amount, approximately \$18.0 million relates to the design and construction of a new manufacturing facility, while the remaining amount relates to the build out and infrastructure of research and development and office space.

In February 2003, we entered into an amended and restated loan and security agreement with Comerica Bank. Our loan and security agreement provided a revolving line of credit of up to \$16.0 million. In April 2003, we borrowed funds under the revolving line of credit to pay down the outstanding amounts under the expiring equipment line of credit and term loan under our prior agreement with Comerica. We repaid the outstanding amounts under the line of credit in September 2003 and the amended and restated loan and security agreement with Comerica Bank was terminated in December 2003. We have no debt obligations that have not been recorded in our consolidated financial statements.

The following table describes our commitments to settle contractual obligations in cash as of December 27, 2003.

	Payments Due by Fiscal Year				Total
	2004	2005-2006	2007-2008	After 2008	
Operating leases	\$3,419	\$ 5,056	(In thousands) \$ 5,232	\$11,160	\$24,867

On January 20, 2004, we announced our fiscal 2003 annual results. Subsequently, we have concluded that all of our available-for-sale securities, regardless of their contractual maturities, should be classified as current assets because our policy is to consider all marketable securities as available for use in the current operating cycle.

As a result we have reclassified \$48.8 million of our marketable securities to current assets within our balance sheet. The above reclassification had no impact on our total assets, total liabilities, or stockholders' equity as of December 27, 2003 or on our net income for fiscal 2003 as previously announced.

We believe our existing cash balance, cash equivalents and marketable securities will be sufficient to meet our anticipated cash needs for at least the next 12 months. Our future capital requirements will depend on many factors, including our rate of revenue growth, the timing and extent of spending to support product development efforts, the expansion of sales and marketing activities, the timing of introductions of new products and enhancement to existing products, the costs to ensure access to adequate manufacturing capacity, and the continuing market acceptance of our products. Although we are currently not a party to any

[Table of Contents](#)

agreement or letter of intent with respect to potential investments in, or acquisitions of, complementary businesses, products or technologies, we may enter into these types of arrangements in the future, which could also require us to seek additional equity or debt financing. Additional funds may not be available on terms favorable to us or at all.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, or SPEs, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of December 27, 2003, we are not involved in any unconsolidated SPE transactions.

Recent Accounting Pronouncements

In December 2003, the Financial Accounting Standards Board, or FASB, issued a revised FASB Interpretation No. 46, or FIN 46R, "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." The FASB published the revision to clarify and amend some of the original provisions of FIN 46, which was issued in January 2003, and to exempt certain entities from its requirements. A variable interest entity, or (VIE) refers to an entity subject to consolidation according to the provisions of this Interpretation. FIN 46R applies to entities whose equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support provided by any parties, including equity holders, or where the equity investors (if any) do not have a controlling financial interest. FIN 46R provides that if an entity is the primary beneficiary of a VIE, the assets, liabilities, and results of operations of the VIE should be consolidated in the entity's financial statements. In addition, FIN 46R requires that both the primary beneficiary and all other enterprises with a significant variable interest in a VIE provide additional disclosures. The provisions of FIN 46R are effective for the Company's fiscal 2004 first quarter. We do not expect the adoption of FIN46R to have a material impact on our financial position or on our results of operations.

Trends, Risks and Uncertainties

You should carefully consider the following risk factors, as well as the other information in this Annual Report on Form 10-K, in evaluating FormFactor and our business. If any of the following risks actually occur, our business, financial condition and results of operations would suffer. Accordingly, the trading price of our common stock would likely decline and you may lose all or part of your investment in our common stock. The risks and uncertainties described below are not the only ones we face. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business operations.

Our operating results are likely to fluctuate, which could cause us to miss expectations about these results and cause the trading price of our common stock to decline.

Our operating results are likely to fluctuate. Some of the important factors that could cause our revenues and operating results to fluctuate from period-to-period include:

- customer demand for our products;
- our ability to deliver reliable, cost-effective products in a timely manner;
- the reduction, rescheduling or cancellation of orders by our customers;
- the timing and success of new product introductions and new technologies by our competitors and us;
- our product and customer sales mix and geographical sales mix;
- changes in the level of our operating expenses needed to support our anticipated growth;
- a reduction in the price or the profitability of our products;
- changes in our production capacity or the availability or the cost of components and materials;

[Table of Contents](#)

- our ability to bring new products into volume production efficiently;
- the timing of and return on our investments in research and development;
- our ability to collect accounts receivable;
- seasonality, principally due to our customers' purchasing cycles; and
- market conditions in our industry, the semiconductor industry and the economy as a whole.

The occurrence of one or more of these factors might cause our operating results to vary widely. As a result, we believe that you should not rely on period-to-period comparisons of our financial results as an indication of our future performance. If our revenues or operating results fall below the expectations of market analysts or investors, the market price of our common stock could decline substantially.

Cyclicality in the semiconductor industry historically has affected our sales and might do so in the future, and as a result we could experience reduced revenues or operating results.

The semiconductor industry has historically been cyclical and is characterized by wide fluctuations in product supply and demand. From time to time, this industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product and technology cycles, excess inventories and declines in general economic conditions. This cyclicality could cause our operating results to decline dramatically from one period to the next. For example, our revenues in the three months ended September 29, 2001 declined by 25.5% compared to our revenues in the three months ended June 30, 2001, and our revenues in the three months ended March 29, 2003 declined by 15.7% compared to our revenues in the three months ended December 28, 2002. Our business depends heavily upon the development of new semiconductors and semiconductor designs, the volume of production by semiconductor manufacturers and the overall financial strength of our customers, which, in turn, depend upon the current and anticipated market demand for semiconductors and products, such as personal computers, that use semiconductors. Semiconductor manufacturers generally sharply curtail their spending during industry downturns and historically have lowered their spending disproportionately more than the decline in their revenues. As a result, if we are unable to adjust our levels of manufacturing and human resources or manage our costs and deliveries from suppliers in response to lower spending by semiconductor manufacturers, our gross margin might decline and cause us to experience operating losses.

If we do not keep pace with technological developments in the semiconductor industry, our products might not be competitive and our revenues and operating results could suffer.

We must continue to invest in research and development to improve our competitive position and to meet the needs of our customers. Our future growth depends, in significant part, upon our ability to work effectively with and anticipate the testing needs of our customers, and on our ability to develop and support new products and product enhancements to meet these needs on a timely and cost-effective basis. Our customers' testing needs are becoming more challenging as the semiconductor industry continues to experience rapid technological change driven by the demand for complex circuits that are shrinking in size and at the same time are increasing in speed and functionality and becoming less expensive to produce. Examples of recent trends driving demand for technological research and development include semiconductor manufacturers' transitions to 110 nanometer and 90 nanometer technology nodes, to 512 megabit density devices and to Double Date Rate II, or DDR II, architecture devices. Our customers expect that they will be able to integrate our wafer probe cards into any manufacturing process as soon as it is deployed. Therefore, to meet these expectations and remain competitive, we must continually design, develop and introduce on a timely basis new products and product enhancements with improved features. Successful product design, development and introduction on a timely basis require that we:

- design innovative and performance-enhancing features that differentiate our products from those of our competitors;
- transition our products to new manufacturing technologies;

[Table of Contents](#)

- identify emerging technological trends in our target markets;
- maintain effective marketing strategies;
- respond effectively to technological changes or product announcements by others; and
- adjust to changing market conditions quickly and cost-effectively.

We must devote significant research and development resources to keep up with the rapidly evolving technologies used in semiconductor manufacturing processes. Not only do we need the technical expertise to implement the changes necessary to keep our technologies current, but we must also rely heavily on the judgment of our management to anticipate future market trends. If we are unable to timely predict industry changes, or if we are unable to modify our products on a timely basis, we might lose customers or market share. In addition, we might not be able to recover our research and development expenditures, which could harm our operating results.

If semiconductor memory device manufacturers do not convert to 300 mm wafers, our growth could be impeded.

The growth of our business for the foreseeable future depends in large part upon sales of our wafer probe cards to manufacturers of dynamic random access memory, or DRAM, and flash memory devices. The recent downturn in the semiconductor industry caused various chip manufacturers to readdress their respective strategies for converting existing 200 mm wafer fabrication facilities to 300 mm wafer fabrication, or for building new 300 mm wafer fabrication facilities. Some manufacturers have delayed, cancelled or postponed previously announced plans to convert to 300 mm wafer fabrication. We believe that the decision to convert to a 300 mm wafer fabrication facility is made by each manufacturer based upon both internal and external factors, such as:

- current and projected chip prices;
- projected price erosion for the manufacturer's particular chips;
- supply and demand issues;
- overall manufacturing capability within the manufacturer's target market(s);
- the availability of funds to the manufacturer;
- the technology roadmap of the manufacturer; and
- the price and availability of equipment needed within the 300 mm facility.

One or more of these internal and external factors, as well as other factors, including factors that a manufacturer may choose to not publicly disclose, can impact the decision to maintain a 300 mm conversion schedule, to delay the conversion schedule for a period of time, or to cancel the conversion. It is also possible that the conversion to 300 mm wafers will occur on different schedules for DRAM chip manufacturers and flash memory chip manufacturers. We have invested significant resources to develop technology that addresses the market for 300 mm wafers. If manufacturers of memory devices delay or discontinue the transition to 300 mm wafers, or make the transition more slowly than we currently expect, our growth and profitability could be impeded. In addition, any delay in large-scale adoption of manufacturing based upon 300 mm wafers would provide time for other companies to develop and market products that compete with ours, which could harm our competitive position.

We are subject to general economic and market conditions.

Our business is subject to the effects of general economic conditions in the United States and worldwide, and to market conditions in the semiconductor industry in particular. For example, in fiscal 2001, our operating results were adversely affected by unfavorable global economic conditions and reduced capital spending by semiconductor manufacturers. These adverse conditions resulted in a decrease in the demand for semiconductors and products using semiconductors, and in a sharp reduction in the development of new

[Table of Contents](#)

semiconductors and semiconductor designs. As a result, we experienced a decrease in the demand for our wafer probe cards. If the economic conditions in the United States and worldwide do not improve, or if they worsen from current levels, we could experience material negative effects on our business.

We depend upon the sale of our wafer probe cards for substantially all of our revenues, and a downturn in demand for our products could have a more disproportionate impact on our revenues than if we derived revenues from a more diversified product offering.

Historically, we have derived substantially all of our revenues from the sale of our wafer probe cards. We anticipate that sales of our wafer probe cards will represent a substantial majority of our revenues for the foreseeable future. Our business depends in large part upon continued demand in current markets for, and adoption in new markets of, current and future generations of our wafer probe cards. Large-scale market adoption depends upon our ability to increase customer awareness of the benefits of our wafer probe cards and to prove their reliability, ability to increase yields and cost effectiveness. We may be unable to sell our wafer probe cards to certain potential customers unless those customers change their device test strategies, change their wafer probe card and capital equipment buying strategies, or change or upgrade their existing test equipment. We might not be able to sustain or increase our revenues from sales of our wafer probe cards, particularly if conditions in the semiconductor market deteriorate or do not improve or if the market enters into another downturn in the future. Any decrease in revenues from sales of our wafer probe cards could harm our business more than it would if we offered a more diversified line of products.

If demand for our products in the memory device and flip chip logic markets declines or fails to grow as we anticipate, our revenues could decline.

We derive substantially all of our revenues from wafer probe cards that we sell to manufacturers of DRAM memory and flash memory devices and manufacturers of microprocessor, chipset and other logic devices. In the microprocessor, chipset and other logic device markets, our products are primarily used for devices employing flip chip packaging, which devices are commonly referred to as flip chip logic devices. In fiscal 2003, sales to manufacturers of DRAM devices accounted for 61.3% of our revenues, sales to manufacturers of flip chip logic devices accounted for 19.1% of our revenues, and sales to manufacturers of flash memory devices accounted for 18.4% of our revenues. For fiscal 2002, sales to manufacturers of DRAM devices accounted for 69.6% of our revenues, sales to manufacturers of flip chip logic devices accounted for 17.4% of our revenues, and sales to manufacturers of flash memory devices accounted for 11.7% of our revenues. Therefore, our success depends in part upon the continued acceptance of our products within these markets and our ability to continue to develop and introduce new products on a timely basis for these markets. For example, the market might not accept an increasingly high parallelism wafer test solution.

A substantial portion of these semiconductor devices is sold to manufacturers of personal computers and computer-related products. The personal computer market has historically been characterized by significant fluctuations in demand and continuous efforts to reduce costs, which in turn have affected the demand for and price of DRAM devices and microprocessors. The personal computer market might not grow in the future at historical rates or at all and design activity in the personal computer market might decrease, which could negatively affect our revenues and operating results.

The markets in which we participate are intensely competitive, and if we do not compete effectively, our operating results could be harmed.

The wafer probe card market is highly competitive. With the introduction of new technologies and market entrants, we expect competition to intensify in the future. In the past, increased competition has resulted in price reductions, reduced gross margins or loss of market share, and could do so in the future. Competitors might introduce new competitive products for the same markets that our products currently serve. These products may have better performance, lower prices and broader acceptance than our products. In addition, for products such as wafer probe cards, semiconductor manufacturers typically qualify more than one source, to avoid dependence on a single source of supply. As a result, our customers will likely purchase products from our competitors. Current and potential competitors include AMST Co., Ltd., Cascade

[Table of Contents](#)

Microtech, Inc., ESJ Corporation, Feinmetall GmbH, Japan Electronic Materials Corporation, Kulicke and Soffa Industries, Inc., Micronics Japan Co., Ltd., MicroProbe, Inc., NanoNexus Inc., Phicom Corporation, SCS Hightech, Inc., Tokyo Cathode Laboratory Co., Ltd. and Wentworth Laboratories, Inc., among others. Many of our current and potential competitors have greater name recognition, larger customer bases, more established customer relationships or greater financial, technical, manufacturing, marketing and other resources than we do. As a result, they might be able to respond more quickly to new or emerging technologies and changes in customer requirements, devote greater resources to the development, promotion, sale and support of their products, and reduce prices to increase market share. Some of our competitors also supply other types of test equipment, or offer both advanced wafer probe cards and needle probe cards. Those competitors that offer both advanced wafer probe cards and needle probe cards might have strong, existing relationships with our customers or with potential customers. Because we do not offer a needle probe card or other conventional technology wafer probe card for less advanced applications, it may be difficult for us to introduce our advanced wafer probe cards to these customers and potential customers for certain wafer test applications. It is possible that existing or new competitors, including test equipment manufacturers, may offer new technologies that reduce the value of our wafer probe cards.

We derive a substantial portion of our revenues from a small number of customers, and our revenues could decline significantly if any major customer cancels, reduces or delays a purchase of our products.

A relatively small number of customers has accounted for a significant portion of our revenues in any particular period. In fiscal 2003, four customers accounted for 66.2% of our revenues. In fiscal 2002, four customers accounted for 77.2% of our revenues. Our ten largest customers accounted for 93.5% of our revenues in fiscal 2003 and 97.4% of our revenues in fiscal 2002. We anticipate that sales of our products to a relatively small number of customers will continue to account for a significant portion of our revenues. The cancellation or deferral of even a small number of purchases of our products could cause our revenues to decline in any particular quarter. A number of factors could cause customers to cancel or defer orders, including manufacturing delays, interruptions to our customers' operations due to fire, natural disasters or other events or a downturn in the semiconductor industry. Our agreements with our customers do not contain minimum purchase commitments, and our customers could cease purchasing our products with short or no notice to us or fail to pay all or part of an invoice. In some situations, our customers might be able to cancel orders without a significant penalty. In addition, the continuing trend toward consolidation in the semiconductor industry, particularly among manufacturers of DRAMs, could reduce our customer base and lead to lost or delayed sales and reduced demand for our wafer probe cards. Industry consolidation also could result in pricing pressures as larger DRAM manufacturers could have sufficient bargaining power to demand reduced prices and favorable nonstandard terms. Additionally, certain customers may not want to rely entirely or substantially on a single wafer probe card supplier and, as a result, such customers could reduce their purchases of our wafer probe cards.

If our relationships with our customers and companies that manufacture semiconductor test equipment deteriorate, our product development activities could be harmed.

The success of our product development efforts depends upon our ability to anticipate market trends and to collaborate closely with our customers and with companies that manufacture semiconductor test equipment. Our relationships with these customers and companies provide us with access to valuable information regarding manufacturing and process technology trends in the semiconductor industry, which enables us to better plan our product development activities. These relationships also provide us with opportunities to understand the performance and functionality requirements of our customers, which improve our ability to customize our products to fulfill their needs. Our relationships with test equipment companies are important to us because test equipment companies can design our wafer probe cards into their equipment and provide us with the insight into their product plans that allows us to offer wafer probe cards for use with their products

[Table of Contents](#)

when they are introduced to the market. Our relationships with our customers and test equipment companies could deteriorate if they:

- become concerned about our ability to protect their intellectual property;
- develop their own solutions to address the need for testing improvement;
- regard us as a competitor;
- establish relationships with others in our industry; or
- attempt to restrict our ability to enter into relationships with their competitors.

Many of our customers and the test equipment companies we work with are large companies. The consequences of a deterioration in our relationship with any of these companies could be exacerbated due to the significant influence these companies can exert in our markets. If our current relationships with our customers and test equipment companies deteriorate, or if we are unable to develop similar collaborative relationships with important customers and test equipment companies in the future, our long-term ability to produce commercially successful products could be impaired.

Because we generally do not have a sufficient backlog of unfilled orders to meet our quarterly revenue targets, revenues in any quarter are substantially dependent upon customer orders received and fulfilled in that quarter.

Our revenues are difficult to forecast because we generally do not have a sufficient backlog of unfilled orders to meet our quarterly revenue targets at the beginning of a quarter. Rather, a majority of our revenues in any quarter depends upon customer orders for our wafer probe cards that we receive and fulfill in that quarter. Because our expense levels are based in part on our expectations as to future revenues and to a large extent are fixed in the short term, we might be unable to adjust spending in time to compensate for any unexpected shortfall in revenues. Accordingly, any significant shortfall of revenues in relation to our expectations could hurt our operating results.

We rely upon a distributor for a substantial portion of our revenues, and a disruption in our relationship with our distributor could have a negative impact on our revenues.

We rely on Spirox Corporation, our distributor in Taiwan, Singapore and China, for a substantial portion of our revenues. Sales to Spirox accounted for 13.4% of our revenues in fiscal 2003 and 20.9% of our revenues in fiscal 2002. Spirox also provides customer support. A reduction in the sales or service efforts or financial viability of our distributor, or deterioration in, or termination of, our relationship with our distributor could harm our revenues, our operating results and our ability to support our customers in the distributor's territory. In addition, establishing alternative sales channels in the region could consume substantial time and resources, decrease our revenues and increase our expenses.

If our relationships with our independent sales representatives change, our business could be harmed.

We currently rely on independent sales representatives to assist us in the sale of our products in various geographic regions. If we make the business decision to terminate or modify our relationships with one or more of our independent sales representatives, or if an independent sales representative decides to disengage from us, and we do not effectively and efficiently manage such a change, we could lose sales to existing customers and fail to obtain new customers.

If semiconductor manufacturers do not migrate elements of final test to wafer probe test, market acceptance of other applications of our technology could be delayed.

We intend to work with our customers to migrate elements of final test from the device level to the wafer level. This migration will involve a change in semiconductor test strategies from concentrating final test at the individual device level to increasing the amount of test at the wafer level. Semiconductor manufacturers typically take time to qualify new strategies that affect their testing operations. As a result, general acceptance

[Table of Contents](#)

of wafer-level final test might not occur in the near term or at all. In addition, semiconductor manufacturers might not accept and use wafer-level final test in a way that uses our technology. If the migration of elements of final test to wafer probe test does not grow as we anticipate, or if semiconductor manufacturers do not adopt our technology for their wafer probe test requirements, market acceptance of other applications for our technology could be delayed.

Changes in test strategies, equipment and processes could cause us to lose revenues.

The demand for wafer probe cards depends in large part upon the number of semiconductor designs and the overall semiconductor unit volume. The time it takes to test a wafer depends upon the number of devices being tested, the complexity of these devices, the test software program and the test equipment itself. As test programs become increasingly effective and test throughput increases, the number of wafer probe cards required to test a given volume of devices declines. Therefore, advances in the test process could cause us to lose sales.

If semiconductor manufacturers implement chip designs that include increased built-in self-test capabilities, or similar functions or methodologies that increase test throughput, it could negatively impact our sales or the migration of elements of final test to the wafer level. Additionally, if new chip designs or types of chips are implemented that require less, or even no, test using wafer probe cards, our revenues could be impacted. Further, if new chip designs are implemented which we are unable to test, or which we are unable to test efficiently and provide our customers with an acceptably low overall cost of test, our revenues could be negatively impacted.

We incur significant research and development expenses in conjunction with the introduction of new product platforms. Often, we time our product introductions to the introduction of new test equipment platforms. Because our customers require both test equipment and wafer probe cards, any delay or disruption of the introduction of new test equipment platforms would negatively affect our growth.

We manufacture all of our products at a single facility, and any disruption in the operations of that facility could adversely impact our business and operating results.

Our processes for manufacturing our wafer probe cards require sophisticated and costly equipment and a specially designed facility, including a semiconductor clean room. We manufacture all of our wafer probe cards at one facility located in Livermore, California. Any disruption in the operation of that facility, whether due to technical or labor difficulties, destruction or damage from fire or earthquake, infrastructure failures such as power or water shortage or any other reason, could interrupt our manufacturing operations, impair critical systems, disrupt communications with our customers and suppliers and cause us to write off inventory and to lose sales. In addition, if the recent energy crises in California that resulted in disruptions in power supply and increases in utility costs were to recur, we might experience power interruptions and shortages, which could disrupt our manufacturing operations. This could subject us to loss of revenues as well as significantly higher costs of energy. Further, current and potential customers might not purchase our products if they perceive our lack of an alternate manufacturing facility to be a risk to their continuing source of supply.

If we do not transition effectively to our new operations and manufacturing site, our manufacturing capacity will be negatively impacted.

We plan to move our manufacturing operations into a new facility in Livermore in 2004. The costs of starting up our new manufacturing facility, including capital costs such as equipment and fixed costs such as rent, will be substantial. We might not be able to shift from our current production facility to the new production facility efficiently or effectively. The transition will require us to have both our existing and new manufacturing facilities operational for several quarters, including into 2005. This will cause us to incur significant costs due to redundancy of infrastructure at both sites. Furthermore, the qualification of the new manufacturing facility will require us to use materials and build product and product components that will not be sold to our customers, causing higher than normal material spending. The transition might also lead to manufacturing interruptions, which could mean delayed deliveries or lost sales. Some or all of our customers

could require a full qualification of our new facility. Any qualification process could take longer than we anticipate. Any difficulties with the transition or with bringing the new manufacturing facility to full capacity and volume production could increase our costs, disrupt our production process and cause delays in product delivery and lost sales, which would harm our operating results.

If we are unable to manufacture our products efficiently, our operating results could suffer.

We must continuously modify our manufacturing processes in an effort to improve yields and product performance, lower our costs and reduce the time it takes us to design and produce our products. We will incur significant start-up costs associated with implementing new manufacturing technologies, methods and processes and purchasing new equipment, which could negatively impact our gross margin. We could experience manufacturing delays and inefficiencies as we refine new manufacturing technologies, methods and processes, implement them in volume production and qualify them with customers, which could cause our operating results to decline. The risk of encountering delays or difficulties increases as we manufacture more complex products. In addition, if demand for our products increases, we will need to expand our operations to manufacture sufficient quantities of products without increasing our production times or our unit costs. As a result of such expansion, we could be required to purchase new equipment, upgrade existing equipment, develop and implement new manufacturing processes and hire additional technical personnel. Further, new or expanded manufacturing facilities could be subject to qualification by our customers. In the past, we have experienced difficulties in expanding our operations to manufacture our products in volume on time and at acceptable cost. Any difficulties in expanding our manufacturing operations could cause product delivery delays and lost sales. If demand for our products decreases, we could have excess manufacturing capacity. The fixed costs associated with excess manufacturing capacity could cause our operating results to decline. If we are unable to achieve further manufacturing efficiencies and cost reductions, particularly if we are experiencing pricing pressures in the marketplace, our operating results could suffer.

If we are unable to continue to reduce the time it takes for us to design and produce a wafer probe card, our growth could be impeded.

Our customers continuously seek to reduce the time it takes them to introduce new products to market. The cyclical nature of the semiconductor industry, coupled with changing demands for semiconductor devices, requires our customers to be flexible and highly adaptable to changes in the volume and mix of products they must produce. Each of those changes requires a new design and each new design requires a new wafer probe card. For some existing semiconductor devices, the manufacturers' volume and mix of product requirements are such that we are unable to design, manufacture and ship products to meet such manufacturers' relatively short cycle time requirements. If we are unable to reduce the time it takes for us to design, manufacture and ship our products in response to the needs of our customers, our competitive position could be harmed. If we are unable to meet a customer's schedule for wafer probe cards for a particular design, our customer might purchase wafer probe cards from a competitor and we might lose sales.

We obtain some of the components and materials we use in our products from a single or sole source or a limited group of suppliers, and the partial or complete loss of one of these suppliers could cause production delays and a substantial loss of revenues.

We obtain some of the components and materials used in our products, such as printed circuit board assemblies, plating materials and ceramic substrates, from a single or sole source or a limited group of suppliers. Alternative sources are not currently available for sole source components and materials. Because we rely on purchase orders rather than long-term contracts with the majority of our suppliers, we cannot predict with certainty our ability to obtain components and materials in the longer term. A sole or limited source supplier could increase prices, which could lead to a decline in our gross margin. Our dependence upon sole or limited source suppliers exposes us to several other risks, including a potential inability to obtain an adequate supply of materials, late deliveries and poor component quality. Disruption or termination of the supply of components or materials could delay shipments of our products, damage our customer relationships and reduce our revenues. For example, if we were unable to obtain an adequate supply of a component or

[Table of Contents](#)

material, we might have to use a substitute component or material, which could require us to make changes in our manufacturing process. From time to time in the past, we have experienced difficulties in receiving shipments from one or more of our suppliers, especially during periods of high demand for our products. If we cannot obtain an adequate supply of the components and materials we require, or do not receive them in a timely manner, we might be required to identify new suppliers. We might not be able to identify new suppliers on a timely basis or at all. Our customers and we would also need to qualify any new suppliers. The lead-time required to identify and qualify new suppliers could affect our ability to timely ship our products and cause our operating results to suffer. Further, a sole or limited source supplier could require us to enter into non-cancelable purchase commitments or pay in advance to ensure our source of supply. In an industry downturn, commitments of this type could result in charges for excess inventory of parts. If we are unable to predict our component and materials needs accurately, or if our supply is disrupted, we might miss market opportunities by not being able to meet the demand for our products.

Wafer probe cards that do not meet specifications or that contain defects could damage our reputation, decrease market acceptance of our technology, cause us to lose customers and revenues, and result in liability to us.

The complexity and ongoing development of our wafer probe card manufacturing process, combined with increases in wafer probe card production volumes, have in the past and could in the future lead to design or manufacturing problems. For example, the presence of contaminants in our plating baths has caused a decrease in our manufacturing yields or has resulted in unanticipated stress-related failures when our wafer probe cards are being used in the manufacturing test environment. Manufacturing design errors such as the miswiring of a wafer probe card or the incorrect placement of probe contact elements have caused us to repeat manufacturing design steps. In addition to these examples, problems might result from a number of factors, including design defects, materials failures, contamination in the manufacturing environment, impurities in the materials used, unknown sensitivities to process conditions, such as temperature and humidity, and equipment failures. As a result, our products have in the past contained and might in the future contain undetected errors or defects. Any errors or defects could:

- cause lower than anticipated yields and lengthening of delivery schedules;
- cause delays in product shipments;
- cause delays in new product introductions;
- cause us to incur warranty expenses;
- result in increased costs and diversion of development resources;
- cause us to incur increased charges due to unusable inventory;
- require design modifications; or
- decrease market acceptance or customer satisfaction with these products.

The occurrence of any one or more of these events could hurt our operating results.

In addition, if any of our products fails to meet specifications or has reliability, quality or compatibility problems, our reputation could be damaged significantly and customers might be reluctant to buy our products, which could result in a decline in revenues, an increase in product returns or warranty costs and the loss of existing customers or the failure to attract new customers. Our customers use our products with test equipment and software in their manufacturing facilities. Our products must be compatible with the customers' equipment and software to form an integrated system. If the system does not function properly, we could be required to provide field application engineers to locate the problem, which can take time and resources. If the problem relates to our wafer probe cards, we might have to invest significant capital, manufacturing capacity and other resources to correct it. Our current or potential customers also might seek to recover from us any losses resulting from defects or failures in our products. Liability claims could require us to spend significant time and money in litigation or to pay significant damages.

If we fail to forecast demand for our products accurately, we could incur inventory losses.

Each semiconductor chip design requires a custom wafer probe card. Because our products are design-specific, demand for our products is difficult to forecast. Due to our customers' short delivery time requirements, we often design, and at times produce, our products in anticipation of demand for our products rather than in response to an order. Due to the uncertainty inherent in forecasts, we are and expect to continue to be subject to inventory risk. If we do not obtain orders as we anticipate, we could have excess inventory for a specific customer design that we would not be able to sell to any other customer, which would likely result in inventory write-offs.

If we fail to effectively manage our service centers, our business might be harmed.

In 2002, we expanded our repair and service center in Seoul, South Korea, and in 2003, we opened a repair and service center in Dresden, Germany. These service centers are part of our strategy to, among other things, provide our customers with more efficient service and repair of our wafer probe cards. If we are unable to effectively manage our service centers, do not expand or enhance our service centers to meet customer demand, or if the work undertaken in the service centers is not equivalent to the level and quality provided by repairs and services performed by our North American repair and service operations, which are part of our manufacturing facility in Livermore, California, we could incur higher wafer probe card repair and service costs, which could harm our operating results.

If we do not effectively manage changes in our business, these changes could place a significant strain on our management and operations and, as a result, our business might not succeed.

Our ability to grow successfully requires an effective planning and management process. We plan to increase the scope of our operations and the size of our direct sales force domestically and internationally. For example, we have leased a new facility in Livermore, California and plan to move our corporate headquarters and manufacturing operations into this facility in 2004. Our growth could place a significant strain on our management systems, infrastructure and other resources. To manage our growth effectively, we must invest the necessary capital and continue to improve and expand our systems and infrastructure in a timely and efficient manner. Those resources might not be available when we need them, which would limit our growth. Our officers have limited experience in managing large or rapidly growing businesses. In addition, the majority of our management has no experience in managing a public company or communicating with securities analysts and public company investors. Our controls, systems and procedures might not be adequate to support a growing public company. If our management fails to respond effectively to changes in our business, our business might not succeed.

If we fail to attract, integrate and retain qualified personnel, our business might be harmed.

Our future success depends largely upon the continued service of our key management, technical, and sales and marketing personnel, and on our continued ability to hire, integrate and retain qualified individuals, particularly engineers and sales and marketing personnel in order to increase market awareness of our products and to increase revenues. For example, in the future, we might need technical personnel experienced in competencies that we do not currently have or require. Competition for qualified individuals may be intense, and we might not be successful in retaining our employees or attracting new personnel. The loss of any key employee, the inability to successfully integrate replacement personnel, the failure of any key employee to perform in his or her current position or our inability to attract and retain skilled employees as needed could impair our ability to meet customer and technological demands. All of our key personnel in the United States are employees at-will. We have no employment contracts with any of our personnel in the United States.

We may make acquisitions, which could put a strain on our resources, cause ownership dilution to our stockholders and adversely affect our financial results.

While we have made no acquisitions of businesses, products or technologies in the past, we may make acquisitions of complementary businesses, products or technologies in the future. Integrating newly acquired

[Table of Contents](#)

businesses, products or technologies into our company could put a strain on our resources, could be expensive and time consuming, and might not be successful. Future acquisitions could divert our management's attention from other business concerns and expose our business to unforeseen liabilities or risks associated with entering new markets. In addition, we might lose key employees while integrating new organizations. Consequently, we might not be successful in integrating any acquired businesses, products or technologies, and might not achieve anticipated revenues and cost benefits. In addition, future acquisitions could result in customer dissatisfaction, performance problems with an acquired company, potentially dilutive issuances of equity securities or the incurrence of debt, contingent liabilities, possible impairment charges related to goodwill or other intangible assets or other unanticipated events or circumstances, any of which could harm our business.

As part of our sales process, we could incur substantial sales and engineering expenses that do not result in revenues, which would harm our operating results.

Our customers generally expend significant efforts evaluating and qualifying our products prior to placing an order. The time that our customers require to evaluate and qualify our wafer probe cards is typically between three and 12 months and sometimes longer. While our customers are evaluating our products, we might incur substantial sales, marketing, and research and development expenses. For example, we typically expend significant resources educating our prospective customers regarding the uses and benefits of our wafer probe cards and developing wafer probe cards customized to the potential customer's needs, for which we might not be reimbursed. Although we commit substantial resources to our sales efforts, we might never receive any revenues from a customer. For example, many semiconductor designs never reach production, including designs for which we have expended design effort and expense. In addition, prospective customers might decide not to use our wafer probe cards. The length of time that it takes for the evaluation process and for us to make a sale depends upon many factors including:

- the efforts of our sales force and our distributor and independent sales representatives;
- the complexity of the customer's fabrication processes;
- the internal technical capabilities of the customer; and
- the customer's budgetary constraints and, in particular, the customer's ability to devote resources to the evaluation process.

In addition, product purchases are frequently subject to delays, particularly with respect to large customers for which our products may represent a small percentage of their overall purchases. As a result, our sales cycles are unpredictable. If we incur substantial sales and engineering expenses without generating revenues, our operating results could be harmed.

From time to time, we might be subject to claims of infringement of other parties' proprietary rights, or to claims that our intellectual property rights are invalid or unenforceable, which could result in significant expense and loss of intellectual property rights.

In the future, we might receive claims that we are infringing intellectual property rights of others, or claims that our patents or other intellectual property rights are invalid or unenforceable. We have received in the past, and may receive in the future, communications from third parties inquiring about our interest in licensing certain of their intellectual property or more generally identifying intellectual property that may be of interest to us. For example, we received such a communication from Microelectronics and Computer Technology Corporation in October 2001, with a follow-up letter in January 2002, inquiring about our interest in acquiring a license to certain of their patents and technology, and from IBM Corporation in February 2002, with a follow-up letter in August 2003, inquiring about our interest and need to acquire a license to IBM patents and technology related to high density integrated probes. We have not engaged in a dialog with Microelectronics and Computer Technology Corporation. We have engaged in a dialog with IBM Corporation regarding our companies' respective intellectual property portfolios and technologies, and presently anticipate that this dialog will continue. In August 2002, subsequent to our initiating correspondence with Japan

[Table of Contents](#)

Electronic Materials Corporation regarding the scope of our intellectual property rights and the potential applicability of those rights to certain of its wafer probe cards, Japan Electronic Materials Corporation offered that precedent technologies exist as to one of our foreign patents that we had identified, and also referenced a U.S. patent in which it stated we might take interest. For the inquiries we have received to date, we do not believe we infringe any of the identified patents and technology. The semiconductor industry is characterized by uncertain and conflicting intellectual property claims and vigorous protection and pursuit of these rights. The resolution of any claims of this nature, with or without merit, could be time consuming, result in costly litigation or cause product shipment delays. In the event of an adverse ruling, we might be required to pay substantial damages, cease the use or sale of infringing products, spend significant resources to develop non-infringing technology, discontinue the use of certain technology or enter into license agreements. License agreements, if required, might not be available on terms acceptable to us or at all. The loss of access to any of our intellectual property or the ability to use any of our technology could harm our business.

If we fail to protect our proprietary rights, our competitors might gain access to our technology, which could adversely affect our ability to compete successfully in our markets and harm our operating results.

If we fail to protect our proprietary rights adequately, our competitors might gain access to our technology. Unauthorized parties might attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. Others might independently develop similar or competing technologies or methods or design around our patents. In addition, the laws of many foreign countries in which we or our customers do business do not protect our intellectual property rights to the same extent as the laws of the United States. As a result, our competitors might offer similar products and we might not be able to compete successfully. We also cannot assure that:

- our means of protecting our proprietary rights will be adequate;
- patents will be issued from our currently pending or future applications;
- our existing patents or any new patents will be sufficient in scope or strength to provide any meaningful protection or commercial advantage to us;
- any patent, trademark or other intellectual property right that we own will not be invalidated, circumvented or challenged in the United States or foreign countries; or
- others will not misappropriate our proprietary technologies or independently develop similar technology, duplicate our products or design around any patent or other intellectual property rights that we own.

We might be required to spend significant resources to monitor and protect our intellectual property rights. We presently believe that it is likely that one or more of our competitors are using methodologies or have implemented structures into certain of their products that are covered by one or more of our intellectual property rights. On February 24, 2004, we filed in the Seoul Southern District Court, located in Seoul, South Korea, two separate complaints against Phicom Corporation, a Korean corporation, alleging infringement of a total of four Korean patents issued to FormFactor. One Complaint alleges that Phicom is infringing our Korean Patent Nos. 252,457, entitled "Method of Fabricating Interconnections Using Cantilever Elements and Sacrificial Substrates," and 324,064, entitled "Contact Tip Structures for Microelectronic Interconnection Elements and Methods of Making Same." The other Complaint alleges Phicom is infringing our Korean Patent Nos. 278,342, entitled "Method of Altering the Orientation of Probe Elements in a Probe Card Assembly," and 399,210, entitled "Probe Card Assembly." Both of the Complaints seek injunctive relief. The court actions are a part of our ongoing efforts to protect the intellectual property embodied in our proprietary technology, including our MicroSpring interconnect technology. We could incur material expenses in these litigations. We may initiate other claims or litigation against third parties for infringement of our proprietary rights or to establish the validity of our proprietary rights. If we threaten or initiate litigation, we may be subject to claims by third parties against which we must defend. Any litigation, whether or not it is resolved in our favor, could result in significant expense to us and divert the efforts of our technical and management personnel. In addition, many of our customer contracts contain provisions that require us to indemnify our

customers for third party intellectual property infringement claims, which would increase the cost to us of an adverse ruling in such a claim. An adverse determination could also prevent us from licensing our technologies and methods to others.

Our failure to comply with environmental laws and regulations could subject us to significant fines and liabilities, and new laws and regulations or changes in regulatory interpretation or enforcement could make compliance more difficult and costly.

We are subject to various and frequently changing U.S. federal, state and local, and foreign governmental laws and regulations relating to the protection of the environment, including those governing the discharge of pollutants into the air and water, the management and disposal of hazardous substances and wastes, the cleanup of contaminated sites and the maintenance of a safe workplace. We could incur substantial costs, including cleanup costs, civil or criminal fines or sanctions and third-party claims for property damage or personal injury, as a result of violations of or liabilities under environmental laws and regulations or non-compliance with the environmental permits required at our facilities.

For instance, in May 2003, we received a Notice of Violation from the Bay Area Air Quality Management District, or BAAQMD, regarding our record keeping relating to our usage of wipe cleaning solvent. We introduced corrective action to prevent any continued or recurrent record keeping violation, and we resolved the Notice of Violation with a monetary payment which was not significant. It is possible that in the future, we may receive environmental violation notices, and that final resolution of the violations identified by these notices could harm our operating results. By way of further example, in December 2003, we received an Inspection Report from the Department of Toxic Substances Control, or DTSC, in connection with an inspection conducted in August 2003 of the Company's facilities. The DTSC Report reflects certain violations that had not been previously addressed by us in correspondence with the DTSC. We promptly took appropriate steps to address all of the violations noted, believe that all such violations were addressed, and sent correspondence to the DTSC confirming such corrective steps. At the present time it is not clear whether any monetary penalty will be imposed by the DTSC for the violations, and if so, the relative significance of the penalty. In January 2004, we received a Notice of Violation from the BAAQMD for "Failure to Meet Permit Condition" during a routine inspection of our facilities conducted by an Inspector with the Compliance & Enforcement Division of the BAAQMD. The January BAAQMD Notice reflects that we recently exceeded permissible usage limits on its solvent bench operations. The limit was exceeded only recently, in November 2003. We have identified appropriate corrective action and are also continuing our efforts to get the permit modified to reflect the current usage requirements. Notwithstanding our contemplated corrective action, the January BAAQMD Notice remains unresolved and we may be subject to a penalty based upon the unresolved January BAAQMD Notice. In view of the May BAAQMD Notice discussed above and the fact that a payment was associated with the resolution thereof, we presently believe that it is likely the January BAAQMD Notice will result in the imposition of a monetary penalty. At the present time it is not clear whether any monetary payment would be significant. In February 2004, a contractor at our manufacturing facility discharged certain diesel fuel mixed with water into a storm drain. We notified the appropriate agencies, assisted in their investigation and in the activities of a third party to assist with the cleanup activities. We have not yet been notified as to whether any financial penalties will be imposed based upon the incident and, if imposed, whether such penalties would be significant.

These laws, regulations and permits also could require the installation of costly pollution control equipment or operational changes to limit pollution emissions or decrease the likelihood of accidental releases of hazardous substances. In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination at our or others' sites or the imposition of new cleanup requirements could require us to curtail our operations, restrict our future expansion, subject us to liability and cause us to incur future costs that would have a negative effect on our operating results and cash flow.

Because we conduct some of our business internationally, we are subject to operational, economic, financial and political risks abroad.

Sales of our products to customers outside the United States have accounted for an important part of our revenues. Our international sales as a percentage of our revenues were 49.9% for fiscal 2003 and 44.4% for fiscal 2002. In the future, we expect international sales, particularly into Europe, Japan, South Korea and Taiwan, to continue to account for a significant percentage of our revenues. Accordingly, we will be subject to risks and challenges that we would not otherwise face if we conducted our business only in the United States. These risks and challenges include:

- compliance with a wide variety of foreign laws and regulations;
- legal uncertainties regarding taxes, tariffs, quotas, export controls, export licenses and other trade barriers;
- political and economic instability in, or foreign conflicts that involve or affect, the countries of our customers;
- difficulties in collecting accounts receivable and longer accounts receivable payment cycles;
- difficulties in staffing and managing personnel, distributors and representatives;
- reduced protection for intellectual property rights in some countries;
- currency exchange rate fluctuations, which could affect the value of our assets denominated in local currency, as well as the price of our products relative to locally produced products;
- seasonal fluctuations in purchasing patterns in other countries; and
- fluctuations in freight rates and transportation disruptions.

Any of these factors could harm our existing international operations and business or impair our ability to continue expanding into international markets.

We might require additional capital to support business growth, and such capital might not be available.

We intend to continue to make investments to support business growth and may require additional funds to respond to business challenges, which include the need to develop new products or enhance existing products, enhance our operating infrastructure and acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financing to secure additional funds. Equity and debt financing, however, might not be available when needed or, if available, might not be available on terms satisfactory to us. If we are unable to obtain adequate financing or financing on terms satisfactory to us, our ability to continue to support our business growth and to respond to business challenges could be significantly limited.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the United States.

We prepare our financial statements in conformity with accounting principles generally accepted in the United States. These accounting principles are subject to interpretation by the Financial Accounting Standards Board, the American Institute of Certified Public Accountants, the Securities and Exchange Commission and various bodies formed to interpret and create appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change.

Recently enacted and proposed changes in securities laws and regulations are likely to increase our costs.

The Sarbanes-Oxley Act of 2002 that became law in July 2002, as well as new rules and regulations subsequently implemented by the Securities and Exchange Commission, have required changes to some of our corporate governance practices. The Act also requires the Securities and Exchange Commission to promulgate

[Table of Contents](#)

additional new rules on a variety of subjects. In addition to final rules and rule proposals already made by the Securities and Exchange Commission, Nasdaq has adopted revisions to its requirements for companies, such as us, that are Nasdaq-listed. We expect these new rules and regulations to increase our legal and financial compliance costs, and to make some activities more difficult, time consuming and/or costly. We also expect these new rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These new rules and regulations could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on our audit committee, and qualified executive officers.

Unanticipated changes in our tax rates or exposure to additional income tax liabilities could affect our profitability.

We are subject to income taxes in both the United States and various foreign jurisdictions, and our domestic and international tax liabilities are subject to the allocation of expenses in different jurisdictions. Our effective tax rate could be adversely affected by changes in the mix of earnings in countries with different statutory tax rates, changes in the valuation of deferred tax assets and liabilities, changes in tax laws including pending tax law changes, such as the benefit from export sales and the research and development credit by material audit assessments. In particular, the carrying value of deferred tax assets, which are predominantly in the United States, is dependent on our ability to generate future taxable income in the United States. In addition, the amount of income taxes we pay could be subject to ongoing audits in various jurisdictions and a material assessment by a governing tax authority could affect our profitability.

The trading price of our common stock is likely to be volatile, and you might not be able to sell your shares at or above the price that you paid for them.

The trading prices of the securities of technology companies have been highly volatile. Accordingly, the trading price of our common stock is likely to be subject to wide fluctuations. Further, our securities have a limited trading history. Factors affecting the trading price of our common stock include:

- variations in our operating results;
- announcements of technological innovations, new products or product enhancements, strategic alliances or significant agreements by us or by our competitors;
- recruitment or departure of key personnel;
- the gain or loss of significant orders or customers;
- changes in the estimates of our operating results or changes in recommendations by any securities analysts that elect to follow our common stock;
- market conditions in our industry, the industries of our customers and the economy as a whole; and
- sales or perceived sales of substantial amounts of our common stock held by existing stockholders.

In addition, if the market for technology stocks or the stock market in general experiences continued or greater loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, operating results or financial condition. The trading price of our common stock also might decline in reaction to events that affect other companies in our industry even if these events do not directly affect us.

If securities analysts do not publish research or reports about our business, our stock price could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts. If one or more of the analysts who cover us downgrade our stock, our stock price would likely decline rapidly. If one or more of these analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause

our stock price to decline. If securities analysts do not publish research or reports about our business, our stock price could decline.

The concentration of our capital stock ownership with insiders will likely limit your ability to influence corporate matters.

Our executive officers, directors, current 5% or greater stockholders and entities affiliated with any of them together beneficially own a large percentage of our outstanding common stock. As a result, these stockholders, acting together, have substantial influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. As a result, corporate actions might be taken even if other stockholders, including you, oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial.

Our management has broad discretion over the use of the proceeds to us from our public offerings of common stock and might not apply the proceeds of our public offerings in ways that enhance our results of operations.

Our management has broad discretion to use the net proceeds from our public offerings, which include our initial public offering and our follow-on public offering, and you will be relying on the judgment of our management regarding the application of these proceeds. We intend to use a portion of the net proceeds from our initial public offering for leasehold improvements at our new corporate headquarters and manufacturing facility. Although we expect our management to use the remaining net proceeds from our public offerings for general corporate purposes, including working capital and for potential strategic investments or acquisitions, we have not allocated these net proceeds for specific purposes. Our management might not be able to yield a significant return, if any, on any investment of these net proceeds.

Provisions of our certificate of incorporation and bylaws or Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Delaware corporate law and our certificate of incorporation and bylaws contain provisions that could discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions:

- establish a classified board of directors so that not all members of our board are elected at one time;
- provide that directors may only be removed “for cause” and only with the approval of 66 2/3% of our stockholders;
- require super-majority voting to amend some provisions in our certificate of incorporation and bylaws;
- authorize the issuance of “blank check” preferred stock that our board could issue to increase the number of outstanding shares and to discourage a takeover attempt;
- authorize the issuance of “blank check” preferred stock that our board could issue to increase the number of outstanding shares and to discourage a takeover attempt;
- limit the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- provide that the board of directors is expressly authorized to make, alter or repeal our bylaws; and
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company.

Item 7A: Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Exchange Risk. Our revenues, except in Japan, and our expenses, except those expenses related to our operations in Germany, United Kingdom, Japan and Korea operations, are denominated in U.S. dollars. Revenues and accounts receivable from our Japanese customers, which are denominated in Japanese Yen increased significantly in fiscal 2003. As a result, we are exposed to foreign currency fluctuations. We recorded the resulting currency gains or losses in our consolidated income statement. As of December 27, 2003 we did not enter into forward exchange contracts to hedge exposure denominated in foreign currencies or any other derivative financial instruments for trading or speculative purposes.

In March of 2004, we entered into three forward exchange contracts to hedge a portion of, but not all, existing and anticipated foreign currency transactions denominated in Japanese Yen expected to occur within six months. These outstanding foreign currency forward exchange contracts allow us to sell 605.5 million Yen for U.S. dollar \$5.4 million with contract rates ranging from 112.49 Yen to 112.62 Yen per U.S. dollar. These contracts expire on various dates through July 2004. We do not use derivative financial instruments for trading or speculative purposes.

Interest Rate Risk. The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. Some of the securities in which we invest may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. For example, if we hold a security that was issued with an interest rate fixed at the then-prevailing rate and the prevailing interest rate later rises, the principal amount of our investment will probably decline. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents, and marketable securities in a variety of securities, including commercial paper, money market funds, government and non-government debt securities and certificates of deposit (see Note 3 of the Notes to Consolidated Financial Statements). The risk associated with fluctuating interest rates is limited to our investment portfolio and we do not believe that a 10% change in interest rates will have a significant impact on our interest income. As of December 27, 2003, all of our investments were in money market accounts, certificates of deposit or high quality corporate debt obligations and U.S. government securities.

Item 8: Consolidated Financial Statements and Supplementary Data
Consolidated Financial Statements

The consolidated financial statements of FormFactor required by this item are included in the section entitled "Consolidated Financial Statements" of this Annual Report on Form 10-K. See Item 15(a)(1) for a list of FormFactor's consolidated financial statements.

Selected Quarterly Financial Data

The following selected quarterly financial data should be read in conjunction with FormFactor's consolidated financial statements and the related notes and "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations." This information has been derived from unaudited consolidated financial statements of FormFactor that, in the Company's opinion, reflect all recurring adjustments necessary to fairly present this information when read in conjunction with FormFactor's consolidated financial statements and the related notes appearing in the section entitled "Consolidated Financial Statements." The results of operations for any quarter are not necessarily indicative of the results to be expected for any future period.

	Mar. 31, 2001	June 30, 2001	Sept. 29, 2001	Dec. 29, 2001	Mar. 30, 2002	June 29, 2002	Sept. 28, 2002	Dec. 28, 2002	Mar. 29, 2003	June 28, 2003	Sept. 27, 2003	Dec. 27, 2003
Revenues	\$19,849	\$21,507	\$16,021	\$16,056	\$17,288	\$18,510	\$20,729	\$22,157	\$18,669	\$22,094	\$26,076	\$31,463
Cost of revenues	10,410	11,269	8,477	8,229	8,859	9,422	10,259	10,916	9,800	11,469	13,213	15,447
Gross margin	9,439	10,238	7,544	7,827	8,429	9,088	10,470	11,241	8,869	10,625	12,863	16,016
Operating expenses:												
Research and development	4,073	4,323	3,054	3,169	3,249	3,579	3,828	3,936	3,525	3,831	3,966	4,247
Selling, general and administrative	4,730	5,230	4,344	4,196	3,992	4,172	4,265	4,576	4,013	4,478	4,980	5,573
Stock-based compensation	58	102	103	206	165	302	283	289	333	371	396	384
Restructuring charges	—	—	1,380	—	—	—	—	—	—	—	—	—
Total operating expenses	8,861	9,655	8,881	7,571	7,406	8,053	8,376	8,801	7,871	8,680	9,342	10,204
Operating income (loss)	578	583	(1,337)	256	1,023	1,035	2,094	2,440	998	1,945	3,521	5,812
Interest and other income (expense), net	(74)	94	229	228	155	164	85	238	129	131	520	786
Income (loss) before income taxes	504	677	(1,108)	484	1,178	1,199	2,179	2,678	1,127	2,076	4,041	6,598
Benefit (provision) for income taxes	(207)	(291)	426	(235)	(332)	(485)	5,031	(1,089)	(428)	(789)	(1,536)	(2,530)
Net income (loss)	\$ 297	\$ 386	\$ (682)	\$ 249	\$ 846	\$ 714	\$ 7,210	\$ 1,589	\$ 699	\$ 1,287	\$ 2,505	\$ 4,068
Net income (loss) per share:												
Basic	\$.08	\$.10	\$ (.16)	\$.06	\$.19	\$.16	\$ 1.61	\$.35	\$.15	\$.12	\$.07	\$.11
Diluted	\$.01	\$.01	\$ (.16)	\$.01	\$.03	\$.02	\$.24	\$.05	\$.02	\$.04	\$.07	\$.10
Weighted-average number of shares used in per share calculations:												
Basic	3,790	3,941	4,137	4,248	4,391	4,438	4,478	4,529	4,539	10,894	34,117	35,617
Diluted	27,924	28,353	4,137	29,038	29,823	29,535	29,575	29,227	29,266	31,170	37,905	39,460

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

None.

Item 9A: *Controls and Procedures*

Disclosure Controls and Procedures

As required by Rule 13a-15(b) of the Securities Exchange Act of 1934, FormFactor management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation as of the end of the period covered by this Annual Report on Form 10-K, of the effectiveness of FormFactor's "disclosure controls and procedures" as defined in Exchange Act Rule 13a-15(e). Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of December 27, 2003, FormFactor's disclosure controls and procedures were effective for ensuring that information required to be disclosed in the reports that FormFactor files or submits under the Securities Exchange Act of 1934 are recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms.

Internal Control over Financial Reporting

As required by Rule 13a-15(d) of the Securities Exchange Act of 1934, FormFactor management, including the Chief Executive Officer and Chief Financial Officer, also conducted an evaluation of FormFactor's "internal control over financial reporting" as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in FormFactor's internal control over financial reporting occurred during the fourth quarter of 2003 that materially affected, or are reasonably likely to materially affect, FormFactor's internal control over financial reporting. Based on that evaluation, there has been no such change during the fourth fiscal quarter.

Limitations on Effectiveness of Controls

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. The design of any control system is based, in part, upon the benefits of the control system relative to its costs. Control systems can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. In addition, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

PART III

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

Information concerning FormFactor's directors, including FormFactor's audit committee and audit committee financial expert, appear in FormFactor's Proxy Statement, under the section entitled "Election of Directors." Such information in this portion of the Proxy Statement is incorporated herein by reference.

For information with respect to FormFactor's executive officers, see Part I, Item 1 of this Annual Report on Form 10-K under the section entitled "Executive Officers."

Information concerning Section 16(a) beneficial ownership reporting compliance appears in FormFactor's Proxy Statement under the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance." Such information in this portion of the Proxy Statement is incorporated herein by reference.

FormFactor has adopted a Statement of Corporate Code of Business Conduct that applies to all directors, officers and employees of FormFactor and a Statement of Financial Code of Ethics that applies to our chief executive officer, chief financial officer, chief accounting officer and other employees in our finance department. Information concerning these codes appears in FormFactor's Proxy Statement under the section entitled "Election of Directors — Corporate Codes." Such information in this portion of the Proxy Statement is incorporated herein by reference.

Item 11: *Executive Compensation*

Information concerning executive compensation and related information appears in FormFactor's Proxy Statement under the section entitled "Executive Compensation and Related Information." Such information in this portion of the Proxy Statement is incorporated herein by reference.

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

Information concerning the security ownership of certain beneficial owners and management and related stockholder matters, including information regarding FormFactor's equity compensation plans, appears in FormFactor's Proxy Statement under the section entitled "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters." Such information in this portion of the Proxy Statement is incorporated herein by reference.

Item 13: *Certain Relationships and Related Transactions*

Information concerning certain relationships and related transactions appears in FormFactor's Proxy Statement under the section entitled "Certain Relationships and Related Transactions." Such information in this portion of the Proxy Statement is incorporated by reference.

Item 14: *Principal Accountant Fees and Services*

Information concerning principal accountant fees and services and the audit committee's pre-approval policies and procedures appear in FormFactor's Proxy Statement under the section entitled "Ratification of Selection of Independent Auditors." Such information in this portion of the Proxy Statement is incorporated herein by reference

PART IV

Item 15: Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Consolidated Financial Statements:

- Report of Independent Auditors
- Consolidated Balance Sheets
- Consolidated Income Statements
- Consolidated Statements of Stockholders' Equity (Deficit)
- Consolidated Statements of Cash Flows
- Notes to Consolidated Financial Statements

(2) Financial Statement Schedule:

- Report of Independent Auditors
- Schedule II — Valuation and Qualifying Accounts

(3) Exhibits:

The exhibits listed in the accompanying Index to Exhibits are filed or incorporated by reference as part of this Annual Report on Form 10-K.

(b) Reports on Form 8-K

Date of Report	Item(s)	Description
10/16/03	7, 12	FormFactor announced earnings for the quarter ended September 27, 2003.
10/16/03	5, 7	FormFactor announced its intention to file a Form S-1 Registration Statement with the SEC for a proposed public follow-on offering.
10/20/03	5, 7	FormFactor announced the filing of a Form S-1 Registration Statement with the SEC for a proposed public follow-on offering.
11/04/03	5, 7	FormFactor announced the pricing of its public follow-on offering.

(c) Exhibits: The following exhibits are filed as part of this Annual Report on Form 10-K:

Exhibit Number	Exhibit Description
10.11*	Key Management Bonus Plan (2004)
10.12*	Sales Incentive Plan (first half 2004)
10.35	Letter Agreement by and between Infineon Technologies Aktiengesellschaft and FormFactor dated December 10, 2003
10.45*	Probe Card Purchase Agreement by and between Elpida Memory, Inc. and FormFactor dated April 1, 2002 and Agreement by and between Elpida Memory, Inc. and FormFactor dated August 18, 2003
23.01	Consent of Independent Accountants
31.01	Certification of Chief Executive Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.02	Certification of Chief Financial Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.01**	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this Form 10-K and have been filed separately with the Securities and Exchange Commission.

** This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

[Table of Contents](#)

<u>Signature</u>	<u>Title</u>	<u>Date</u>
Additional Directors:		
<hr/> <i>/s/</i> JOSEPH R. BRONSON <hr/> Joseph R. Bronson	Director	March 19, 2004
<hr/> <i>/s/</i> DR. THOMAS J. CAMPBELL <hr/> Dr. Thomas J. Campbell	Director	March 19, 2004
<hr/> <i>/s/</i> DR. WILLIAM H. DAVIDOW <hr/> Dr. William H. Davidow	Director	March 19, 2004
<hr/> <i>/s/</i> G. CARL EVERETT, JR. <hr/> G. Carl Everett, Jr.	Director	March 19, 2004
<hr/> <i>/s/</i> JAMES A. PRESTRIDGE <hr/> James A. Prestridge	Director	March 19, 2004

CONSOLIDATED FINANCIAL STATEMENTS

As required under "Item 8: Consolidated Financial Statements and Supplementary Data," the consolidated financial statements of FormFactor are provided in this section as follows:

Report of Independent Auditors

The Board of Directors and Stockholders of FormFactor, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income, of stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of FormFactor, Inc. (the "Company") and its subsidiaries at December 28, 2002 and December 27, 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 27, 2003 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements in accordance with auditing standards generally accepted in the United States of America, which 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California

March 17, 2004

FORMFACTOR, INC.
CONSOLIDATED BALANCE SHEETS

	December 28, 2002	December 27, 2003
(In thousands, except share and per share data)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 26,786	\$ 116,305
Marketable securities	7,557	62,965
Accounts receivable, net of allowance for doubtful accounts of \$253 in 2002 and \$103 in 2003	11,986	19,698
Inventories, net	4,230	8,025
Deferred tax assets	2,571	2,575
Prepaid expenses and other current assets	3,463	2,744
Total current assets	56,593	212,312
Restricted cash	2,835	2,550
Property and equipment, net	16,538	20,495
Deferred tax assets	1,068	398
Other assets	484	356
Total assets	\$ 77,518	\$ 236,111
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Bank line of credit	\$ 375	\$ —
Notes payable, current portion	500	—
Accounts payable	6,712	10,579
Accrued liabilities	7,677	10,147
Deferred revenue and customer advances	793	1,005
Total current liabilities	16,057	21,731
Notes payable, less current portion	625	—
Deferred revenue and customer advances	672	433
Total liabilities	17,354	22,164
Commitments and contingencies (Note 6)		
Redeemable convertible preferred stock, \$0.001 par value:		
Authorized: 23,126,983 shares for 2002 and none in 2003		
Issued and outstanding: 23,002,626 shares in 2002 and none in 2003 (Liquidation preferences: \$66,263 at December 28, 2002 and none at December 27, 2003)		
	64,895	—
Redeemable convertible preferred stock warrants	306	—
	65,201	—
Stockholders' equity (deficit):		
Preferred stock, \$0.001 par value:		
Authorized: 10,000,000 shares		
Issued and outstanding: none in 2002 and 2003		
	—	—
Common stock, \$0.001 par value:		
Authorized: 250,000,000 shares		
Issued and outstanding: 4,680,118 shares in 2002 and 36,808,906 shares in 2003		
	5	37
Additional paid-in capital	20,064	226,630
Notes receivable from stockholders	(3,447)	(661)
Deferred stock-based compensation, net	(12,294)	(11,249)
Accumulated other comprehensive loss	—	(4)
Accumulated deficit	(9,365)	(806)
Total stockholders' equity (deficit)	(5,037)	213,947
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	\$ 77,518	\$ 236,111

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

FORMFACTOR, INC.
CONSOLIDATED STATEMENTS OF INCOME

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
	(In thousands, except per share data)		
Revenues	\$ 73,433	\$ 78,684	\$ 98,302
Cost of revenues(1)	38,385	39,456	49,929
Gross margin	35,048	39,228	48,373
Operating expenses:			
Research and development(1)	14,619	14,592	15,569
Selling, general and administrative(1)	18,500	17,005	19,044
Stock-based compensation	469	1,039	1,484
Restructuring charges	1,380	—	—
Total operating expenses	34,968	32,636	36,097
Operating income	80	6,592	12,276
Interest income	989	808	1,041
Interest expense	(170)	(79)	(38)
Other income (expense), net	(342)	(87)	563
	477	642	1,566
Income before income taxes	557	7,234	13,842
Benefit (provision) for income Taxes	(307)	3,125	(5,283)
Net income	\$ 250	\$ 10,359	\$ 8,559
Net income per share:			
Basic	\$ 0.06	\$ 2.33	\$ 0.41
Diluted	\$ 0.01	\$ 0.35	\$ 0.25
Weighted-average number of shares used in per share calculations:			
Basic	4,029	4,448	21,047
Diluted	28,654	29,554	34,165
(1) Amounts exclude stock-based compensation, as follows:			
Cost of revenues	\$ 27	\$ 172	\$ 223
Research and development	139	217	460
Selling, general and administrative	303	650	801
Total	\$ 469	\$ 1,039	\$ 1,484

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

Change in unrealized gain on marketable securities, net of tax	—	—	—	—	—	47	—	47
Translation adjustments	—	—	—	—	—	(51)	—	(51)
Net income	—	—	—	—	—	—	8,559	8,559
Comprehensive income								8,555
Balances, December 27, 2003	<u>36,808,906</u>	<u>\$ 37</u>	<u>\$226,630</u>	<u>\$ (661)</u>	<u>\$ (11,249)</u>	<u>\$ (4)</u>	<u>\$ (806)</u>	<u>\$213,947</u>

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

FORMFACTOR, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
	(In thousands)		
Cash flows from operating activities:			
Net income	\$ 250	\$ 10,359	\$ 8,559
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	4,745	5,392	5,147
Stock-based compensation expense	469	1,039	1,484
Common stock issued for services provided	15	57	—
Deferred tax assets	—	(3,639)	666
Tax benefits from employee stock option plans	—	—	1,668
Interest income from stockholders' notes receivable	(257)	(238)	(160)
Provision for doubtful accounts	(166)	(161)	(150)
Provision for excess and obsolete inventories	969	(1,157)	1,959
Loss on disposal of property and equipment	194	322	10
Non-cash restructuring expenses	277	—	—
Changes in assets and liabilities:			
Accounts receivable	501	38	(7,547)
Inventories	(522)	(683)	(5,755)
Prepays and other current assets	(268)	(1,412)	918
Accounts payable	1,246	1,163	3,842
Accrued liabilities	2,307	1,828	2,359
Deferred revenues	501	(55)	(28)
Net cash provided by operating activities	<u>10,261</u>	<u>12,853</u>	<u>12,972</u>
Cash flows from investing activities:			
Acquisition of property and equipment	(9,356)	(4,177)	(9,080)
Purchase of marketable securities	(17,865)	(23,136)	(153,641)
Proceeds from maturities of marketable securities	15,817	22,590	98,280
Restricted cash	—	(2,835)	285
Other assets	(203)	63	83
Net cash used in investing activities	<u>(11,607)</u>	<u>(7,495)</u>	<u>(64,073)</u>
Cash flows from financing activities:			
Proceeds from issuance of redeemable convertible preferred stock, net	10,072	—	—
Proceeds from issuance of common stock, net	298	1,070	139,490
Repayment of notes receivable from stockholders	—	26	2,786
Repurchase of common stock	(28)	(6)	(200)
Proceeds from issuance of notes payable	2,000	—	—
Proceeds from issuance of bank line of credit	—	375	1,000
Repayment of notes payable	(2,365)	(602)	(1,125)
Repayment of bank line of credit	—	—	(1,375)
Net cash provided by financing activities	<u>9,977</u>	<u>863</u>	<u>140,576</u>
Effect of exchange rate changes on cash and cash equivalents	—	—	44
Net increase in cash and cash equivalents	8,631	6,221	89,519
Cash and cash equivalents, beginning of year	11,934	20,565	26,786
Cash and cash equivalents, end of year	<u>\$ 20,565</u>	<u>\$ 26,786</u>	<u>\$ 116,305</u>
Non-cash financing activities:			
Common stock issued for notes receivable	\$ 43	\$ —	\$ —
Repurchase of common stock in connection with cancellation of notes receivable from stockholders	\$ 186	\$ 345	\$ 200
Conversion of redeemable convertible preferred stock and warrants to common stock	\$ —	\$ —	\$ 65,201
Deferred stock-based compensation	\$ 4,356	\$ 9,262	\$ 439
Supplemental disclosure of cash flow information:			
Interest paid	\$ 170	\$ 79	\$ 38

Income taxes paid	\$ 271	\$ 179	\$ 2,573
-------------------	--------	--------	----------

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

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Formation and Business of the Company:

FormFactor, Inc. (the “Company”) was incorporated on April 15, 1993 to design, develop, manufacture, sell and support precision, high performance advanced semiconductor wafer probe cards. The Company is based in Livermore, California, home to its corporate offices, research and development, and manufacturing locations. The Company has offices in California, Japan, Hungary, Germany and South Korea.

Initial Public Offering

The Securities and Exchange Commission declared the Company’s first registration statement, which the Company filed on Form S-1 (Registration No. 333-86738) under the Securities Act of 1933 in connection with the initial public offering of its common stock, effective on June 11, 2003. Under this registration statement, the Company registered 6,900,000 shares of its common stock, including 900,000 shares subject to the underwriter’s over-allotment option, with an aggregate public offering price of \$96,600,000. The Company registered 6,505,305 of these shares on its behalf and 394,695 of these shares on behalf of certain stockholders of the Company, including a director and certain officers of the Company.

In June 2003 the Company completed its initial public offering in which it sold 5,605,305 shares of the Company’s common stock that it registered on its behalf and 394,695 shares on behalf of the selling stockholders. The shares were sold for the aggregate public offering price of \$84,000,000. The underwriters exercised their over-allotment option to purchase 900,000 shares on June 20, 2003 and in connection with the option’s exercise, the Company sold 900,000 shares for the aggregate public offering price of \$12,600,000. The sale of shares of common stock by the Company, including the sale of 900,000 shares pursuant to the exercise of the over-allotment option by the underwriters, resulted in aggregate gross proceeds of approximately \$91,100,000, approximately \$6,400,000 of which the Company applied to underwriting discounts and commissions and approximately \$2,700,000 of which the Company applied to related costs. As a result, the Company received approximately \$82,000,000 of the offering proceeds.

The sale of shares of common stock by the selling stockholders resulted in aggregate gross proceeds of approximately \$5,500,000, approximately \$2,700,000 of which the selling stockholders paid to the Company to repay loans from the Company and approximately \$387,000 of which the selling stockholders applied to underwriting discounts and commissions. As result, the selling stockholders received approximately \$2,400,000 of the offering proceeds.

Follow-On Public Offering

The Securities and Exchange Commission declared the Company’s follow-on registration statement, which the Company filed on Form S-1 (Registration No. 333-109815) under the Securities Act of 1933 in connection with the follow-on public offering of its common stock, effective on November 4, 2003. Under this registration statement, the Company and certain stockholders of the Company offered 5,750,000 shares of the Company’s common stock, including 750,000 shares subject to the underwriters’ over-allotment option, with an aggregate public offering price of \$149,500,000. The Company registered 2,249,866 of these shares, including 750,000 shares subject to the underwriters’ over-allotment option, on its behalf and 3,500,134 of these shares on behalf of certain stockholders of the Company, including certain officers of the Company and an officer who is also a director of the Company.

On November 10, 2003, the Company completed its follow-on offering in which it sold 2,249,866 shares of its common stock and the selling stockholders sold 3,500,134 shares of the Company’s common stock. The sale of shares of common stock by the Company, including the sale of 750,000 shares pursuant to the exercise of the over-allotment option by the underwriters, resulted in aggregate gross proceeds of approximately \$58,500,000, approximately \$2,600,000 of which the Company applied to underwriting discounts and commissions. As a result, the Company received approximately \$55,900,000 of the offering proceeds.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The sale of shares of common stock by the selling stockholders resulted in aggregate gross proceeds of approximately \$91,000,000, of which \$4,100,000 was applied to underwriting discounts and commissions. As a result, the selling stockholders received approximately \$86,900,000 of the offering proceeds.

Note 2 — Summary of Significant Accounting Policies:

Basis of Consolidation and Foreign Currency Translation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All material intercompany balances and transactions have been eliminated.

Translation adjustments resulting from the process of remeasuring into the United States of America dollar the foreign currency financial statements of the Company's wholly owned subsidiaries, for which the United States of America dollar is the functional currency, are included in operations. For the Company's international subsidiaries which use their local currency as their functional currency, assets and liabilities are translated at exchange rates in effect at the balance sheet date and revenue and expense accounts at average exchange rates during the period. Resulting translation adjustments are recorded directly to cumulative comprehensive income.

Use of Estimates

In accordance with accounting principles generally accepted in the United States of America, management utilizes certain estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The primary estimates underlying the Company's financial statements include allowance for doubtful accounts receivable, reserves for product warranty, reserves for obsolete and slow moving inventory, income taxes and accrual for other liabilities. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with original or remaining maturities of three months or less, at the date of purchase, to be cash equivalents. Cash and cash equivalents include money market and various deposit accounts.

Marketable Securities

The Company has classified its marketable securities as "available-for-sale." All marketable securities represent the investment of funds available for current operations, notwithstanding their contractual maturities. Such marketable securities are recorded at fair value and unrealized gains and losses, if material, are recorded as a separate component of stockholders' equity (deficit) until realized. Realized gains and losses on sale of all such securities are reported in earnings, computed using the specific identification cost method. Both realized and unrealized gains have not been significant to date.

Restricted Cash

Under the terms of one of its facility leases, the Company provides security to the landlord in the form of six letters of credit totaling \$2,830,000 (see Note 5). In July 2002, the letters of credit were secured by a certificate of deposit of \$2,835,000, which was classified as restricted cash as of December 28, 2002. In June 2003, the letters of credit were secured by a deposit in a money market account of \$2,550,000, which has been classified as restricted cash as of December 27, 2003.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Inventories

Inventories are stated at the lower of cost (principally standard cost which approximates actual cost on a first-in, first-out basis) or market value. Reserves for potentially excess and obsolete inventory are made based on management's analysis of inventory levels and future sales forecasts.

The Company designs, manufactures and sells a fully custom product into a market that has been subject to cyclicity and significant demand fluctuations. Probe cards are complex products, custom to a specific chip design and have to be delivered on lead-times shorter than most manufacturers' cycle times. It is therefore common to start production and to acquire production materials ahead of the receipt of an actual purchase order. Probe cards are manufactured in low volumes, therefore, material purchases are often subject to minimum purchase order quantities in excess of the actual demand. These factors make inventory valuation adjustments part of the normally occurring cost of revenue. The aggregate inventory valuation adjustments equal the additions to the inventory reserves and were \$4,504,000, \$1,279,000 and \$3,687,000 for the years ended December 29, 2001, December 28, 2002, and for December 27, 2003, respectively. The Company retains the excess inventory until the customer's design is discontinued. The inventory may be used to satisfy customer warranty demand. When the customer's design is discontinued, the Company disposes of any excess inventory. The Company wrote-off inventories of \$3,535,000 in fiscal year 2001 and \$2,436,000 in fiscal year 2002 but did not write-off any inventories in fiscal year 2003.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is provided on a straight-line method over the estimated useful lives of the assets, generally two to five years. Leasehold improvements are amortized over their estimated useful lives or the term of the related lease, whichever is less. Upon sale or retirement of assets, the cost and related accumulated depreciation or amortization are removed from the balance sheet and the resulting gain or loss is reflected in operations.

Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed of

The Company accounts for impairment of long-lived assets in accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS No. 144 establishes a uniform accounting model for long-lived assets to be disposed of. SFAS No. 144 also requires that long-lived assets be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset to estimated undiscounted future net cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Warranty Accrual

The Company offers warranties on certain products and records a liability for the estimated future costs associated with warranty claims, which is based upon historical experience and the Company's estimate of the level of future costs. Warranty costs are reflected in the income statement as a cost of revenues. A reconciliation of the changes in the Company's warranty liability for the year ending December 28, 2002 and December 27, 2003 follows (in thousands):

Warranty accrual at December 29, 2001	\$ 430
Reserve for warranties issued during the year	1,688
Settlements made during the year	(1,439)
	<hr/>
Warranty accrual at December 28, 2002	679
Reserve for warranties issued during the year	722
Settlements made during the year	(955)
	<hr/>
Warranty accrual at December 27, 2003	\$ 446
	<hr/>

Management believes that the accrual balance at December 27, 2003 is adequate to cover estimated future costs associated with warranty claims.

Concentration of Credit Risk and Other Risks and Uncertainties

The Company maintains its cash, cash equivalents and marketable securities in accounts with three major financial institutions in the United States of America and in countries where subsidiaries operate, in the form of demand deposits and money market accounts. Deposits in these banks may exceed the amounts of insurance provided on such deposits. The Company has not experienced any losses on its deposits of cash and cash equivalents.

Carrying amounts of certain of the Company's financial instruments including cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to their short maturities. Based on borrowing rates currently available to the Company for loans with similar terms, the carrying value of notes payable and the bank line of credit at December 28, 2002 approximate fair value. Estimated fair values for marketable securities, which are separately disclosed elsewhere, are based on quoted market prices for the same or similar instruments.

The Company markets and sells its products to a narrow base of customers and generally does not require collateral. In fiscal year 2001, four customers accounted for approximately 26%, 20%, 16% and 12% of revenues. In fiscal year 2002, three customers accounted for approximately 27%, 21% and 20% of revenues. In fiscal 2003, four customers accounted for approximately 30%, 13%, 12% and 10% of revenues. At December 28, 2002, three customers accounted for approximately 26%, 25% and 19% of accounts receivable. At December 27, 2003, three customers accounted for approximately 38%, 10% and 10% of accounts receivable.

The Company operates in the intensely competitive semiconductor industry, primarily dynamic random access memory, or DRAM, which has been characterized by price erosion, rapid technological change, short product life, cyclical market patterns and heightened foreign and domestic competition. Significant technological changes in the industry could affect operating results adversely.

Certain components that meet the Company's requirements are available only from a limited number of suppliers. The rapid rate of technological change and the necessity of developing and manufacturing products with short lifecycles may intensify these risks. The inability to obtain components as required, or to develop alternative sources, if and as required in the future, could result in delays or reductions in product shipments,

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

which in turn could have a material adverse effect on the Company's business, financial condition, and results of operations.

Revenue Recognition

The Company recognizes revenue upon shipment where there is a contract or purchase order, the fee is fixed or determinable and where collectibility of the resulting receivable is reasonably assured. Revenues from product sales to customers other than distributors are recognized upon shipment and reserves are provided for estimated returns and allowances. Although the Company's distributor has no price protection rights or rights to return product, other than for warranty claims, the Company defers recognition of revenue from its distributor until the distributor confirms an order from its customer, given the lack of visibility into the distributor's inventory levels. Revenues from the licensing of the Company's design and manufacturing technology are recognized over the term of the license agreement or when the significant contractual obligations have been fulfilled.

Research and Development

Research and development costs are charged to operations as incurred.

Advertising Costs

Advertising costs, included in sales and marketing expenses, are expensed as incurred. Advertising expenses in fiscal years 2001, 2002 and 2003 were approximately \$328,000, \$114,000 and \$210,000 respectively.

Income Taxes

The Company accounts for income taxes under the provisions of SFAS No. 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Segments

The Company operates in one segment for the design, development, manufacture, sale and support of precision, high performance advanced semiconductor wafer probe cards, using one measurement of profitability to manage its business.

Stock-based Compensation

The Company uses the intrinsic value method of Accounting Principles Board Opinion No. 25 ("APB No. 25"), "Accounting for Stock Issued to Employees," in accounting for its employee stock options, and presents disclosure of pro forma information required under SFAS No. 123 ("SFAS No. 123"), "Accounting for Stock-Based Compensation."

Had compensation cost for the Company's stock option grants to employees been determined based on the fair values of the stock option at the date of grant consistent with the provisions of SFAS No. 123, the

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Company's net income would have been changed to the pro-forma amounts as follows (in thousands, except per share data):

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
Net income, as reported	\$ 250	\$ 10,359	\$ 8,559
Add: Stock-based employee compensation expense included in reported net income, net of tax	195	616	918
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of tax	(1,269)	(1,316)	(2,892)
Pro forma net income (loss)	\$ (824)	\$ 9,659	\$ 6,585
Net income (loss) per share			
Basic:			
As reported	\$ 0.06	\$ 2.33	\$ 0.41
Pro forma	\$ (0.20)	\$ 2.17	\$ 0.31
Diluted:			
As reported	\$ 0.01	\$ 0.35	\$ 0.25
Pro forma	\$ (0.20)	\$ 0.33	\$ 0.20

The Company has adopted the disclosure only provisions of SFAS No. 123. Prior to the Company's initial public offering in June 2003, the Company calculated the fair value of each option on the date of grant using the minimum value method as prescribed by SFAS No. 123. Since June 12, 2003, the Company includes an expected volatility factor of 67% in addition to the factors described in the following table in determining the fair value of all options granted. Therefore, the pro forma net income and pro forma net income per share may not be representative for future periods. The assumptions used are as follows:

	Stock Options Years Ended			ESPP Year Ended
	December 29, 2001	December 28, 2002	December 27, 2003	December 27, 2003
Risk-free interest rate	4.58%	4.48%	3.00%	0.89%
Expected life (in years)	5	5	5	0.5
Dividend yield	—	—	—	—
Expected volatility	—	—	67%	67%

The weighted-average per share grant date fair value of options granted during the years ended December 29, 2001, December 28, 2002 and December 27, 2003 was \$1.06, \$1.32 and \$7.55, respectively. The weighted average estimated fair value of purchase rights granted under the 2002 Employee Stock Purchase Plan was \$6.63 per share for fiscal 2003.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" which require that such equity instruments are recorded at their fair value on the measurement date. The measurement of stock-based compensation is subject to periodic adjustment as the underlying equity instruments vest.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Net Income Per Share

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed giving effect to all potential dilutive common stock, including options, warrants, common stock subject to repurchase and redeemable convertible preferred stock.

A reconciliation of the numerator and denominator used in the calculation of basic and diluted net income per share follows (in thousands):

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
Numerator:			
Net income	\$ 250	\$ 10,359	\$ 8,559
Denominator:			
Weighted-average common stock outstanding	4,557	4,675	21,218
Less: Weighted-average shares subject to repurchase	(528)	(227)	(171)
Weighted-average shares used in computing basic net income per share	4,029	4,448	21,047
Dilutive potential common shares used in computing diluted net income per share	24,625	25,106	13,118
Total weighted-average number of shares used in computing diluted net income per share	28,654	29,554	34,165

The following outstanding options and warrants were excluded from the computation of diluted net income per share as they had an antidilutive effect (in thousands):

	December 29, 2001	December 28, 2002	December 27, 2003
Options to purchase common stock	1,164	258	250
Warrants	46	46	—

Comprehensive Income (Loss)

Comprehensive income (loss) includes foreign currency translation adjustments and unrealized gains (losses) on available-for-sale securities, the impact of which has been excluded from net income and reflected as components of equity. The component of comprehensive income (loss) is reported on the Company's consolidated statements of stockholders' equity (deficit).

Recent Accounting Pronouncements

In December 2003, the Financial Accounting Standards Board ("FASB") issued a revised FASB Interpretation No. 46 ("FIN 46R"), "Consolidation of Variable Interest Entities, an interpretation of ARB No. 51." The FASB published the revision to clarify and amend some of the original provisions of FIN 46, which was issued in January 2003, and to exempt certain entities from its requirements. A variable interest entity ("VIE") refers to an entity subject to consolidation according to the provisions of this Interpretation. FIN 46R applies to entities whose equity investment at risk is insufficient to finance that entity's activities without receiving additional subordinated financial support provided by any parties, including equity holders, or where the equity investors (if any) do not have a controlling financial interest. FIN 46R provides that if an entity is the primary beneficiary of a VIE, the assets, liabilities, and results of operations of the VIE should be

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

consolidated in the entity's financial statements. In addition, FIN 46R requires that both the primary beneficiary and all other enterprises with a significant variable interest in a VIE provide additional disclosures. The provisions of FIN 46R are effective for the Company's fiscal 2004 first quarter. The Company does not expect the adoption of FIN 46R to have a material impact on the Company's financial position or results of operations.

Note 3 — Balance Sheet Components:

Marketable securities at December 27, 2003 consisted of the following (in thousands):

	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Market Value
Corporate bonds and notes	\$17,137	\$ 5	\$ (4)	\$17,138
Municipal bonds	29,782	9	(12)	29,779
U.S. government agencies	16,000	48	—	16,048
Total	<u>\$62,919</u>	<u>\$ 62</u>	<u>\$ (16)</u>	<u>\$62,965</u>

Marketable securities at December 28, 2002 consisted of the following (in thousands):

	Cost	Gross Unrealized Gains	Gross Unrealized Losses	Market Value
Corporate bonds and notes	\$1,510	\$ 2	\$ —	\$1,512
Foreign Debt Securities	1,503	1	—	1,504
Municipal bonds	1,043	—	—	1,043
U.S. government agencies	3,494	4	—	3,498
Total	<u>\$7,550</u>	<u>\$ 7</u>	<u>\$ —</u>	<u>\$7,557</u>

Contractual maturities of marketable securities as of December 27, 2003 were as follows (in thousands):

	Cost	Market Value
Due in one year or less	\$14,148	\$14,139
Due after one through three years	48,771	48,826
	<u>\$62,919</u>	<u>\$62,965</u>

For fiscal 2001 and 2002 gross realized gains on sales or maturities of marketable securities were not material. For fiscal 2003, the Company did not incur any gains or losses on sales or maturities of marketable securities.

Inventories, net of reserves, consisted of the following (in thousands):

	December 28, 2002	December 27, 2003
Raw materials	\$ 1,520	\$ 3,128
Work-in-progress	2,319	4,628
Finished goods	391	269
	<u>\$ 4,230</u>	<u>\$ 8,025</u>

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Property and equipment consisted of the following (in thousands):

	December 28, 2002	December 27, 2003
Machinery and equipment	\$ 19,265	\$ 24,768
Computer equipment and software	6,046	6,866
Furniture and fixtures	682	632
Leasehold improvements	3,047	3,127
Construction-in-progress	5,046	7,770
	34,086	43,163
Less: Accumulated depreciation and amortization	(17,548)	(22,668)
	\$ 16,538	\$ 20,495

Depreciation and amortization of property and equipment for the years ended December 29, 2001, December 28, 2002 and December 27, 2003 was approximately \$4,433,000, \$5,315,000 and \$5,086,000, respectively.

Accrued liabilities consisted of the following (in thousands):

	December 28, 2002	December 27, 2003
Accrued compensation and benefits	\$ 4,746	\$ 6,949
Accrued commissions	402	387
Other accrued expenses	2,529	2,811
	\$ 7,677	\$ 10,147

Note 4 — Restructuring Charges and Expenses:

During fiscal 2001, the Company recorded a restructuring charge of approximately \$1,400,000. The Company implemented the restructuring plan to better align the infrastructure with the market conditions in the semiconductor industry and to further focus the Company on the wafer probe card business. The restructuring charge consisted of \$880,000 for headcount reductions covering 14 employees in research and development, 23 employees in operations and 17 employees in selling, general and administrative. The majority of the affected employees were based in Livermore, California. Further, the Company recorded \$223,000 for the consolidation of excess facilities and \$277,000 for asset write-offs, primarily for property and equipment. The consolidation of excess facilities included the closure of certain corporate facilities that had been vacated. The charge of \$223,000 primarily related to lease termination and noncancelable lease costs. Property and equipment that was disposed of resulted in a charge of \$277,000 and primarily consisted of leasehold improvements for the excess facilities. As of December 28, 2002, the restructuring plan had been fully executed and there were no remaining payments to be made in respect of the restructuring.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Information related to the restructuring plan follows (in thousands):

	Workforce Reductions	Lease Contractual Commitments	Facilities	Total
Restructuring provisions at August 16, 2001	\$ 880	\$ 223	\$ 277	\$1,380
Utilized:				
Non-cash	—	—	(277)	(277)
Cash	(615)	(47)	—	(662)
Restructuring liability at December 29, 2001	265	176	—	441
Utilized:				
Cash	(265)	(176)	—	(441)
Restructuring liability at December 28, 2002	\$ —	\$ —	\$ —	\$ —

Note 5 — Notes Payable and Bank Line of Credit:

In March 2001, the Company entered into a financing agreement with Comerica Bank which provided for total borrowings up to \$16,000,000. The terms of the agreement provide for a revolving line of credit, up to the commitment amount of \$12,000,000 for working capital requirements and the issuance of letters of credit, an equipment line of credit, which provided for borrowings up to \$2,000,000, and a term loan of \$2,000,000, to be used only to consolidate and refund other existing long-term debt. The Company executed the term loan of \$2,000,000, and as of December 28, 2002, had an outstanding balance of \$1,125,000. In March 2002, the Company drew down \$375,000 against the equipment line of credit. Borrowings under the equipment line of credit accrued interest at an annual rate of 4.25%. As of December 28, 2002, the Company had an outstanding balance of \$375,000 under the equipment line of credit, which has been classified as a current liability. In addition, six letters of credit totaling \$2,830,000 have been issued to the lessor of the Company's facilities. All borrowings under the financing agreements are collateralized by all of the Company's assets.

In February 2003, the Company amended and restated its loan and security agreement with Comerica Bank. The loan and security agreement provided a revolving line of credit to allow for a maximum commitment amount of up to \$16,000,000. In April 2003, the Company borrowed \$1,000,000 under the revolving line of credit to pay down the outstanding amounts under the expiring equipment line of credit and term loan under the Company's prior agreement with Comerica Bank. The Company repaid the outstanding amounts under the line of credit in September 2003 and the restated loan and security agreement with Comerica Bank was terminated in December 2003.

Note 6 — Commitments and Contingencies:

Environmental Matters

The Company is subject to U.S. federal and state and foreign governmental laws and regulations relating to the protection of the environment. Management believes that the Company complies with all material environmental laws and regulations that apply to the Company. In May 2003, the Company received a Notice of Violation from the Bay Area Air Quality Management District, or "BAAQMD," regarding its record keeping relating to its usage of wipe cleaning solvent. The Company introduced corrective action to prevent any continued or recurrent record keeping violation, and the Company resolved the Notice of Violation with a monetary payment that was not significant. In connection with an inspection conducted in August 2003 of the Company's facilities, the Company received in December 2003 an Inspection Report from the Department of Toxic Substances Control, or "DTSC." The DTSC report reflects certain violations that had not been previously addressed by the Company in correspondence with the DTSC. The Company promptly took

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

appropriate steps to address all of the violations noted, believes that all such violations were addressed, and sent correspondence to the DTSC confirming such corrective steps. At the present time it is not clear whether any monetary penalty will be imposed by the DTSC for the violations, and if so, the relative significance of the penalty. In January 2004, the Company received a Notice of Violation from the BAAQMD for "Failure to Meet Permit Condition" during a routine inspection of the Company's facilities conducted by an Inspector with the Compliance & Enforcement Division of the BAAQMD. The January BAAQMD Notice reflects that the Company recently exceeded permissible usage limits on its solvent bench operations. The limit was exceeded only recently, in November 2003. The Company has identified appropriate corrective action and it is also continuing its efforts to get the permit modified to reflect the current usage requirements. Notwithstanding the Company's contemplated corrective action, the January BAAQMD Notice remains unresolved and the Company may be subject to a penalty based upon the unresolved matters set forth in the January BAAQMD Notice. In view of the May BAQMD Notice discussed above and the fact that a payment was associated with the resolution thereof, the Company presently believes that it is likely that the January BAAQMD Notice will result in the imposition of a monetary penalty. At the present time it is not clear whether any monetary payment would be significant.

It is possible that in the future, the Company may receive environmental violation notices, and that final resolution of the violations identified by these notices could harm its operating results. New laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination at the Company's or others' sites or the imposition of new cleanup requirements could have a negative effect on the Company's operating results.

Leases

The Company leases its facilities under various operating leases which expire through December 2012. In addition to the base rental, the Company is responsible for certain taxes, insurance and maintenance costs. Under the terms of the lease agreements, the Company has the option to extend the term leases. As of December 27, 2003, aggregate future minimum lease payments are as follows (in thousands):

2004	\$ 3,419
2005	2,569
2006	2,487
2007	2,572
2008	2,660
Thereafter	11,160
	<u>\$24,867</u>

Rent expense for the years ended December 29, 2001, December 28, 2002 and December 27, 2003 was approximately \$1,016,000, \$2,902,000 and \$3,417,000, respectively.

Indemnification Arrangements

The Company enters into indemnification arrangements with third parties, including customers, business partners and lessors, from time to time in the ordinary course of its business. Under these arrangements, the Company has agreed to defend, indemnify and hold the third party harmless from and against losses arising from a breach of representations or covenants of the Company, from claims of intellectual property infringement, or from other claims concerning the Company's products made against those third parties. These arrangements may limit the time within which an indemnification claim can be made, the type of the claim and the total amount that the Company can be required to pay in connection with the indemnification obligation. In addition, the Company has entered into indemnification agreements with its

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

directors and officers, and the Company's bylaws contain indemnification obligations in favor of the Company's directors, officers and agents. It is not possible to determine or reasonably estimate the maximum potential amount of future payments under these indemnification arrangements due to the varying terms of such arrangements, the history of prior indemnification claims and the unique facts and circumstances involved in each particular arrangement and in each potential future claim for indemnification. The Company is not aware of any requests for indemnification under these arrangements. The Company has not recorded any liabilities for these indemnification arrangements on the Company's consolidated balance sheet as of December 27, 2003.

Legal Matters

On February 24, 2004, the Company filed in the Seoul Southern District Court, located in Seoul, South Korea, two separate complaints against Phicom Corporation ("Phicom"), a Korean corporation, alleging infringement of a total of four Korean patents issued to the Company. One complaint alleges that Phicom is infringing the Company's Korean Patent Nos. 252,457, entitled "Method of Fabricating Interconnections Using Cantilever Elements and Sacrificial Substrates," and 324,064, entitled "Contact Tip Structures for Microelectronic Interconnection Elements and Methods of Making Same." The other complaint alleges Phicom is infringing the Company's Korean Patent Nos. 278,342, entitled "Method of Altering the Orientation of Probe Elements in a Probe Card Assembly," and 399,210, entitled "Probe Card Assembly." Both of the complaints seek injunctive relief. The court actions are a part of the Company's ongoing efforts to protect the intellectual property embodied in its proprietary technology, including its MicroSpring interconnect technology. The Company could incur material expenses in these litigations.

From time to time, the Company may become involved in litigation relating to additional claims arising from the ordinary course of business. Other than previously disclosed, management of the Company is not currently aware of any matters that will have a material adverse affect on the financial position, results of operations or cash flows of the Company.

Note 7 — Redeemable Convertible Preferred Stock:

From April through December 1995, the Company sold 6,389,103 shares of Series A redeemable convertible preferred stock to new investors for net cash proceeds of \$349,000.

In December 1995, the Company sold 3,448,293 shares of Series B redeemable convertible preferred stock to new investors for net cash proceeds of \$2,967,000.

From May through July 1996, the Company sold 3,298,161 shares of Series C redeemable convertible preferred stock to existing and 60% to new investors for net cash proceeds of \$5,426,000.

From April 1997 through October 1998, the Company sold 5,552,973 shares of Series D redeemable convertible preferred stock to existing and 84% to new investors for net cash proceeds of \$19,221,000. In October 2000, the Company issued an additional 326,545 shares of Series D redeemable convertible preferred stock pursuant to the exercise of a warrant. In June 2002, the Company issued an additional 8,083 shares of Series D redeemable convertible preferred stock pursuant to the exercise of a warrant.

From August through October 1999, the Company sold 2,666,666 shares of Series E redeemable convertible preferred stock to existing and 80% to new investors for net cash proceeds of \$19,950,000.

From September through November 2000, the Company sold 633,130 shares of Series F redeemable convertible preferred stock to existing and 94% to new investors for net cash proceeds of \$6,910,000.

From July through September 2001, the Company sold 679,672 shares of Series G redeemable convertible preferred stock to an existing and 98% to new investors for net cash proceeds of \$10,072,000.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of December 29, 2001, the redeemable convertible preferred stock comprised (in thousands, except share and per share data):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference Per Share	Annual Dividends Per Share
Series A	6,389,103	6,389,103	\$ 349	\$ —	\$0.0424
Series B	3,527,258	3,448,293	2,967	0.87	0.0696
Series C	3,300,000	3,298,161	5,426	1.65	0.1320
Series D	6,376,812	5,879,518	19,221	3.45	0.2760
Series E	2,866,667	2,666,666	19,950	7.50	0.6000
Series F	750,000	633,130	6,910	11.00	0.8800
Series G	1,470,000	679,672	10,072	15.00	1.2000
	<u>24,679,840</u>	<u>22,994,543</u>	<u>\$64,895</u>		

As of December 28, 2002 the redeemable convertible preferred stock comprised (in thousands, except share and per share data):

	Number of Shares Authorized	Number of Shares Issued and Outstanding	Proceeds, Net of Issuance Cost	Liquidation Preference Per Share	Annual Dividends Per Share
Series A	6,389,103	6,389,103	\$ 349	\$ —	\$0.0424
Series B	3,521,020	3,448,293	2,967	0.87	0.0696
Series C	3,298,161	3,298,161	5,426	1.65	0.1320
Series D	5,893,731	5,887,601	19,221	3.45	0.2760
Series E	2,666,666	2,666,666	19,950	7.50	0.6000
Series F	678,630	633,130	6,910	11.00	0.8800
Series G	679,672	679,672	10,072	15.00	1.2000
	<u>23,126,983</u>	<u>23,002,626</u>	<u>\$64,895</u>		

Upon the closing of the Company's initial public offering in June 2003, all outstanding shares of redeemable convertible preferred stock converted into an equal number of shares of common stock.

Note 8 — Stockholders' Equity (Deficit):**Preferred Stock**

The Company has authorized 10,000,000 shares of undesignated preferred stock, \$0.001 par value, none of which is issued and outstanding. The Company's Board of Directors shall determine the rights, preferences, privileges and restrictions of the preferred stock, including dividends rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series.

Common Stock

Each share of common stock has the right to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to the prior rights of holders of all classes of stock outstanding having priority rights as to dividends. No dividends have been declared or paid as of December 27, 2003.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

During fiscal 2001 and 2002, the Company issued fully vested unrestricted common stock in exchange for goods or services from non-employees. The Company believes that the fair value of the common stock is more reliably measurable than the fair value of the consideration received. The Company has measured these transactions using the fair value of the unrestricted common stock at the time of issuance and has recognized the related expenses immediately.

Warrants

In connection with a financing agreement entered into by the Company in April 1996, the Company issued warrants to purchase an aggregate of 72,727 shares of Series B redeemable convertible preferred stock, now common stock, at an exercise price of \$1.65 per share. These warrants expire in June 2008. The value of these warrants determined using a Black-Scholes model was not material.

In September 2000, the Company entered into a seven year technology license agreement to transfer technology to a related party. In connection with the license agreement, the Company issued a warrant to purchase 45,500 shares of Series F redeemable convertible preferred stock, now common stock, at an exercise price of \$11.00 per share. The warrant was fully vested upon grant and nonforfeitable. This warrant is exercisable on September 22, 2005 and would have become exercisable earlier with respect to 22,750 shares on March 22, 2003 if, on or before that date, the warrant holder had achieved specified commercial milestones. Further, the warrant will become exercisable immediately with respect to all 45,500 shares if the warrant holder has achieved certain higher commercial milestones. As of December 27, 2003, no shares are exercisable. This warrant expires upon the earlier of September 23, 2005 or immediately prior to an acquisition of the Company. The Company reserved 45,500 shares of common stock in the event of exercise. The fair value of this warrant, estimated on the date of grant using a Black-Scholes model, of \$306,220 has been capitalized as an other asset, and is being amortized against revenue using the straight-line method over the expected life of the technology of five years. The assumptions used in the calculation were: dividend yield of 0%; expected volatility of 67%; an expected term of 5 years; risk free interest rate of 6.00%.

Stock Option Plans

The Company has reserved shares of common stock for issuance under the 1996 Stock Option Plan, Incentive Option Plan and Management Incentive Option Plan (the "Plans"). Under all Plans, the Board of Directors may issue incentive stock options to employees and nonqualified stock options and stock purchase rights to consultants or employees of the Company. The Board of Directors has the authority to determine to whom options will be granted, the number of shares, the term and exercise price (which cannot be less than fair market value at date of grant for incentive stock options or 85% of fair market value for nonqualified stock options). If an employee owns stock representing more than 10% of the outstanding shares, the price of each share shall be at least 110% of the fair market value, as determined by the Board of Directors. Generally, all options are immediately exercisable and vest 25% on the first anniversary of the vesting commencement date and on a monthly basis thereafter for a period of an additional three years. The options have a maximum term of ten years. Unvested option exercises are subject to repurchase upon termination of the holder's status as an employee or consultant. At December 28, 2002 and December 27, 2003, 189,849 shares of common stock and 154,811 shares of common stock, respectively, were subject to the Company's right of repurchase.

On April 18, 2002, the Board of Directors adopted the 2002 Equity Incentive Plan ("2002 Plan"), which became effective upon the effective date of the initial public offering of the Company's common stock. The 2002 Plan provides for the grant of both incentive stock options and nonqualified stock options, restricted stock and stock bonuses. The incentive stock options may be granted to the employees and the nonqualified stock options, and all awards other than incentive stock options, may be granted to employees, officers, directors and consultants. The exercise price of incentive stock options must be at least equal to the fair market value of

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

common stock on the date of grant. The exercise price of incentive stock options granted to 10% stockholders must be at least equal to 110% of the fair market value of common stock on the date of grant and vest over 5 years. Options granted under the 2002 Plan are exercisable as determined by the Board of Directors, and generally expire ten years from date of grant. The Company has reserved 500,000 shares of common stock for issuance under the 2002 Plan plus any shares which have been reserved but not issued under the Company's existing Plans, plus any shares repurchased at the original purchase price and any options which expire, thereafter. With the effectiveness of the 2002 Plan, the Company will not grant any options under the 1996 Stock Option Plan, the Incentive Option Plan and the Management Incentive Option Plan. In addition, on each January 1, the number of shares available for issuance under the 2002 Plan will be increased by an amount equal to 5.0% of the outstanding shares of common stock on the preceding day.

Activity under the Plans and the 2002 Plan is set forth below (in thousands, except share and per share data):

	Outstanding Options				
	Shares Available	Number of Shares	Exercise Price	Aggregate Price	Weighted Average Exercise Price
Balances, December 30, 2000	687,730	3,264,581	\$ 0.10-\$6.00	\$13,698	\$ 4.20
Additional shares reserved	1,840,000	—	—	—	—
Options granted	(1,952,073)	1,952,073	6.00-6.50	12,308	6.31
Options exercised	—	(168,229)	0.10-6.00	(341)	2.03
Options canceled/shares repurchased	922,278	(885,971)	0.50-6.50	(4,444)	5.02
Balances, December 29, 2001	1,497,935	4,162,454	0.10-6.50	21,221	5.10
Additional shares reserved	3,500,000	—	—	—	—
Options granted	(1,999,243)	1,999,243	6.50-8.00	13,364	6.68
Options exercised	—	(223,113)	0.10-6.50	(1,070)	4.79
Options canceled	234,559	(234,559)	1.50-8.00	(1,390)	5.93
Balances, December 28, 2002	3,233,251	5,704,025	0.10-8.00	32,125	5.63
Additional shares reserved	500,000	—	—	—	—
Options granted	(1,807,547)	1,807,547	6.50-26.07	29,571	16.36
Options exercised	—	(425,653)	0.10-9.00	(1,655)	3.89
Options canceled	399,996	(399,996)	2.50-19.50	(2,575)	6.44
Balances, December 27, 2003	2,325,700	6,685,923	\$0.10-\$26.07	\$57,466	\$ 8.60

The number of options outstanding and vested at December 28, 2002 was 1,691,430 shares.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The options outstanding and vested by exercise price at December 27, 2003 are as follows:

Options Outstanding				Options Vested	
Range of Exercise Prices	Number of Options Outstanding	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price	Number Vested	Weighted Average Exercise Price
\$0.10	15,000	1.40	\$ 0.10	15,000	\$ 0.10
\$0.17	12,002	3.27	0.17	12,002	0.17
\$0.50	11,319	3.84	0.50	11,319	0.50
\$0.80	76,120	3.98	0.80	76,120	0.80
\$1.25	9,150	4.29	1.25	9,150	1.25
\$1.50	52,253	4.81	1.50	52,253	1.50
\$2.50	12,388	5.22	2.50	12,388	2.50
\$3.25	561,662	5.45	3.25	524,224	3.25
\$3.75 – \$5.00	23,754	5.68	4.11	23,754	4.11
\$5.50	824,260	6.66	5.50	624,101	5.50
\$6.00	651,896	7.10	6.00	461,903	6.00
\$6.50	2,471,992	8.16	6.50	349,566	6.50
\$7.50 – \$8.00	224,904	8.37	7.89	92,466	7.87
\$9.00	299,701	9.39	9.00	769	9.00
\$14.00	314,586	9.45	14.00	314,586	14.00
\$17.95 – \$19.43	158,650	9.61	18.62	5,208	18.72
\$19.50	838,586	9.63	19.50	6,899	19.50
\$19.67 – \$26.07	127,700	9.79	20.98	—	—
	<u>6,685,923</u>			<u>2,591,708</u>	

Deferred stock-based compensation

During fiscal 2001 and fiscal 2002, and through the Company's initial public offering in June 2003, the Company issued options to certain employees under the Plan with exercise prices below the deemed fair market value of the Company's common stock at the date of grant. In accordance with the requirements of APB No. 25, the Company has recorded deferred stock-based compensation for the difference between the exercise price of the stock option and the deemed fair market value of the Company's stock at the grant. This deferred stock-based compensation is amortized to expense on a straight-line basis over the period during which the Company's right to repurchase the stock lapses or the options become vested, generally four years. During the years ended December 29, 2001, December 28, 2002, and December 27, 2003, the Company has recorded deferred stock-based compensation related to these options in the amounts of \$4,265,000, \$9,262,000 and \$439,000, net of cancellations, respectively, of which \$195,000, \$997,000 and \$1,484,000 had been amortized to expense during fiscal 2001, 2002 and 2003, respectively.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Stock-based compensation expense related to stock options granted to non-employees is recognized on a straight-line basis, as the stock options are earned. During fiscal 2001, the Company issued options to non-employees. The options generally vest ratably over four years. The values attributable to these options are amortized over the service period and the unvested portion of these options were remeasured at each vesting date. The Company believes that the fair value of the stock options is more reliably measurable than the fair value of the services received. The fair value of the stock options granted were revalued at each reporting date using the Black-Scholes option pricing model as prescribed by SFAS No. 123 using the following assumptions:

	Year Ended December 29, 2001
Risk-free interest rate	5.75%
Expected life (in years)	10
Dividend yield	—
Expected volatility	67%

The stock-based compensation expense will fluctuate as the deemed fair market value of the common stock fluctuates. In connection with the grant of stock options to non-employees, the Company recorded deferred stock-based compensation of \$259,000, \$91,000 and none for the years ended December 29, 2001, December 28, 2002, and for December 27, 2003, respectively. Stock-based compensation expenses related to options granted to non-employees were allocated to research and development, selling, general and administrative expenses as follows (in thousands):

	Years Ended	
	December 29, 2001	December 28, 2002
Research and development	\$ 70	\$ —
Selling, general and administrative	204	42
	<u>\$ 274</u>	<u>\$ 42</u>

2002 Employee Stock Purchase Plan

On April 18, 2002, the Board of Directors approved the 2002 Employee Stock Purchase Plan ("2002 ESPP"). The 2002 ESPP is designed to enable eligible employees to purchase shares of common stock at a discount on a periodic basis through payroll deductions or through a single lump sum cash payment in the case of the first offering period. Except for the first offering period which had a seven-month duration, each offering period will be for two years and will consist of four six-month purchase periods. The price of the common stock purchased shall be 85% of the lesser of the fair market value of the common stock on the first day of the applicable offering period or the last day of each purchase period. 1,500,000 shares of common stock are reserved for issuance under the 2002 ESPP and will be increased on each January 1 by an amount equal to 1.0% of the outstanding shares of common stock on the preceding day. No shares were purchased under the 2002 ESPP as of December 27, 2003.

Notes receivable

In fiscal 2000 and 2001, the Company received full recourse notes receivable from certain employees in exchange for common stock. The notes bear interest at the applicable market interest rate, ranging from 4.46% to 6.60%, and have due dates through May 2007. Under the terms of the full recourse notes receivable, the Company may proceed against any assets of the holder of the notes, or against the collateral securing the

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

notes, or both, in event of default. The notes are collateralized by the underlying shares of common stock. During fiscal 2003, the majority of the notes receivable had been fully paid.

Note 9 — Income Taxes:

The components of income before income taxes were as follows (in thousands):

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
U.S.	\$ (965)	\$ 8,439	\$ 14,703
Foreign	1,522	(1,205)	(861)
	<u>\$ 557</u>	<u>\$ 7,234</u>	<u>\$ 13,842</u>

The components of the provision (benefit) for income taxes are as follows (in thousands):

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
Current:			
Federal	\$ 158	\$ 385	\$ 3,031
State	108	(14)	2
Foreign	41	143	158
	<u>307</u>	<u>514</u>	<u>3,191</u>
Deferred:			
Federal	—	(2,073)	1,645
State	—	(1,566)	447
	<u>—</u>	<u>(3,639)</u>	<u>2,092</u>
Total provision (benefit) for income taxes	<u>\$ 307</u>	<u>\$ (3,125)</u>	<u>\$ 5,283</u>

At December 27, 2003, the Company had state net operating loss carryforward of approximately \$825,000 available to offset future taxable income. This carryforward begins to expire in 2006 unless utilized.

At December 27, 2003, the Company had research credit carryforwards of approximately \$108,000 and \$1,126,000 for federal and state income tax purposes, respectively. If not utilized, the federal carryforwards will expire in various amounts beginning in 2021. The state research credit can be carried forward indefinitely.

Under the Internal Revenue Code, as amended, and similar state provisions, certain substantial changes in the Company's ownership could result in an annual limitation on the amount of credit net operating loss and carryforwards that can be utilized in future years to offset future taxable income. Annual limitations may result in the expiration of net operating loss and credit carryforwards before they are used.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Components of the Company's deferred tax assets are as follows (in thousands):

	December 28, 2002	December 27, 2003
Net operating losses	\$ 37	\$ 38
Tax credits	2,297	845
Depreciation and amortization	(196)	(59)
Other reserves and accruals	1,501	2,149
	\$ 3,639	\$ 2,973

Management periodically evaluates the recoverability of the deferred tax assets and recognizes the tax benefit only as reassessment demonstrates that they are realizable. At such time, if it is determined that it is more likely than not that the deferred tax assets are realizable, the valuation allowance will be adjusted. As of December 28, 2002 and December 27, 2003, the Company has not provided a valuation allowance because it believes it is more likely than not that all deferred tax assets will be realized in the foreseeable future.

Tax benefits of \$1,668,000 in fiscal 2003 associated with the exercise of employee stock options and other employee stock programs were allocated to stockholders' equity.

The items accounting for the difference between income taxes computed at the federal statutory rate and the provision (benefit) for income taxes consisted of:

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
Federal statutory rate	34.0%	34.0%	35.0%
State taxes and credits, net of federal benefit	(77.4)	2.0	3.2
Non-deductible deferred stock-based compensation	28.6	4.7	3.6
No tax benefit of foreign losses	183.9	44.6	2.6
Extraterritorial income exclusion	(35.0)	(2.6)	(3.9)
Tax credits	(132.3)	(4.7)	(2.4)
Change in valuation allowance	56.0	(125.3)	—
Permanent items and other	(2.7)	4.2	0.1
Total	55.1%	(43.1)%	38.2%

Note 10 — Employee Benefit Plan:

In 1996, the Company adopted a retirement plan which is qualified under Section 401(k) of the Internal Revenue Code of 1986. Eligible employees may make voluntary contributions to the retirement plan of up to 25% of their annual compensation, not to exceed the statutory amount, and the Company may make matching contributions. The Company made no contributions to the retirement plan in fiscal 2001, 2002 and 2003.

Note 11 — Operating Segment and Geographic Information:

The Company operates in one segment regarding the design, development, manufacture, sale and support of precision, high performance advanced semiconductor wafer probe cards. In accordance with SFAS No. 131 ("SFAS No. 131"), "Disclosures About Segments of an Enterprise and Related Information," the Company's chief operating decision-maker has been identified as the President and Chief Executive Officer, who reviews operating results to make decisions about allocating resources and assessing performance for the entire company. Since the Company operates in one segment and in one group of similar products and services, all

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

financial segment and product line information required by SFAS No. 131 can be found in the consolidated financial statements.

As of December 28, 2002 and December 27, 2003, 97% and 96% of long-lived assets are maintained in the United States of America, respectively.

The following table summarizes revenue by geographic region based upon invoicing location:

	Years Ended		
	December 29, 2001	December 28, 2002	December 27, 2003
North America	52.7%	55.6%	50.1%
Taiwan	26.4	20.9	13.5
Japan	6.9	7.1	20.1
Asia (excluding Japan and Taiwan)	0.2	0.9	6.0
Europe	13.8	15.5	10.3
Total	100.0%	100.0%	100.0%

Revenues to Intel Corporation represented 12% of the Company's fiscal 2001 revenues, 27% of fiscal 2002 revenues and 30% of fiscal 2003 revenues. Revenues to Spirox Corporation represented 26% of the Company's fiscal 2001 revenues, 21% of fiscal 2002 revenues and 13% of fiscal 2003 revenues.

Revenues to Infineon Technologies AG represented 16% of the Company's fiscal 2001 revenues, 20% of fiscal 2002 revenues and 10% of fiscal 2003 revenues.

Samsung Electronic Industries Co., Ltd. represented 20% of the Company's fiscal 2001 revenues. Elpida represented 12% of the Company's fiscal 2003 revenues. No other customer represented greater than 10% of the Company's revenues in fiscal 2001, 2002 and 2003.

Note 12 — Related Party Transactions:

The Company provided services or sold products to related parties, who are also stockholders of the Company's common stock. For the years ended December 29, 2001, December 28, 2002 and December 27, 2003 revenue recognized from these related parties was \$46,042,000, \$50,639,000 and 42,676,000, respectively. At December 28, 2002 and December 27, 2003, the Company had accounts receivable of \$8,593,000 and \$3,707,752, respectively, from these related parties.

The Company purchased inventories from related parties, and paid commissions to related parties, who are also stockholders of the Company's common stock. For the years ended December 29, 2001, December 28, 2002 and December 27, 2003, transactions with these related parties were \$11,458,000, \$9,767,000 and \$13,155,000, respectively. At December 28, 2002 and December 27, 2003, the Company had accounts payable of \$2,903,000 and \$2,627,000, respectively, to these related parties.

In July 2003, the Company purchased approximately \$3,151,000 of manufacturing equipment from a company where one of the members of the Company's Board of Directors is also an officer of that company. This transaction was negotiated at arms length and the supplier was selected after a comprehensive, competitive bidding process. As of December 27, 2003 the Company had no unpaid amounts with respect to this equipment purchase.

FORMFACTOR, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Note 13 — Subsequent Events:

In January and February 2004, three stockholders, fully repaid outstanding notes receivables in the amount of \$661,000. As of February 21, 2004 the Company no longer has any notes receivables from stockholders outstanding.

In February 2004, a contractor at the Company's manufacturing facility discharged certain diesel fuel mixed with water into a storm drain. The Company notified the appropriate agencies, assisted in their investigation and in the activities of a third party to assist with the cleanup activities. The Company has not yet been notified as to whether any financial penalties will be imposed based upon the incident and, if imposed, whether such penalties would be significant.

In March 2004, the Company entered into three forward exchange contracts to hedge a portion of, but not all, existing and anticipated foreign currency transactions denominated in Japanese Yen expected to occur within six months. These outstanding foreign currency forward exchange contracts allow the Company to sell 605,500,000 Yen for \$5,400,000 with contract rates ranging from 112.49 Yen to 112.62 Yen per U.S. dollar. These contracts expire on various dates through July 2004. The Company does not use derivative financial instruments for trading or speculative purposes.

**REPORT OF INDEPENDENT AUDITORS ON
FINANCIAL STATEMENT SCHEDULE**

To the Board of Directors
of FormFactor, Inc.:

Our audits of the consolidated financial statements referred to in our report dated March 17, 2004 appearing in this Annual Report on Form 10-K also included an audit of the financial statement schedule listed in Item 15(a)(2) of this Form 10-K. In our opinion, the financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

San Jose, California

March 22, 2004

SCHEDULE II
FORMFACTOR, INC.

VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 29, 2001, December 28, 2002 and December 27, 2003
(in thousands)

Description	Balance at Beginning of Year	Additions	Deductions	Balance at End of Year
Allowance for doubtful accounts receivable				
Year ended December 29, 2001	\$ 580	\$ —	\$ 166	\$ 414
Year ended December 28, 2002	\$ 414	\$ 165	\$ 326	\$ 253
Year ended December 27, 2003	\$ 253	\$ —	\$ 150	\$ 103
Reserve for excess and obsolete inventory				
Year ended December 29, 2001	\$ 7,647	\$ 4,504	\$ 3,535	\$8,616
Year ended December 28, 2002	\$ 8,616	\$ 1,279	\$ 2,436	\$7,459
Year ended December 27, 2003	\$ 7,459	\$ 3,687	\$ 1,728	\$9,418
Allowance against deferred tax assets				
Year ended December 29, 2001	\$ 8,749	\$ 312	\$ —	\$9,061
Year ended December 28, 2002	\$ 9,061	\$ —	\$ 9,061	\$ —
Year ended December 27, 2003	\$ —	\$ —	\$ —	\$ —

INDEX TO EXHIBITS

Set forth below is a list of exhibits that are being filed or incorporated by reference into this Report on Form 10-K:

Exhibit Number	Exhibit Description	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File No.	Date of First Filing		
3.01	Amended and Restated Certificate of Incorporation of the Registrant as filed with the Delaware Secretary of State on June 17, 2003.	S-1	333-109815	10/20/03	3.01	
3.02	Amended and Restated Bylaws of the Registrant.	S-1	333-109815	10/20/03	3.02	
4.01	Specimen Common Stock Certificate.	S-1/A	333-86738	5/28/02	4.01	
4.02	Sixth Amended and Restated Rights Agreement by and among the Registrant and certain stockholders of the Registrant dated July 13, 2001.	S-1	333-86738	4/22/02	4.02	
4.03	Stockholders Agreement by and among the Registrant, Dr. Igor Y. Khandros, Susan Bloch and Richard Hoffman dated February 9, 1994.	S-1	333-86738	4/22/02	4.03	
4.04	Stockholders Agreement by and among the Registrant, Dr. Igor Y. Khandros, Susan Bloch and Milton Ohring dated April 11, 1994.	S-1	333-86738	4/22/02	4.04	
4.05	Stockholders Agreement by and among the Registrant, Dr. Igor Y. Khandros, Susan Bloch and Benjamin Eldridge dated August 12, 1994.	S-1	333-86738	4/22/02	4.05	
4.06	Stockholders Agreement by and among the Registrant, Dr. Igor Y. Khandros, Susan Bloch and Charles Baxley, P.C. dated September 8, 1994.	S-1	333-86738	4/22/02	4.06	
10.01	Form of Indemnity Agreement.	S-1/A	333-86738	5/28/02	10.01	
10.02	1995 Stock Plan, and form of option grant.	S-1	333-86738	4/22/02	10.02	
10.03	1996 Stock Option Plan, and form of option grant.	S-1	333-86738	4/22/02	10.03	
10.04	Incentive Option Plan, and form of option grant.	S-1	333-86738	4/22/02	10.04	
10.05	Management Incentive Option Plan, and form of option grant.	S-1	333-86738	4/22/02	10.05	
10.06	2002 Equity Incentive Plan, and forms of option grant.	S-1/A	333-86738	6/10/03	10.06	
10.07	2002 Employee Stock Purchase Plan.	S-1/A	333-86738	6/10/03	10.07	
10.08	Key Management Bonus Plan (2003).	S-1/A	333-86738	6/10/03	10.08.1	
10.09	Sales Incentive Plan (first half 2003).	S-1/A	333-86738	6/10/03	10.09.1	
10.10	Sales Incentive Plan (second half 2003).	S-1	333-109815	10/20/03	10.10	
10.11*	Key Management Bonus Plan (2004).	—	—	—	—	X
10.12*	Sales Incentive Plan (first half 2004).	—	—	—	—	X
10.13	Employment Offer Letter dated October 29, 1998 to Yoshikazu Hatsukano.	S-1	333-86738	4/22/02	10.11	

[Table of Contents](#)

Exhibit Number	Exhibit Description	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File No.	Date of First Filing		
10.14	Lease by and between Paul E. Iacono and the Registrant dated June 26, 1995.	S-1	333-86738	4/22/02	10.12	
10.15	First Option to Extend Lease Term by and between Paul E. Iacono and the Registrant dated October 4, 2002 for the Lease between the parties dated June 26, 1995.	S-1/A	333-86738	12/18/02	10.12.1	
10.16	Lease by and between Paul E. Iacono and the Registrant dated April 12, 1996.	S-1	333-86738	4/22/02	10.13	
10.17	First Option to Extend Lease Term by and between Paul E. Iacono and the Registrant dated October 4, 2002 for the Lease between the parties dated April 12, 1996.	S-1/A	333-86738	12/18/02	10.13.1	
10.18	Lease by and between Paul E. Iacono and the Registrant dated November 20, 1996.	S-1	333-86738	4/22/02	10.14	
10.19	First Option to Extend Lease Term by and between Paul E. Iacono and the Registrant dated October 4, 2002 for the Lease between the parties dated November 20, 1996.	S-1/A	333-86738	12/18/02	10.14.1	
10.20	Lease by and between Paul E. Iacono and the Registrant dated April 24, 1997.	S-1	333-86738	4/22/02	10.15	
10.21	First Option to Extend Lease Term by and between Paul E. Iacono and the Registrant dated October 4, 2002 for the Lease between the parties dated April 24, 1997.	S-1/A	333-86738	12/18/02	10.15.1	
10.22	Lease by and between Richard K. and Pamela K. Corbett, Robert and Cheryl Rumberger, Connie Duke and the Registrant dated March 12, 1998.	S-1	333-86738	4/22/02	10.16	
10.23	First Amendment to Standard Industrial/ Single Tenant Lease — Net by and between Richard K. Corbett and Pamela K. Corbett, Robert Rumberger and Cheryl Rumberger, and the Registrant dated April 30, 2003.	S-1/A	333-86738	5/21/03	10.16.1	
10.24	Lease by and between L One and the Registrant dated March 25, 1998.	S-1	333-86738	4/22/02	10.17	
10.25	Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated May 3, 2001.	S-1/A	333-86738	6/10/03	10.18	
10.26	First Amendment to Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated January 31, 2003.	S-1/A	333-86738	5/07/03	10.18.1	
10.27	Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated May 3, 2001.	S-1/A	333-86738	6/10/03	10.19	
10.28	First Amendment to Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated January 31, 2003.	S-1/A	333-86738	5/07/03	10.19.1	

[Table of Contents](#)

Exhibit Number	Exhibit Description	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File No.	Date of First Filing		
10.29	Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated May 3, 2001.	S-1/A	333-86738	6/10/03	10.20	
10.30	First Amendment to Pacific Corporate Center Lease by and between Greenville Investors, L.P. and the Registrant dated January 31, 2003.	S-1/A	333-86738	5/07/03	10.20.1	
10.31	Third Amended and Restated Loan and Security Agreement by and between Comerica Bank — California and the Registrant dated February 21, 2003.	S-1/A	333-86738	5/07/03	10.29	
10.32	Basic Purchase Agreement by and among Infineon Technologies Aktiengesellschaft, Whiteoak Semiconductor Partnership, Promos Technologies Inc. and the Registrant dated July 9, 1999.	S-1/A	333-86738	6/10/03	10.22	
10.33	Letter Agreement by and between Infineon Technologies Aktiengesellschaft and the Registrant dated July 19, 2002.	S-1/A	333-86738	5/07/03	10.22.1	
10.34	Letter Agreement by and between Infineon Technologies Aktiengesellschaft and the Registrant dated July 1, 2003.	S-1	333-109815	10/20/03	10.22.2	
10.35	Letter Agreement by and between Infineon Technologies Aktiengesellschaft and the Registrant dated December 10, 2003.	—	—	—	—	X
10.36	Authorized International Distributor Agreement by and between Spirox Corporation and the Registrant dated June 1, 2000.	S-1/A	333-86738	6/10/03	10.23	
10.37	Amendment No. 1 to Authorized International Distributor Agreement by and between Spirox Corporation and the Registrant dated July 1, 2003.	S-1	333-109815	10/20/03	10.23.1	
10.38	Probecard Purchase Agreement by and between Samsung Electronics Industries Co., Ltd. and the Registrant dated November 22, 2000.	S-1/A	333-86738	6/10/03	10.24	
10.39	Agreement by and between Samsung Electronics Industries Co., Ltd. and the Registrant dated October 31, 2001, Agreement by and between Samsung Electronics Industries Co., Ltd. and the Registrant dated January 10, 2002, and Agreement by and between Samsung Electronics Industries Co., Ltd. and the Registrant dated January 22, 2003.	S-1/A	333-86738	6/10/03	10.24.1	

[Table of Contents](#)

Incorporated by Reference

Exhibit Number	Exhibit Description	Incorporated by Reference			Exhibit Number	Filed Herewith
		Form	File No.	Date of First Filing		
10.40	Intel Corporation Purchase Agreement — Capital Equipment and Services by and between Intel Corporation and the Registrant dated January 8, 2001, and as amended on January 22, 2001, on March 1, 2001, and on April 1, 2001.	S-1/A	333-86738	6/10/03	10.25	
10.41	Amendment to Intel Corporation Purchase Agreement by and between Intel Corporation and the Registrant dated May 22, 2002.	S-1/A	333-86738	5/07/03	10.25.1	
10.42	Amendment to Intel Corporation Purchase Agreement by and between Intel Corporation and the Registrant dated June 30, 2002.	S-1	333-109815	10/20/03	10.25.2	
10.43	Production and Development Materials and Services Purchase Agreement by and between Harbor Electronics and the Registrant dated April 17, 2002.	S-1/A	333-86738	6/10/03	10.27	
10.44	Production and Development Materials and Services Purchase Agreement by and between NTK Technologies and the Registrant dated June 25, 2002.	S-1/A	333-86738	6/10/03	10.28	
10.45*	Probe Card Purchase Agreement by and between Elpida Memory, Inc. and the Registrant dated April 1, 2002 and Agreement by and between Elpida Memory, Inc. and the Registrant dated August 18, 2003.	—	—	—	—	X
21.01	List of the Registrant's subsidiaries.	S-1	333-86738	4/22/02	21.01	
23.01	Consent of Independent Accountants.	—	—	—	—	X
31.01	Certification of Chief Executive Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	—	X
31.02	Certification of Chief Financial Officer pursuant to 15 U.S.C. Section 7241, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	—	X
32.01**	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	—	X

* Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this Form 10-K and have been filed separately with the Securities and Exchange Commission.

** This exhibit shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

FORMFACTOR, INC.

KEY MANAGEMENT BONUS PLAN

(2004)

I. PURPOSE

To further the success of FormFactor, Inc. (hereinafter referred to as the "COMPANY") by enabling the Company to be competitive with the rest of the industry in attracting and retaining key talent and to provide an incentive, in addition to base salary compensation, to those key professionals of the Company who will have a substantial opportunity to influence achievement of major corporate objectives and subsequent Company growth. This will 1) more closely associate the personal interests of such key professionals with Company interests, 2) encourage such key professionals to continue as employees of the Company; and 3) position the Company as a company that provides better-than-market rewards for better-than-market performance.

II. DETERMINATION OF BONUS PAYMENT

Actual bonus award amounts are based on a combination of specific percentage achievement of corporate objectives and specific percentage achievement of personal objectives. Percentage participation rates are established for each individual based on level of responsibility and scope of work in the organization. Specific bonus target percentages will be established for each plan year.

III. CORPORATE OBJECTIVES

Attachment A lists the indicators used to measure achievement of the corporate objectives component for FY2004 plan.

Each objective has equal weight (1/3). The minimum threshold equals 80% of the target (i.e., no payment for that indicator unless 80% of the target is reached.) The maximum threshold equals 200% of the target (i.e., for any single indicator, no more than 200% of the bonus target amount will be paid).

IV. PERSONAL OBJECTIVES

Participants will work with their Managers to identify personal objectives to be used as achievement indicators for each individual participating in the Plan. These objectives should be critical to the success of the individual and should tie into the overall Company business priorities. The maximum threshold equals 125% of the target (i.e., for any single personal objective, no more than 125% of the bonus target amount will be paid). The applicable Senior Manager must approve each individual's personal objectives and the weighting of each within the total percentage for personal objectives. The personal objectives component will constitute a pre-determined percentage of the total award depending upon the degree of each participant's actual achievement of personal goals as determined by the appropriate Vice President (or higher).

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

V. ALLOCATION OF INCENTIVE BONUS

A. DEFINITIONS:

1. CAF = Corporate Achievement Factor defined as the average of the

percentage achievement of the three corporate objectives (with a minimum of 80% and a maximum of 200% for each objective achieved; if the percentage achievement is less than 80% for a corporate objective, it counts as zero in computing the CAF):

Percentage of Bookings Target achieved	=	%
Percentage of Net Sales Target achieved	=	%
Percentage of Operating Margin Target achieved	=	_____ %
Total	=	%

$$\text{CAF} = \frac{\text{Total}}{3}$$

2. PPS = Participant's Proportional Share (%) defined as:

$$\text{Participant's Bonus \%} \times (\text{CAF} \times \# * * \% + \text{Participant's Personal Objectives Achievement} \times \# * * \%)$$

percentage see Attachment A

3. PIB = Participant's Incentive Bonus defined as: (example)

$$\text{Participant's Individual Base Salary} \times \text{PPS} = \text{PERSONAL INCENTIVE BONUS (subject to Override calculation)}$$

B. EXAMPLE ONLY:

Director-BU at \$* * * base with * * *% bonus % and personal objectives achievement of 89%. HYPOTHETICAL

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

	AOP	RESULT	ACHIEVEMENT %	CAF
	---	-----	-----	---
Bookings	\$* * *	\$64.3M	* * *%	
Net Sales	\$* * *	\$75.0M	* * *%	* * *%
Operating Margin	\$* * *	\$ 1.1M	* * *%	

$$\text{PPS} = \frac{(* * * \% \times (* * * \% \times * * * \% + 89\% \times * * * \%)}{(* * * \% \times (* * * \% + * * * \%)} = * * * \%$$

$$\text{PIB} = \$* * * \times * * * \% = \$* * *. - = \text{PERSONAL INCENTIVE BONUS}$$

VI. DEFINITION OF BASE PAY

An individual's eligible gross earnings for the Plan Year (exclusive of overtime, shift premiums, car allowance, bonuses, etc.) will be used in calculating the bonus payment. Participants who enter the KMBP during the year will receive a pro-rated payout based on the number of completed weeks in the plan year.

VII. PLAN YEAR

The Plan Year nets from December 28, 2003 - December 25, 2004.

VIII. MISCELLANEOUS PROVISIONS

A. ADMINISTRATION

The Chairman of the Board of Directors and the Board Compensation Committee shall have full power and authority to administer and interpret the plan and to adopt such rules and regulations consistent with the terms of the Plan as they deem necessary or advisable to carry out the provisions of the Plan. The CEO/President may appoint an Administrator of the Plan and delegate to such Administrator power to administer and interpret the Plan as to such matters as the CEO/President may deem necessary.

B. TERMINATION OF EMPLOYMENT

In order to be eligible for the bonus, an employee must be employed with the Company on the date payouts for the designated plan year occur. If prior to the end of the award period a participant's employment terminates by way of retirement, normal retirement date, death, or total and permanent disability (as determined under the Company's Long-Term Disability Plan), and the participant would have been entitled to the payment of the award if his/her employment had not so terminated, payment of the award shall be pro-rated based on the number of months of the award period during which the participant was an employee. If a participant's employment terminates by reason of death, payment of the award shall be made to the person(s) designated as the participant's beneficiary under the Company 401(k) Retirement Plan, and if there is none, to the participant's estate.

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

C. SALE OF COMPANY

If the Company is sold, or if the Company is a party to a merger or consolidation in which it is not the surviving company, all awards will be deemed to have been earned at 100% of the target value for the current year and will be paid to the applicable participant at that point.

D. TRANSFER OF RIGHTS

The rights and interests of a participant under the Plan may not be assigned or transferred except by will and the laws of descent or distribution.

E. RIGHT TO EMPLOYMENT

Participation in the Plan shall not confer on any employee the right to continued employment in the same or any other capacity.

F. RIGHTS TO PLAN

No employee or other person shall have any claim or right to be granted an award under the Plan, nor shall participation in the Plan in one year grant any right to participate in the Plan in any subsequent year.

G. WITHHOLDING

The Company shall have the right to deduct from all awards paid under the Plan any federal, state, local, or foreign taxes required by law to be withheld with respect to such awards.

H. UNALLOCATED FUNDS

Monies that are unallocated due to the personal objectives not being satisfactorily accomplished, as determined by the CEO/President, will remain part of the Company's operating funds.

I. AMENDMENT AND TERMINATION

The Board of Directors may amend or suspend the Plan, in whole or in part, at any time with respect to the current or any subsequent Plan year.

ATTACHMENT A

FY2004 MANAGEMENT BONUS PLAN GUIDELINES

Title/Responsibility -----	Target % Corporate -----	Target % Personal -----
CEO	100	0
Senior Vice-President	80	20
Vice-President-Corp.	* * *	* * *
Vice-President-B.U.	* * *	* * *
Vice-President-Tech. L.C.	* * *	* * *
Director - BU	* * *	* * *
Director - Tech. I.C.	* * *	* * *

FY2004 CORPORATE BONUS PLAN TARGETS

BOOKINGS:	\$* * *
NET SALES:	\$* * *
OPERATING MARGIN:	\$* * *

* Includes charges of \$6.2M for the new site.

 * * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

2004 1H FORMFACTOR, INC. DIRECT SALES INCENTIVE PLAN
Rev 1.0

TERM: December 28, 2003 through June 26, 2004.

DEFINITIONS:

- TARGETED COMMISSION PLAN (TC) . The amount of compensation (aka "Commissions") due to the individual sales person when 100% of the target booking plan and MBO's are achieved.
- TARGET BOOKINGS (TB). (aka "Quota") The amount of bookings that must be achieved to receive the target bonus.
- TARGET BOOKINGS COMPONENT (TC-B): The portion of the Target commission plan allocated to the bookings quota achieved.
- TARGET MBO COMPONENT (TC-M): The portion of the Target commission plan allocated to the MBO achieved
- RATE PER DOLLAR BOOKED. The percentage of commission earned per dollar of booking achieved.
- INCENTIVE RATE (IR): The percentage of the sales person's base salary used to calculate the TC.

DIRECT SALES INCENTIVE PLAN

The incentive plan is structured to pay 100% of a set commission based on the following guidelines:

1. The targeted commission (TC) is separated into a bookings component and an MBO component. The bookings component (TC-B) is * * *% of the targeted commission plan and the MBO component (TC-M) is * * *% of the TC.
2. If 0-* * *% of the TB is achieved, a total of * * *% of the TC-B will be paid to the respective sales person.
3. The last * * *% of the TB achieved will result in * * *% of the targeted bookings component plan being paid to the respective sales person.
4. There will be no cap on this incentive plan. For instances where the TC or TB is exceeded, the following will apply:
 - The same rate per dollar booked as the last * * *% of the target income will be applied to all bookings achieved in excess of the TB.
5. The Direct Sales Incentive Plan is split into two 1/2 year plans. There will be separate TB set for each 1/2 year time period and separate MBOs for each 1/2 year time period.
6. The VP of Worldwide Sales shall set the target bookings plan for each region and each individual sales person. These plans shall be published no later than 30 days after the beginning of the 1st and 3rd quarters.
7. By mutual agreement with the VP of Worldwide Sales, each sales person will be assigned * * *-* * * MBOs for each 1/2 year. Each MBO will be weighted. Upon approval by the VP of Worldwide Sales, MBOs may be modified prior to the end of the 1/2 year period.
8. The VP of Worldwide Sales, with approval from the VP of Finance, shall set the Incentive Rate (IR) for each sales person. The IR shall be percentage of the sales person's base salary and the rate shall be determined by the level of responsibility of the sales person and the size of the region. The standard IR are:
 - a. Sr. VP - 95%
 - b. Director- ***%

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

- c. Regional Manager - * * * * *
- d. Sr. Account Manager/Major Account Manager: * * *-* * *
- e. Account Manager: * * *-* * *

9. Changes to the Sales Compensation Plan shall be approved by the Sr. VP of Worldwide Sales and the VP of Finance.

Example: Joe H. Salesman's base salary is \$* * * and his IR is * * *%. For the 1/2 year, Joe's TC is \$* * * (\$* * *Kx* * *%x1/2 year). The TC-B is * * *% or \$* * *. The TC-M is * * *% or \$* * *. The TB for the 1/2 year for Joe H. Salesman is \$* * *M. * * *% of the TB is \$* * *M and Joe will earn * * *% of the TC-B or \$* * * once he achieves the \$* * *M in bookings (rate paid = * * *% on every dollar booked up to \$* * *M). Once Joe exceeds \$* * *M in bookings, he will be paid at a rate of * * *% (* * *% * \$* * */* * *% * \$* * *M) with no cap on the bookings. Joe will also have * * * MBOs assigned for the half year. Each was weighted a * * *%. For each MBO achieved, Joe will earn \$* * * (* * *% x \$* * *).

In this example, Joe books \$* * * and achieves * * * of * * * of his MBOs. Joe will be paid in total:

\$* * *M * * * * = \$* * *

\$* * *M * * * * = \$* * *

\$* * *M * * * * = \$* * *

* * * MBO * \$* * * = \$* * *

Total Incentive Due for -1/2 Year = \$* * *

ADDITIONAL GUIDELINES:

1. All direct sales personnel are eligible for the commission plan and will be paid on a pro rata basis as of the date of their employment.
2. Commissions shall be paid within 45 days of the close of the quarter.
3. Territories and assigned accounts will determine the basis of the targeted commission plan.
4. The VP of Worldwide Sales will determine how much credit is awarded for account managers with multinational accounts and split commissions as part of their respective responsibilities.
5. Any receivables not collected will be debooked from the salespersons totals in the following period.

/s/ Peter Mathews

 Submitted & Approved
 Peter Mathews
 VP Worldwide Sales
 Date 2/19/04

/s/ Michael Ludwig

 Approved
 Michael Ludwig
 VP Finance
 Date 2/19/04

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

December 10, 2003

VIA FACSIMILE TRANSMISSION

Herr Jens Moeckel
Executive Corporate Core Commodity Manager
Memory Product Division
Infineon Technologies AG
Gustav-Heinemann-Ring 212
D-81739 Munchen
Germany

Re: Extension of Basic Purchase Agreement

Dear Herr Moeckel:

We write to confirm our companies' agreement to extend the term of the Basic Purchase Agreement ("Agreement") between, on the one hand, Infineon Technologies AG, WhiteOak Semiconductor Partnership (now Infineon Technologies Richmond), and ProMOS Technologies, Inc. and, on the other hand, FormFactor, Inc. Specifically, this letter confirms that we have agreed to extend the term of the Agreement to and until June 30, 2004. All other terms and conditions of the Agreement remain unchanged.

As required by the Agreement, and in order to ensure the completeness of everyone's files, we would appreciate it if you would countersign this letter in the space provided below and return it to our office. If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours,

/s/ Peter B. Mathews

Peter B. Mathews
Sr. Vice President, Worldwide Sales

Accepted and agreed to on December 10, 2003

INFINEON TECHNOLOGIES AG

By: _____	/s/ i.v. [illegible]	/s/ i.v. [illegible]
Its: Mogel/Executive Core	Commodity Manager	Kraus/Executive Core
		Commodity Manager

bcc: Michael M. Ludwig
Stuart L. Merkadeau

FORMFACTOR, INC.

PROBE CARD PURCHASE AGREEMENT

FormFactor, Inc. a Delaware corporation having an office located at:

2140 Research Drive
Livermore, CA 94550

Contact: * * *
Phone: * * *
Fax: * * *

Elpida Memory, Inc., a Japanese corporation having an office located at:

2-1, Yaesu 2-chome, Chuo-ku, Tokyo
104-0028

Contact: * * *
Phone: * * *
Fax: * * *

FormFactor K. K., a Japanese corporation and 100% owned subsidiary of FormFactor, Inc., having an office at:

Re ju Oh-i machi Bldg.
4-13-17, Oh-i, Shinagawa-ku,
Tokyo, 140-0014, Japan

Contact: * * *
Phone: * * *
Fax: * * *

Elpida Memory, Inc. is interested in using FormFactor's WaferProbe(TM) probe cards for memory products and agrees to purchase them for all its * * * wafer products using * * * in production.

FormFactor, Inc., is interested in supporting Elpida Memory, Inc. by supplying its WaferProbe(TM) probe cards for memory products and agrees to offer special terms and conditions described as below.

- Product Pricing: The multiple DUT probe cards (all collectively, "PRODUCTS") and pricing in Japanese Yen as set forth in APPENDIX 1.
- Forecasts: Non-binding * * * month rolling forecasts shall be provided consistent with the form set forth in APPENDIX 2.
- Specifications: The Products shall meet the specifications set forth in APPENDICES 3.1 and 3.2 (all collectively, "SPECIFICATIONS").
- Outgoing Inspection: FormFactor, Inc. shall perform an outgoing product acceptance check consistent with APPENDIX 4.
- Delivery Lead Times: The delivery date for Products will be set forth in the applicable accepted purchase order, subject to compliance with the delivery schedules for first article designs and re-orders of existing designs as set forth in APPENDIX 6.

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

- Warranty: FormFactor, Inc. warrants the Products as set forth in APPENDIX 7.
- Design Change: All design changes shall be submitted on the Design Change Request Form as set forth in APPENDIX 8.

Spare Parts: Spare Exchange Service shall be provided consistent with APPENDIX 9.

Support: FormFactor, Inc. and FormFactor K. K. shall provide technical support consistent with APPENDIX 10.

Term: April 1st, 2002, through March 31st, 2004 (the "TERM").

CNDA No.: FFK-ELP0204.

In consideration of the mutual promises and obligations contained within this Probe Card Purchase Agreement (this "AGREEMENT"), FormFactor, Inc. (hereinafter "VENDOR") and FormFactor K. K., on the one hand, and Elpida Memory, Inc. (hereinafter "BUYER"), on the other hand, agree as set forth above and in the accompanying General Terms and Conditions and have caused this Agreement to be binding and effective as of April 1, 2002 ("EFFECTIVE DATE"). It is hereby agreed that VENDOR may perform all or part of its obligations, and receive all or part of its rights, provided in this Agreement and in the General Terms and Conditions by and through FormFactor K. K. In that case, VENDOR shall remain responsible for the performance by FormFactor K. K. and all the performance by BUYER to FormFactor K. K. shall be deemed as the performance to VENDOR and BUYER shall be released from such performed obligation to VENDOR.

FORMFACTOR, INC.

ELPIDA MEMORY, INC.

By: /s/ Igor Khandros

By: /s/ Kenji Tokuyama

Igor Khandros
Title: CEO and President
Dated: August 6, 2002

Kenji Tokuyama
Title: President
Dated: August 21, 2002

FORMFACTOR K. K.

By: /s/ Yoshikazu Hatsukano

Yoshikazu Hatsukano
Title: President of FormFactor K. K.
Dated: August 9, 2002

Form Factor Confidential
Page 2

GENERAL TERMS AND CONDITIONS

1. PURPOSE OF THIS AGREEMENT

This Agreement serves as the basis for the purchase of VENDOR's Multi-DUT Memory Probe Cards by BUYER. This Agreement will be an integral part of any purchase orders for Probe Cards, and as such will be deemed to apply to all purchase orders issued by BUYER for VENDOR's Probe Cards and associated services, hereinafter referred to as "Products."

2. INDIVIDUAL CONTRACT (PURCHASE ORDER)

2.1 The Product(s) will be manufactured and sold in accordance with the purchase order(s) issued by BUYER and accepted by VENDOR (such accepted purchase order(s) hereinafter referred to as "INDIVIDUAL CONTRACT(S)"). Such Individual Contracts shall specify only the name of the Product(s), quantity, price, delivery place in Japan, and time of delivery. VENDOR offers, and BUYER agrees to pay, pricing as described in APPENDIX 1 (Probe Card Pricing). All other terms of Individual Contracts shall be contained in this Agreement.

2.2 BUYER shall furnish purchase orders to VENDOR, and VENDOR shall, in any event, accept all purchase orders that comply with the terms and conditions of this Agreement. VENDOR shall confirm in writing such action to the responsible purchasing department at BUYER within one week after receipt thereof. BUYER will consult with VENDOR regarding quantity, delivery place and time of delivery before furnishing purchase orders to VENDOR. In the event that BUYER does not receive VENDOR's written

confirmation within such one week period, the relevant purchase order shall be deemed to be accepted by VENDOR on the expiration of such period.

- 2.3 The conditions of this Agreement shall apply to all purchase orders of BUYER regarding the Products and to any purchase order acceptance by VENDOR even if such communications do not refer to it expressly.
- 2.4 If, subsequent to the acceptance of any purchase order, BUYER requires an earlier or later delivery date than as set forth in an Individual Contract, the parties shall use commercially reasonable efforts to meet such delivery date modification requests. In the event BUYER requests to postpone an agreed upon delivery date to a date to be determined in the future, VENDOR shall accept the request, or deny the request and BUYER shall pay the applicable cancellation charges, based upon the original delivery date set forth in the Individual Contract.
- 2.5 Any Individual Contract may be canceled by written notification from BUYER. VENDOR shall notify BUYER in writing of any cancellation charges calculated as follows: Since each Individual Contract is unique, it shall be subject to a cancellation fee based on the actual expenses incurred by VENDOR up to the purchase price of the Product. Both parties agree that the official design for 1st article (new designs) at VENDOR starts after receipt of purchase order from BUYER, but the clock for cancellation for the 1st article starts after approval by BUYER on * * * submitted by VENDOR before releasing the design to manufacturing.

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

Form Factor Confidential
Page 1

NEW DESIGNS (FIRST ARTICLE)		REPEAT ORDERS	
Weeks after Approval on * * *	Cancellation Charge of purchase price of first article order (* * * cards plus * * *)	Weeks from delivery date when purchase order is canceled.	Cancellation Charge of purchase price of repeat order.
(Less Than Or Equal) Approval on * * *	* * *%	(Greater Than) * * *	* * *%
(Less Than Or Equal) * * *	* * *%	(Greater Than) * * * and (Less Than Or Equal) * * *	* * *%
(Greater Than) * * * and (Less Than Or Equal) * * *	* * *%	(Greater Than) * * * and (Less Than Or Equal) * * *	* * *%
(Greater Than) * * *	* * *%	(Less Than Or Equal) * * *	* * *%

2.6 BUYER shall provide to VENDOR a * * * month rolling forecast for its anticipated purchases of Product(s) in the form of APPENDIX 2 (Form Forecast). This forecast shall be updated every month. This forecast shall not bind both BUYER and VENDOR, and VENDOR shall build to Individual Contracts only and not to the forecast(s).

3. DELIVERY

- 3.1 VENDOR shall deliver Product(s) to the location where BUYER specifies in the purchase order at VENDOR's cost (Incoterms 2000, DDP (Delivery Duty Paid)). For the avoidance of doubt, title to Product passes to BUYER upon BUYER's receipt of Product.
- 3.2 The date for delivery of a Product is determined in the Individual Contract. All changes of accepted delivery dates are only valid if these

changes are mutually agreed upon by the parties in writing.

- 3.3 If any circumstances arise which would result in a delay in delivery of the Product(s), VENDOR shall promptly notify BUYER in writing of the delay as soon as the delay is discovered and shall follow BUYER's instruction to minimize the impact of this late delivery. Notwithstanding the forgoing, in the event that (1) VENDOR notifies BUYER that the delivery for an Individual Contract, or portions of an Individual Contract, will be delayed from the delivery date set forth in the Individual Contract, as soon as VENDOR discovers such delay, (2) the delivery delay is due to other than one of those set forth in Section 17.4, and (3) BUYER notifies VENDOR in writing of BUYER's intent to cancel the delayed order (or delayed portion of the order, as the case may be), then the delayed Product(s) shall be treated as follows:

REPEAT ORDER:

If such Product(s) are Repeat Order(s) and the total number of weeks between the original delivery date in the Individual Contract (or any prior mutually agreed extension) and the revised delivery date presented by VENDOR is more than * * * weeks, then BUYER has the right to cancel the Individual Contract (or the delayed portion, as the case may be), without any penalty and/or charge to cancel. Notwithstanding the foregoing, in the event BUYER desires not to exercise such option and desires to purchase such delayed Product(s), then VENDOR shall be subject to a late delivery charge equal to * * *% of the purchase price for the specific product that is late per week or part thereof, up to a maximum of * * *% of the purchase price of the delayed Product(s).

1ST ARTICLE DESIGNS:

If such Product(s) are 1st article designs and the total number of weeks between the original delivery date in the Individual Contract (or any prior mutually agreed extension) and the revised delivery date presented by VENDOR is more than * * *

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

Form Factor Confidential
Page 2

weeks, then BUYER has the right to cancel the Individual Contract (or the delayed portion, as the case may be) including NRE, without any penalty and/or charge to cancel. In this case, BUYER further has a right to purchase from a third party alternative probe cards, at BUYER's own expense, instead of the Product(s); provided, however, that, in the event VENDOR elects to deliver, at VENDOR's own expense, the delayed 1st article design Product(s) to BUYER, then BUYER shall evaluate the Product(s) immediately. If such Product(s) meet the Specifications, then BUYER shall purchase the Product(s) for Repeat Orders subject to this Agreement.

4. INVOICES AND PACKAGING

- 4.1 VENDOR shall issue an invoice ("INVOICE") for the Product shipped. Each Invoice shall identify the VENDOR's Products, the applicable unit price, the total price, and any internal identifying code of BUYER.
- 4.2 Unless otherwise stated by BUYER, each Product shall be shipped in an individual case, and the packaging shall protect the Product(s) from vibrations, shocks, temperature, temperature differences, humidity, pressure and radiation, as can be reasonably anticipated during shipment. The inner packaging shall fulfill the clean-room requirements applicable at BUYER as communicated to VENDOR in writing and the outer packaging shall be labeled in such a way that the instructions for transport (as stated in the Individual Contract) are clearly visible.

5. FINAL ACCEPTANCE

- 5.1 VENDOR warrants that the Product shall meet the Specifications defined in APPENDICES 3.1 and 3.2 (Product Specifications). It is anticipated that from time to time BUYER and VENDOR may want to modify the Specifications. In such cases, BUYER and VENDOR shall mutually agree in writing to such modifications, and the agreed upon modifications shall be deemed to be incorporated as a part of APPENDICES 3.1 and 3.2. Until BUYER and VENDOR mutually agree in writing to any modifications, the then-existing Specification shall control.
- 5.2 VENDOR shall perform an outgoing product acceptance check per APPENDIX 4 (Outgoing Product Acceptance Check) and shall include these results with each shipment.
- 5.3 The Product shall be considered accepted by BUYER once the Product and any agreed-upon technical documentation, including data set forth in the APPENDIX 4, are accepted and BUYER has confirmed that the Product is in compliance with the Product Specifications in writing. If BUYER does not provide written confirmation of either acceptance or non-acceptance within * * * calendar days of BUYER's receipt of the Product, the Product shall be deemed accepted. If BUYER reasonably believes the Product fails to be in compliance with the Product Specifications triggering non-acceptance, then BUYER shall list the failure(s) or reason(s) for the non-acceptance and provide to VENDOR a detailed report of the same. VENDOR shall work with BUYER to correct the failure(s) and place the Product into compliance with the Product Specification.

6. PRICES, TERMS OF PAYMENT, DELIVERY TIMES

- 6.1 BUYER will pay * * *% of the Invoice within * * * days following the date of BUYER's acceptance specified in paragraph 5.3. All payments will be in Japanese Yen ([YEN]). BUYER must notify VENDOR of any disputed or questioned Invoice within * * * days of BUYER's receipt of such Invoice. VENDOR agrees to respond in good faith to BUYER's notice of a

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

Form Factor Confidential
Page 3

disputed or questioned Invoice within * * * days of VENDOR's receipt of such notice from BUYER.

- 6.2 VENDOR offers 1st article and re-order delivery lead times as described in APPENDIX 6 (First Article and Re-Order Delivery Lead Times).

7. WARRANTY

- 7.1 VENDOR warrants the Product per APPENDIX 7 (Warranty).
- 7.2 Notwithstanding the Disclaimer clause set forth in APPENDIX 7, VENDOR represents and warrants that, to the best of its knowledge, the Product does not infringe any patent, copyright, trade secret or other intellectual property right of any third party. VENDOR will indemnify and hold harmless BUYER from and against any claim, suit or proceeding (hereinafter "CLAIM") brought against BUYER so far as it is based on a Claim that any Product supplied hereunder infringes a patent, copyright, trade secret or other intellectual property right of a third party, provided that VENDOR is notified promptly in writing of such Claim and given full and complete authority, information and assistance (at VENDOR's expense) for the defense of the same. VENDOR will pay all damages and costs finally awarded therein against BUYER, but VENDOR will not be responsible for any settlement or compromise made without VENDOR's prior written consent.
- 7.3 If (i) a Claim mentioned in Section 7.2 above has occurred, or in BUYER's reasonable opinion, is likely to occur, and (ii) BUYER or VENDOR is

subject to an impending order in which BUYER's use of the Product will be enjoined, then VENDOR will promptly, at its option and its own expense, either (i) procure for BUYER the right to continue using the Product(s) or (ii) replace or modify the same so that it becomes non infringing without degrading Product Specifications defined in APPENDICES 3.1 and 3.2 and, if neither of the foregoing is reasonably possible after VENDOR uses its commercially reasonable best efforts, then VENDOR has the obligation to explain the reason(s) to BUYER that options (i) and/or (ii) are not available. If BUYER agrees with VENDOR's conclusion regarding the unavailability of either option (i) or (ii), then BUYER shall have the option to purchase from a third party alternative replacement probe cards at the best available price after good faith negotiation, and VENDOR shall pay the cost for such replacement probe cards.

7.4 VENDOR shall have no obligations under Section 7.1, 7.2 and/or 7.3 in the event Product(s) was modified by BUYER.

8. CHANGES IN THE PRODUCTS

8.1 Changes in the agreed Specifications or the design of the Product(s), which are requested by BUYER, shall be performed by VENDOR within a reasonable time if VENDOR agrees to perform such changes and such changes from BUYER are/were requested in writing using VENDOR's form set forth in APPENDIX 8 (Design Change Request (DCR) Form). If such changes to Specifications will affect delivery dates or prices of the Product(s), VENDOR shall inform BUYER in writing thereof, and such Specification changes will be made only after BUYER agrees in writing to the changed delivery dates and prices.

8.2 VENDOR-initiated substantive changes in the configuration or the Specification of the Product(s) can be made only after written consent of BUYER.

9. SPARE PARTS AND ON SITE EXCHANGE SERVICE

9.1 VENDOR shall keep spare parts on stock as described in APPENDIX 9 when BUYER chooses to purchase spares exchange service option pursuant to APPENDIX 9 (Spare Parts Policy).

Form Factor Confidential
Page 4

10. TECHNICAL ASSISTANCE

10.1 At the request of BUYER, VENDOR shall provide reasonable technical assistance in connection with BUYER's use of the Product(s) consistent with APPENDIX 10 (Support Structure).

10.2 Vendor shall provide adequate qualified personnel to support the use of the Product as described in APPENDIX 10.

11. RESEARCH AND DEVELOPMENT, MANAGEMENT MEETINGS

11.1 Subject to the parties' obligations under Section 12 ("CONFIDENTIAL INFORMATION AND INTELLECTUAL PROPERTY") of this Agreement, VENDOR agrees to share its Multi-DUT Memory probe card technology roadmap with BUYER on a regularly scheduled basis. VENDOR hereby designates all such technology roadmap information as Confidential Information under Section 12 of this Agreement. BUYER agrees to provide inputs to VENDOR for consideration in future product offerings.

11.2 BUYER and VENDOR agree to participate in regularly scheduled management meetings to discuss BUYER product roadmap, VENDOR performance, and other important business and technical issues.

11.3 VENDOR shall have the right to publicly announce the existence of this Agreement. BUYER shall have the right to approve the wording of this announcement

12. CONFIDENTIAL INFORMATION AND INTELLECTUAL PROPERTY

12.1 VENDOR and BUYER agree that the Non-Disclosure Agreement that they executed on April 1, 2002 (the "NDA") is hereby incorporated by reference

as if fully set forth herein.

- 12.2 VENDOR and BUYER agree that Product price, any charges or penalties associated with cancellation or delivery, payment terms, and that information contained in APPENDICES 1, 3.1, 3.2, 6, 8 and 9 contained in this Agreement shall be deemed to be Confidential Information under the NDA. VENDOR and BUYER further agree that each of them may disclose such information: (a) in confidence to its legal counsel, accountants, bankers and financing sources as necessary in connection with obtaining services from such third parties, provided such third parties are bound to confidentiality no less stringent than the provisions of this Agreement; and (b) as required by the applicable rules and regulations of the Securities Exchange Commission or equivalent authority in any other relevant jurisdiction; subject, however, to the party (i) taking reasonable steps consistent with such rules and regulations to minimize the scope and extent of the disclosure; and (ii) providing advance notice of the disclosure to the other party.
- 12.3 Nothing in this Agreement is intended to grant either party any rights in or to the other party's Confidential Information, except the limited right to use such Confidential Information solely for the purposes of carrying out its obligations under this Agreement. Nothing in this Agreement is meant to grant, expressly or by implication, any license under any patent, copyright, trade secret, trademark or other intellectual property right owned or controlled by either party.
- 12.4 In the event that BUYER desires to disclose any of the terms or conditions of this Agreement to a third party, for example, to a BUYER's subcontractor, BUYER shall provide VENDOR advance written notice of the proposed disclosure, and VENDOR shall provide its comment on the disclosure within five (5) days. Notwithstanding the foregoing, in no event

Form Factor Confidential
Page 5

shall this Section 12.4 be deemed to supersede the confidentiality obligations found in the NDA.

- 12.5 The sale of Products hereunder by VENDOR does not convey any license to BUYER, whether expressly or by implication, estoppel or otherwise, under any patent, copyright, trade secret, trademark or other intellectual property rights of VENDOR. VENDOR expressly reserves all of its rights with respect to such patent, copyright, trade secret, trademark and other intellectual property rights. BUYER agrees not to reverse engineer, disassemble or in any way modify any of the Products without the express prior written permission of VENDOR.
13. TERM
- 13.1 This Agreement becomes effective as of the Effective Date and shall be in effect through March 31st, 2004, with the condition that VENDOR will review the pricing specified in APPENDIX 1 and submit new pricing by February 28, 2003, and both parties agree as to product prices for the following year by March 31st, 2003. Otherwise, BUYER may terminate this Agreement as of March 31st, 2003. If both parties agree to extend the Agreement after March 31st, 2004, then they will mutual agree as to product prices, term of payment and delivery times, on such terms and conditions as are fair and reasonable between them.
- 13.2 BUYER may terminate this Agreement if VENDOR breaches any material term or condition of this Agreement and fails to cure such breach within * * * days following receipt of written notice from BUYER. VENDOR may terminate this Agreement if BUYER breaches any material term or condition of this Agreement and fails to cure such breach within sixty * * * days following receipt of written notice from VENDOR.
- 13.3 In the event of termination of this Agreement, Sections 2.5, 3.3, 7, 10, 12, 14, 15, 16 and 17 shall remain effective, and BUYER shall immediately pay all outstanding sums due and owing.
14. ASSIGNMENT

This Agreement is not assignable by a party, and no party may delegate its duties hereunder without the prior written consent of the others (except for as expressly provided in this Agreement as between VENDOR and FormFactor K. K., provided that VENDOR at all times remains responsible for the performance by FormFactor K. K. of all provisions of this Agreement); provided, however, that a party may assign this Agreement to any entity that acquires all or substantially all of its liabilities and assets, so long as the non-assigning parties are given prior written notice and, in the case of an assignment, that (a) the assignee agrees in writing to be bound by all terms of this Agreement, and (b) the assignor at all times remains responsible for the performance by the assignee of all provisions of this Agreement, including but not limited to the protection of the other parties' Confidential Information. Any attempted assignment in violation of this provision shall be void and the provisions hereof will be binding upon and inure to the benefit of the parties, their successors and permitted assigns.

15. DISPUTE RESOLUTION

The parties hereby agree that any dispute arising out of or relating to this Agreement that the parties cannot resolve themselves shall be finally settled by arbitration pursuant to the then-applicable Commercial Arbitration Rules of the Japan Commercial Arbitration Association. The

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

Form Factor Confidential
Page 6

situs of the arbitration shall be Tokyo, Japan. The arbitration shall be conducted by a panel of three (3) arbitrators; each party selecting one arbitrator, and the third arbitrator to be agreed upon by the two party-selected arbitrators, subject only to the arbitrator being a third party national. The award rendered by the arbitrators shall be final and binding upon the parties hereto. The arbitration shall be conducted in English.

16. APPLICABLE LAW

This Agreement shall be construed in accordance with and governed by the laws of Japan.

17. GENERAL PROVISIONS

17.1 Except for Individual Contracts consistent with Section 2.2, this Agreement (together with the APPENDICES hereto) and the NDA constitute the complete and exclusive agreement between the parties pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between the parties with respect to such subject matter. Additional agreements and contractual changes must be made in a writing signed by both parties.

17.2 In the event any provision of this Agreement is held to be unenforceable, such provision will be enforced to the maximum extent permissible and such provision and the remaining portions of this Agreement shall be enforced so as to best meet the intentions of the parties.

17.3 EXCEPT FOR (1) VENDOR'S LIABILITY UNDER SECTIONS 7.2 AND 7.3 AND (2) BOTH PARTIES' LIABILITY FOR BREACH OF CONFIDENTIALITY UNDER SECTION 12, IN NO EVENT WILL EITHER PARTY BE LIABLE FOR ANY LOST REVENUES, DATA, OR PROFITS, OR SPECIAL, INDIRECT, CONSEQUENTIAL OR PUNITIVE DAMAGES WITH RESPECT TO ANY CLAIMS THAT MAY ARISE OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR THE TERMINATION THEREOF, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. In all events, BUYER and VENDOR will meet in good faith in an attempt to reach a mutually agreeable resolution of any claim.

17.4 Neither party shall be responsible for any failure to perform (including late delivery) due to unforeseen circumstances or to causes beyond that party's reasonable control, including but not limited to acts of God, war,

riot, embargoes, acts of civil or military authorities, fire, floods, accidents, strikes or shortages of transportation, facilities, fuel, energy, labor or materials. In the event of any such delay, VENDOR may defer the delivery date of orders for Products for a period equal to the time of such delay.

- 17.5 All notices and demands hereunder will be in writing and will be served by personal service, facsimile transmission or overnight courier service mail at the address of the receiving party set forth on the cover page of this Agreement (or at such different address as may be designated by such party by written notice to the other party).
- 17.6 The waiver by one of the parties of any default by the other will not waive subsequent defaults by the other of the same or a different kind, and all waivers must be in writing to be effective.

17.7 This Agreement will become effective only after BUYER, VENDOR and FormFactor K. K. have signed it. Each person executing this Agreement represents and warrants that he or she has been duly authorized under the applicable party's charter documents and applicable law to execute this Agreement on behalf of the applicable party. This Agreement may be executed in counterparts, each of which when so executed will be deemed an original, and which together will constitute one and the same instrument.

APPENDIX 1	Probe Card Pricing
APPENDIX 2	Form Forecast
APPENDICES 3.1 and 3.2	Product Specifications
APPENDIX 4	Outgoing Product Acceptance Check
APPENDIX 5	Intentionally Omitted
APPENDIX 6	First Article and Re-Order Delivery Lead Times
APPENDIX 7	Warranty
APPENDIX 8	Design Change Request (DCR) Form
APPENDIX 9	Spare Parts Policy
APPENDIX 10	Support Structure

FORMFACTOR, INC. CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 1 PROBE CARD PRICING

PPA Price(s) described in the table below is/are applied to NRE and probe card unit price, under the condition of *** of all DRAM products (***) and beyond) using *** wafer.

Yen per \$=\133

NRE

NRE	STANDARD PRICE	PPA PRICE
-----	-----	-----
* * * NRE	* * *	\$ * * *
-----	-----	-----

(7) * * * PH* * *,X* * * (TRE)

PARALLELISM	STANDARD PRICE	PPA PRICE
X* * *	* * * \$ * * *	* * * \$ * * *

NOTE;

1. The Probe Card Unit Price depends on its specification (ceramic size; PHXX), pararellism, and quantity.
2. Under PPA the discounted unit price(PPA) will be applied from the 1st Article.
3. The minimum quantity per design expected to be * * *. If the quantity is below * * * throught a year, then the unit price for that specific design will be quoted separately.
4. The Products are made in USA.. When over * * *% fluctuation in currency rate occurs, pricing will be adjusted accordingly.

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

FORMFACTOR, INC. CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 2 FORM FORECAST

BUYER FORECAST FOR FORMFACTOR PROBECARDS

1. BUYER agrees to provide a good-faith forecast per the table below for its demand for the following * * * month period. This forecast shall be updated at the fixed date of every month. VENDOR has the right to adjust the pricing from the table above based on the forecast received from BUYER if the forecasted volume is substantially below the forecast at the end of March every year for the next fiscal year..
2. This forecast shall be used for planning purposes only.

FORECAST FOR FORMFACTOR PROBECARDS

		QUANTITY DELIVERED IN CALENDAR MONTH												
		2002												
Product	DUT	Tester	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit

has been filed separately with the Securities and Exchange Commission.

FormFactor Confidential
All rights reserved
page 1/ 1

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 3.1 PRODUCT SPECIFICATIONS

This Appendix describes FFI Probe Card standard specification.

- 1. T1 specification
- 2. T2 specification

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

LIST OF DIFFERENCE FROM FFI SPEC

FOLLOWING IS THE LIST OF DIFFERENT ITEM OF NEC/ELPIDA SPECIFICATION FROM FFI SPEC. IT MAY CONTAIN BOTH DIFFERENCE AND MISSING SPEC WHICH IS NOT SPECIFIED BY FFI SPEC.

PARAMETER	FFI SPECIFICATION INCLUDING TOLERANCE	NEC / ELPIDA REQUESTED SPEC	FFI COMMENT
* * *	* * *UM	* * * UM	EXPRESSION DIFFERENCE
* * *	T1 : * * * GF T2 : * * * GF	T1 : * * * GF T2 : * * * GF	EXPRESSION DIFFERENCE
PCB * * *	--	* * *UM	FFI INTERNAL SPEC
PCB * * *	--	* * *UM	FFI INTERNAL SPEC
PCB * * *	--	* * *UM	FFI INTERNAL SPEC

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

WAFERPROBE (TM) T1 MICROSPRING (TM) CONTACT PROBE CARD SPECIFICATION
(* * *MM PROBE HEADS)

[FORMFACTOR LOGO]

REFERENCE DOCUMENTS: SMPL0801WW - FORMFACTOR WARRANTY POLICY
SMHB0801U - USER HANDBOOK

PARAMETER	NOMINAL SPECIFICATION	TOLERANCE	COMMENTS*
-----------	-----------------------	-----------	-----------

***	(1) *** (millimeter)	Nominal *** (millimeter)	***
***	*** (millimeter)	For reference only.	***
***	*** (millimeter)	For reference only.	***
***	***	For reference only. By Design.	***
***	***	By Design.	***
***	***	*** (micrometer) (Less Than Or Equal) tip size (Less Than Or Equal) *** (micrometer) By Design.	***
***	***	*** (micrometer)	***

*** Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

WAFERPROBE (TM) T1 MICROSPrING (TM) CONTACT PROBE CARD SPECIFICATION
(* * *MM PROBE HEADS)

[FORMFACTOR LOGO]

REFERENCE DOCUMENTS: SMPL0801WW - FORMFACTOR WARRANTY POLICY
SMHB0801U - USER HANDBOOK

PARAMETER	NOMINAL SPECIFICATION	TOLERANCE	COMMENTS
***		*** grams (Less Than Or Equal) k (Less Than Or Equal) *** grams per probe	***
***		*** (micrometer)	***
***	***% of Overtravel	For reference only.	***
***	*** (micrometer) past last touch	For reference only	***
***	*** (micrometer) past first touch		***
***	PH*** - *** x ***	For reference only	***
***	*** unless otherwise specified by customer	***	***
***	***		***
***	***	*** (Less Than Or Equal) *** By Design.	***
***		For reference only. (Less Than Or Equal) *** ***Design dependent	***
***		(Less Than Or Equal) *** ***Design dependent	***
***		(Less Than Or Equal) ***	***
***		(Less Than Or Equal) *** By Design	***
***		***	***

*** Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

WAFERPROBE (TM) T1 MICROSPRING (TM) CONTACT PROBE CARD SPECIFICATION
 (* * *MM PROBE HEADS)

[FORMFACTOR LOGO]

REFERENCE DOCUMENTS: SMPL0801WW - FORMFACTOR WARRANTY POLICY
 SMHB0801U - USER HANDBOOK

PARAMETER	NOMINAL SPECIFICATION	TOLERANCE	Comments
***	***		***
***			***
Figure 1 ***			Figure 3. ***

Figure 2 ***			Notes * Drawings not to scale ** Reference FormFactor WaferProbe Warranty Policy *** Unless otherwise specified at design, and verified during First Article Verification on specific traces.

*** Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 3.2 PRODUCT SPECIFICATIONS

This Appendix describes the difference between FFI standard specification and custom specification agreed between BUYER and VENDOR. The specifications that are not specified here will follow FFI Probe Card standard specification.

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 3.2 LIST OF DIFFERENCE FROM FFI SPEC

FOLLOWING IS THE LIST OF DIFFERENT ITEM OF ELPIDA SPECIFICATION FROM FFI SPEC. IT MAY CONTAIN BOTH DIFFERENCE AND MISSING SPEC, WHICH IS NOT SPECIFIED BY FFI SPEC.

PARAMETER	FFI SPECIFICATION INCLUDING TOLERANCE	ELPIDA REQUESTED SPEC	FFI COMMENT
***	***um	*** um	EXPRESSION DIFFERENCE
***	T1 : *** gf T2 : *** gf	T1 : *** gf T2 : *** gf	EXPRESSION DIFFERENCE
PCB ***	--	***um	FFI INTERNAL SPEC
PCB ***	--	***um	FFI INTERNAL SPEC
PCB ***	--	***um	FFI INTERNAL SPEC

*** Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 4 OUTGOING PRODUCT ACCEPTANCE CHECK

VENDOR will submit Data measured on commercially available metrology tester such as ***'s metallurgy tester PRV-xx series to BUYER as the result of Outgoing Test at VENDOR's factory.

*** Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as ***. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

FormFactor, Inc CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 5 INTENTIONALLY OMITTED

FORMFACTOR, INC. CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 6 FIRST ARTICLE AND RE-ORDER DELIVERY LEAD TIMES

VENDOR WILL CONTINUE TO IMPROVE PROBE CARD LEAD TIME BASED ON ITS ROAD MAP. WHEN VENDOR ESTABLISHES NEW LEAD TIME SCHEME, THEN IT WILL BE PROVIDED IN WRITING TO BUYER.

(1) 1ST ARTICLE (NEW DESIGN)

PRODUCTS	LEAD TIME (WEEKS)
PH* * *	* * *
PH* * *	* * *
PH* * *	* * *
PH* * *	* * *
PH* * *	* * *

NOTE;

- Lead time indicates the number of approximate calendar weeks from PO issued date and receipt of an approved PCIF for the 1st article (NRE) to shipment date from FFI, Livermore. Exact delivery date will be provided in writing by VENDOR.

(2) RE-ORDER

PRODUCTS	NO FORECAST	FORECAST
	LEAD TIME (WEEKS)	LEAD TIME (WEEKS)
PH* * *	* * *	* * *
PH* * *	* * *	* * *
PH* * *	* * *	* * *
PH* * *	* * *	* * *
PH* * *	* * *	* * *

NOTE;

- Lead time indicates the number of approximate calendar weeks from PO issued date to shipment date from FFI, Livermore. Exact delivery date will be determined individually. It does not include the number of days for transport.
- Lead time depends on whether or not advanced forecast is submitted to VENDOR.

(3) PH100 LEGEND

Differences between the PH* * *, PH* * *, and PH* * * specifications are as below.

PH* * *: Less than * * * pins.

PH* * *: Between * * * pins and up to * * * pins with the x* * * Tester Interface.

PH* * *: More than * * * pins with the x* * */x* * * Tester Interface (TRE; Tester Resource Enhancement support).

This criteria may be redefined for more than * * * pins when new category is created

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

WAFERPROBE(TM) WARRANTY POLICY

[FORMFACTOR LOGO]

APPENDIX 7 - WARRANTY

WARRANTY

Products are warranted to be, under normal use and conditions, free from defects in materials and workmanship either for the life of the product to be probed or * * *, whichever comes earlier (the "WARRANTY PERIOD"). VENDOR warrants that Products comply with the specification agreed by both BUYER and VENDOR in writing. In addition, WaferProbe probe cards are warranted to comply with VENDOR published specification for X-Y placement, planarity, and total path resistance (design parameter) over the full Warranty Period. This limited warranty does not cover defects or damage due to acts of God, use or handling not in accordance with specifications or instructions, or repair or modification by anyone other than VENDOR or authorized agents. Without limiting the generality of the foregoing, a partial list of defects covered and not covered by this warranty is set forth below.

COVERED BY WARRANTY:

- Electrical or mechanical failure of any component of Products, when operated under normal conditions as described in Products specification.
- Wear due to operation when adhering to an approved VENDOR, Inc. cleaning protocol.

NOTE: Performance of VENDOR Products depends on the user's pad material, pad structure and wafer process and the cleaning and maintenance protocol used to maintain the probe card. VENDOR will work with Products user to establish an optimized cleaning and maintenance program for the user's specific pad material, structure and wafer process. In order for VENDOR to develop the approved cleaning protocol needed to provide this warranty, the user agrees to participate in the joint work required to establish an optimized cleaning condition and maintenance protocol.

Not Covered by Warranty:

- Damage due to overdrive in excess of specification.
- Damage due to improper handling.
- Any damage caused by metrology tools.
- Any damage occurring outside the prober.
- Any damage caused by loose contaminants or particulates.
- Damage due to unapproved cleaning procedures.
- Operation outside the specified temperature range.
- Excess electrical current or "hot stepping", per current VENDOR technical bulletin specifications.
- Damage due to prober malfunction.
- Damage to probe tips due to wafer material in excess of specification.

SOLE REMEDY

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

WAFERPROBE(TM) WARRANTY POLICY

[FORMFACTOR LOGO]

Should a Product fail to conform to the above warranty during the Warranty Period, BUYER's sole remedy and VENDOR's sole obligation is that VENDOR will repair or replace the Product at no charge to BUYER.

WARRANTY CLAIMS PROCESS

BUYER must notify its VENDOR sales representative in writing (via e-mail, facsimile or letter) of the defect BUYER is experiencing, and if VENDOR, Inc. determines that repair or replacement is necessary; BUYER will receive a Service Authorization Request (SAR) number. BUYER shall not return any WaferProbe probe card without an SAR. No work will be done on any returned product until an SAR # is assigned. BUYER may then, at its own expense, return to VENDOR Products in question, freight prepaid and in the same packing conditions in which it left VENDOR's premises, accompanied by a brief statement explaining the claimed defect. Upon receipt of Products, VENDOR's factory personnel will perform a failure analysis on the returned WaferProbe probe card to confirm the defect and determine the nature of the defect. The failure analysis report will be available upon BUYER request.

If VENDOR determines that the failure of Products is covered by the limited warranty VENDOR will repair or replace the probe card.

If VENDOR determines that any returned WaferProbe probe card is fully functional and not defective, VENDOR will provide a written statement setting forth VENDOR's conclusion that the returned WaferProbe probe card was not defective. If a non-defective, damaged WaferProbe probe card may be repaired, BUYER may request that VENDOR quote price and delivery terms for repair of Products. If Products is not repairable or BUYER chooses not to have the card repaired, VENDOR will return Products to BUYER at BUYER's expense, freight collect and BUYER agrees to pay VENDOR's reasonable cost of handling and testing.

DISCLAIMER

THE WARRANTIES SET FORTH ABOVE ARE IN LIEU OF ALL OTHERS, AND VENDOR SPECIFICALLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NONINFRINGEMENT, FITNESS FOR A PARTICULAR PURPOSE, OR MERCHANTABILITY. NO PERSON IS AUTHORIZED TO MAKE ANY OTHER WARRANTY OR REPRESENTATION CONCERNING THE PERFORMANCE OF PRODUCTS OTHER THAN AS PROVIDED IN THIS SECTION.

[FORMFACTOR LOGO]

FORMFACTOR, INC. CONFIDENTIAL

APPENDIX 8 DESIGN CHANGE REQUEST(DCR) FORM

NOTE: USE THIS FORM WHEN THE CHANGE YOU ARE REQUESTING IS NOT NORMALLY SPECIFIED IN THE PCIF.

REQUESTOR:
DATE:
REASON FOR CHANGE:

TECHNICAL CONTACT AT FFI:
NAME:
PHONE:

TECHNICAL CONTACT AT CUSTOMER SITE:
NAME:

PHONE:

PART NUMBER TO BE CHANGED:
DESCRIBE CHANGE:

WAS THE CHANGE APPROVED BY THE CUSTOMER: YES | | NO | |
WHO APPROVED THE CHANGE:
DATE OF APPROVAL:

TO BE COMPLETED BY THE FFI DESIGN GROUP:

NEW PART #:
APPROVED: YES | | NO | |
NAME:
DATE OF APPROVAL:

FormFactor , Inc. CONFIDENTIAL

[FORMFACTOR LOGO]

APPENDIX 9 SPARE PARTS POLICY

1. PURPOSE OF THIS POLICY

This Policy will serve as the basis for exchange service of Probe Card and Probe Head in case BUYER faces the situation where Wafer probing test stops functioning due to unacceptable malfunctioning of Probe Cards or Probe Head regardless of originating party of this malfunctioning. The spares will be returned after resolution of the malfunction situation. This program is to help minimizing down time of Wafer Probing Test Station.

2. PREPARATION OF EXCHANGE SERVICE THROUGH SPARE PROBE CARDS AND SPARE PROBE HEADS

2.1 BUYER purchases spares exchange service option. Each different type number of Probe Cards requires a separate spare service option. The spares service option pricing is equivalent to the quantity of Spare Probe Cards (SPC) and Spare Probe Heads (SPH) to be prepared by the VENDOR multiplied by discounted price of such Spare Probe Card and Spare Probe Head as specified in VENDOR's price list (Table 1). The quantity is determined in Table 2 that shows the recommended minimum numbers of SPC and or SPH to be prepared by BUYER. VENDOR prepares adequate number of SPC and/or SPH for the service.

2.2 The purchase of the service option triggers the VENDOR to prepare the SPC and SPH, and stock them at local VENDOR location. They remain VENDOR assets and are being utilized for SPC and SPH exchange services as specified in the Table 1. These exchanges are to be performed by VENDOR's qualified service engineer to support BUYER in emergency situation. The titles of SPC and SPH assets will not be transferred to BUYER even when they are being used at BUYER's production floor.

2.3 In case total number of Probe Cards to be purchased in less than * * * for the life of device to be probed, then VENDOR will not prepare SPC unless BUYER pays PPA price (not discounted price) specified in VENDOR price list.

2.4 The Probe Card or Probe Head which has malfunctioned should be forwarded to failure analysis and ,thereafter, to repairing process if it is repairable per FFI policy. Once it is repaired and returned to BUYER, then BUYER returns SPC or SPH to VENDOR. Those returned spares will be stocked at VENDOR's location and serve in another emergency

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

[FORMFACTOR LOGO]

situation. In case of Repaired Probe Head owned by BUYER, VENDOR will stock it at VENDOR location on behalf of BUYER if the option specified in 2.5 is executed.

2.5 In spite of 2.4 above, BUYER has an option to purchase SPH which is being used at BUYER's production floor rather than returning it to VENDOR or which is being stored at VENDOR location. The price of SPH in such case is full amount of PPA price in VENDOR's price list (Table 1))

2.6 BUYER has an option not to purchase SPC and or SPH but in such case BUYER has to accept normal procedure and turn around time for repairing described in 5.

3. EXCHANGE SERVICE OF PROBE HEAD

3.1 VENDOR will send its qualified service engineer to BUYER's production floor to examine the status of malfunctioning of the Probe Card and exchange its Probe Head with a Spare Probe Head by following VENDOR's established procedure. In emergency situations the VENDOR will utilize assets stored in the local office. Vendor's service engineer will submit a service report to BUYER after completion of exchange and diagnosis, and then receives signature of acceptance by a BUYER's appropriate engineer.

3.2 Such Exchange service of Spare Probe Head will be offered at the expense of BUYER. Vendor will do its best effort to dispatch its service engineer within * * * hours after receipt of request of exchange. The expense will be calculated based on the formula shown in the table 3.

4. FAILURE ANALYSIS AND IDENTIFYING ITS ROOT CAUSE

VENDOR will carry failure analysis for the returned Probe Card or Probe Head initiated by SAR process defined by VENDOR to identify its root cause and take corrective actions to avoid repetitive occurrence of the same failure. BUYER will cooperate with VENDOR to accelerate such VENDOR's process by supplying enough information to regenerate the failure for VENDOR to be able to understand the failing phenomena under certain operating environment under CNDA and CTR, This support may include joint work at BUYER's production floor by using the equipment if required.

VENDOR will submit a report on the failure and root cause analysis and corrective actions.

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

[FORMFACTOR LOGO]

5. REPAIRING SERVICE ON RETURNED PROBE CARD OR PROBE HEAD

Repairing Service will follow the procedure defined in the separate document.

The cost for repairing shall be charged to either VENDOR or BUYER based on the result of the failure analysis according to VENDOR's Warranty Policy as set forth in APPENDIX 7.

TABLE 1: SPARE PROBE CARD (SPC) AND SPARE PROBE HEAD (SPH) PRICE CALCULATION SCHEME

FULL AMOUNT OF LIST PRICE: PPA PRICE

DISCOUNTED PRICE:

CARD CONFIGURATION	SPC	SPH
PH* * *	* * *% x * * * Price	* * *% x * * * Price
PH* * *	* * *% x * * * Price	* * *% x * * * Price
PH* * *TRE	* * *% x * * * Price	* * *% x * * * Price

TABLE 2: NUMBER OF SPARE PROBE CARDS, SPARE PROBE HEADS AND EXCHANGE SERVICE

NUMBER OF PURCHASED PROBE CARDS BY BUYER	SPARES PREPARED BY VENDOR		EXCHANGE SERVICE BY VENDOR	
	MIN SPC	MIN SPH	PC, PH EXCHANGES	RESPONSE TIME
(Less Than) * * *	* * *	* * *	SPC exchange	* * * hrs
			0 component	N/a
* * *(Less Than Or Equal) (Less Than) * * *	* * *	* * *	SPC exchange	* * * hrs
			SPH exchange	* * * hrs
* * *(Less Than Or Equal) (Less Than) * * *	* * *	* * *	SPC exchange	* * * hrs
			SPH exchange	* * * hrs
* * *(Less Than Or Equal) (Less Than) * * *	* * *	* * *	SPC exchange	* * * hrs
			SPH exchange	* * * hrs
* * *(Less Than Or Equal) (Less Than) * * *	* * *	* * *	SPC exchange	* * * hrs
			SPH exchange	* * * hrs
* * *(Less Than Or Equal)	* * *	* * *	SPC exchange	* * * hrs
			SPH exchange	* * * hrs

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission.

[FORMFACTOR LOGO]

TABLE 3: CHARGE FOR EXCHANGE SERVICE

SERVICE DAY	SERVICE HOUR FOR SERVICE REQUEST	EXPENSE
-------------	----------------------------------	---------

hand, FormFactor, Inc. and FormFactor K.K. and, on the other hand, Elpida Memory, Inc., and having an effective date of April 1, 2002 (the "AGREEMENT"). Specifically, this letter confirms that we have agreed to revise and replace the probe card pricing set forth in Appendix 1 of the Agreement with the probe card pricing attached as Appendix 1-1 to this letter, which is applied from April 1, 2003 to March 31, 2004. All other terms and conditions of the Agreement remain unchanged.

Consistent with Section 17.1 of the Agreement, and in order to ensure the completeness of each of our company's files, we would appreciate it if you would countersign this letter in the space indicated below and return it to the attention of Kaoru Nemoto at FormFactor K.K.

If you have any questions or concerns, please do not hesitate to contact Kaoru Nemoto or either of the undersigned.

Very truly yours,

/s/ Peter B. Mathews

Peter Mathews
Vice President, World Wide Sales of FormFactor, Inc.

/s/ Yoshikazu Hatsukano

Yoshikazu Hatsukano
President of FormFactor
K.K.

Accepted and agreed to on Aug. 18, 2003

Elpida Memory, Inc.

/s/ Masaji Kubo

Name: Masaji Kubo

Title Chief Administrative Officer

Date: Aug. 18, 2003

APPENDIX 1-1: REVISED PROBE CARD PRICING

No. FFIRF10127
FORMFACTOR, INC. CONFIDENTIAL

2003 2ND YEAR PPA: APPENDIX 1 PROBE CARD PRICING

PPA Price(s) described in the table below is applied to NRE and probe card unit price, Under the condition of * * * of all DRAM products (* * * and below) using * * * wafer

Yen per \$=\120

NRE

NRE	STANDARD PRICE	PPA PRICE
---	-----	-----
* * * NRE	* * *	* * *
* * * NRE	* * *	* * *

NOTE:

NRE will be one third of Standard Price. FormFactor will take three designs Under this Agreement to which this Appendix is attached.

PROBE CARD PRICE SCHEME (1) PH* * */PH* * *, X* * *

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X* * *	* * * \$ * * *	* * * \$ * * *	* * * \$ * * *

(2) PH* * */PH* * *, X* * *

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X* * *	* * * \$ * * *	* * * \$ * * *	* * * \$ * * *
* * * (* * *)			* * * \$ * * *

(2) PH* * *, X* * *

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X* * *	* * * \$ * * *	* * * \$ * * *	* * * \$ * * *
* * *			* * * \$ * * *

(2) PH* * *, X* * *

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X64	* * * \$ * * *	* * * \$ * * *	* * * \$ * * *
* * *			* * * \$ * * *

(2) PH* * *, X* * * (TRE)

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X* * *	* * * \$ * * *	* * * \$ * * *	* * * \$ * * *
* * *			* * * \$ * * *

(2) PH* * *, X* * * (TRE)

PARALLELISM	STANDARD PRICE	2002 PPA PRICE	2003 PPA PRICE
-----	-----	-----	-----
X* * *	* * * \$ * * *	N/A	* * * \$ * * *
* * *		N/A	* * * \$ * * *

* * *

- | | |
|----------------------------|-------|
| A) * * * | * * * |
| B) * * * on 1 PO | * * * |
| C) * * * Lead Time on 1 PO | * * * |

* * * FOR EACH OF THESE CONDITIONS TO * * *.

NOTE:

1. The Probe Card Unit Price depends on its specification (ceramic size: PHXX), parallelism, and quantity. From 2004, the Probe Card Unit Price depends on the pin count by design. (Please see below table 1.)
2. Under PPA the discounted unit price (PPA) will be applied from the 1st Article.
3. The minimum quantity per design is expected to be * * *. If the quantity for a specific design is below * * * throughout a year, then the unit price for that specific design will be quoted separately.
4. The Products are made in the USA. The exchange rate used to convert to Japanese Y will be based on the date of FormFactor's quotation of the specific products as calculated by reference to the average rate of the monthly average rate (Gecchu Heikin) of published exchange rate (Kouji Souba) of Mizuho Bank of the nearest 3 months.

TABLE 1) NEW CONDITION FOR HIGH PIN COUNT DESIGN.

1. Tester: * * * (PH: PH* * *, PH* * *, PH* * *)

a) * * * pins, * * *% price

b) * * * pins, * * *% price

c) * * * pins, contact FFI

* For contract period year 2003 * * *.

2. Tester * * * (PH: PH* * *, PH* * *)

a) * * * pin, * * *%

b) * * * pins, * * *%

c) * * * pin, contact FFI

* * * Confidential treatment has been requested for portions of this exhibit. The copy filed herewith omits the information subject to the confidentiality request. Omissions are designated as * * *. A complete version of this exhibit has been filed separately with the Securities and Exchange Commission

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-106043) of FormFactor, Inc. of our reports dated March 17, 2004 relating to the consolidated financial statements and financial statement schedule, which appear in this Annual Report on Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 22, 2004

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO 15 U.S.C. SECTION 7241,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Igor Y. Khandros, certify that:

1. I have reviewed the annual report on Form 10-K of FormFactor, Inc., a Delaware corporation, for the period ended December 27, 2003, as filed with the Securities and Exchange Commission;
2. Based on my knowledge, the annual 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 the annual report;
3. Based on my knowledge, the financial statements, and other financial information included in the annual 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 the annual report;
4. The registrant's other certifying officer 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)) 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 the annual report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in the annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the annual report based on such evaluation; and
 - (c) Disclosed in the annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
5. The registrant's other certifying officer 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:
 - (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 19, 2004

/s/ Igor Y. Khandros

Igor Y. Khandros
Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO 15 U.S.C. SECTION 7241,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Jens Meyerhoff, certify that:

1. I have reviewed the annual report on Form 10-K of FormFactor, Inc., a Delaware corporation, for the period ended December 27, 2003, as filed with the Securities and Exchange Commission;
2. Based on my knowledge, the annual 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 the annual report;
3. Based on my knowledge, the financial statements, and other financial information included in the annual 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 the annual report;
4. The registrant's other certifying officer 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)) 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 the annual report is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in the annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by the annual report based on such evaluation; and
 - (c) Disclosed in the annual report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
5. The registrant's other certifying officer 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:
 - (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 19, 2004

/s/ Jens Meyerhoff

Jens Meyerhoff
Chief Financial Officer

The following certification shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

CERTIFICATION OF
CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
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 on Form 10-K of FormFactor, Inc., a Delaware corporation, for the period ended December 27, 2003, as filed with the Securities and Exchange Commission, each of the undersigned officers of FormFactor, Inc. certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his respective knowledge:

- (1) the annual report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the annual report fairly presents, in all material respects, the financial condition and results of operations of FormFactor, Inc. for the periods presented therein.

Date: March 19, 2004

/s/ Igor Y. Khandros

Igor Y. Khandros
Chief Executive Officer

Date: March 19, 2004

/s/ Jens Meyerhoff

Jens Meyerhoff
Chief Financial Officer

A signed original of the above certification has been provided to FormFactor, Inc. and will be retained by FormFactor, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.