FORMFACTOR INC
Form 10-K
February 27, 2009

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 27, 2008

or

o **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	**13-3711155**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

7005 Southfront Road, Livermore, California 94551
(Address of principal executive offices, including zip code)

(925) 290-4000
(Registrant's telephone number, including area code)

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

Name of each exchange on which registered: **NASDAQ Global Market**

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No ý

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes o No ý

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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 ý No o

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act:

Large Accelerated filer o	Accelerated filer ý	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No ý

Aggregate market value of registrant's common stock held by non-affiliates of the registrant, based upon the closing price of a share of the registrant's common stock on June 28, 2008 as reported by NASDAQ Global Market on that date: $386,027,758. 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 February 20, 2009 was 49,231,979 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2009 Annual Meeting of Stockholders, which will be filed within 120 days of the end of the fiscal year ended December 27, 2008, 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.

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Throughout this Annual Report on Form 10-K, we refer to FormFactor, Inc. and its consolidated subsidiaries as "FormFactor," "the Company," "we," "us," and "our". Our fiscal years end on the last Saturday in December. Our last three fiscal years ended on December 30, 2006, December 29, 2007 and December 27, 2008.

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NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K 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 and uncertainties. The forward-looking statements include statements concerning, among other things, 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 based on information available to us as of the filing date of this Annual Report on Form 10-K and our current expectations about future events, which are inherently subject to change and involve risks and uncertainties. You should not place undue reliance on these forward-looking statements. We undertake no obligation to update any of these statements for any reason. Actual events or results may differ materially from those expressed or implied by these statements due to various factors, including but not limited to the matters discussed in the section entitled "Item 1A: Risk Factors" and elsewhere in this Form 10-K. You should carefully consider the numerous risks and uncertainties described in such section.

PART I

Item 1: ***Business***

We design, develop, manufacture, sell and support precision, high performance advanced semiconductor wafer probe card products and solutions. Semiconductor manufacturers use our wafer probe cards to perform wafer sort and test on the semiconductor die, or chips, or the whole semiconductor wafer, which is prior to singulation of the wafer into individual separate chips. During wafer sort and test, a wafer probe card is mounted in a prober, which in turn is connected to a semiconductor tester. The wafer probe card is used as an interface to connect electronically with and test individual chips on a wafer. Our wafer probe cards are used by our customers in the front end of the semiconductor manufacturing process, as are our parametric or in-line probe cards. We introduced our first wafer probe card based on our MicroSpring® interconnect technology in 1995. We offer products and solutions that are custom designed for semiconductor manufacturers' unique wafer designs and enable them to reduce their overall cost of test.

The oversupply of memory devices in the early part of our fiscal 2008 coupled with the overall economic slowdown had a significant impact on global semiconductor device manufacturing and produced a challenging environment for our advanced wafer test products. Overall, our revenue declined year-over-year in each of the major semiconductor device segments we address Dynamic Random Access Memory, or DRAM, NAND and NOR Flash and System on Chip, or SoC. These results were due to a number of factors including the relative supply and demand of various semiconductor devices and end products incorporating those devices, device manufacturers' efforts to conserve cash by pulling back on production and by delaying the ramp of new technology nodes. To face these challenges, we focused on demand-generation including working to win over customers with an improved full-wafer contact product platform. At the same time, management resized the organization to better align operations with the business environment, match demand, and to improve operating efficiency. We also moved more resources closer to our customers, by extending support in Japan, Singapore and South Korea. As the year progressed, the oversupply of memory devices in the market was compounded by lower demand for consumer electronics, further exacerbating production imbalances.

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Products

Our products are based on our proprietary technologies, including our MicroSpring interconnect technology and design tools. Our MicroSpring interconnect technology, which includes resilient spring-like contact elements, enables us to produce wafer probe cards for applications that require reliability, speed, precision and signal integrity. We manufacture our MicroSpring contact elements through precision micro-machining and scalable semiconductor-like wafer fabrication processes. Our 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 us to achieve reliable, electrical contact on either clean or oxidized surfaces, including bond pads on a wafer. MicroSpring contacts enable our wafer probe cards to make hundreds of thousands of touchdowns with minimal maintenance for many device applications. 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. Our designers use this library to design an optimized custom wafer probe card for each customer-unique application. Since developing this fundamental technology, we have broadened and refined it to respond to the increasing requirements of testing smaller, faster and more complex semiconductor devices. We continue to invest in research and development activities around our interconnect technologies, including our micro-electro-mechanical systems, or MEMS, technology, as our MicroSpring contacts have scaled in size with the evolution of semiconductors.

Our MicroSpring contacts include geometrically precise tip structures. These tip structures are the part of our wafer probe cards that come into physical contact with the devices being tested, and are manufactured using proprietary micro-machining semiconductor-like processes. These tip structures enable precise contact with small bond pad sizes and pitches. Our technology allows for the design of specific geometries of the contact tip that deliver precise and predictable electrical contact for a customer's particular application.

Our wafer probe cards are custom products that are designed to order for our customers' unique wafer designs. For high parallelism memory test applications, our products require large area contact array sizes because they must accommodate tens of thousands of simultaneous contacts. Our current technology enables probe cards for certain applications to be populated with over 40,000 contacts. This requirement poses fundamental challenges that our technology addresses, including the planarity of the array, the force needed to make contact and the need to touch all bond pads with equal accuracy. We have developed wafer probe cards that use array sizes ranging from 50 mm × 50 mm up to array sizes suitable for contacting all die on a 300 mm wafer simultaneously, in combination with complex multi-layer printed circuit boards that we have designed.

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

Because our customers typically use our wafer probe cards in a wide range of operating temperatures, as opposed to conducting wafer probe test at one predetermined temperature, we have designed complex thermal compensation characteristics into our products. We select our wafer probe card materials after careful consideration of the potential range of test operating temperatures and design our wafer probe cards to provide for a precise match with the thermal expansion characteristics

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of the wafer under test. As a result, our wafer probe cards are able to accurately probe over a large range of operating temperatures. This feature enables our 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, we have designed wafer probe cards optimized for testing at such temperatures.

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

Our technology investment yielded several advances in fiscal 2008. In July, we announced a new technology to enhance probe card performance and productivity. The new technology, known as RapidSoak technology, is designed to reduce the time required for the probe card to reach thermal stability. By shortening the time needed to bring a probe card to a desired temperature, RapidSoak technology improves productivity during probe card installation, wafer exchanges, lot changes and probe card maintenance. Maintaining thermal stability also has a positive effect on contact accuracy, since variations in temperature cause expansion and contraction, producing contact alignment challenges.

In November 2008, we introduced DC-Boost technology to help our customers lower their test efficiency by enabling the test of more devices on a single wafer simultaneously. The DC-Boost technology allows our customers to use tester channels more efficiently, increasing test throughput, and extending the life of their existing test equipment. This technology incorporates application specific integrated circuits into our products in order to multiply the number of devices our customers can test in parallel, bringing a new degree of intelligence to the probe card and providing a roadmap for further parallelism improvements on new device designs and tester platforms.

The Harmony eXP full-wafer contact solution was introduced in December 2008, the culmination of several platform improvements to support 300 mm DRAM wafer test requirements. The new Harmony eXP solution incorporates mechanical enhancements to improve planarity (touch all contacts on an even plane), includes a new MicroSpring contactor design to enable pad pitches as small as 60 microns, and allows a 20% reduction in pad size compared to previous generation Harmony products. In combination with certain of our other proprietary technologies, including our RapidSoak technology, the Harmony eXP solution enables our customers to continue their test cost reduction and test technology roadmaps as they transition to smaller devices.

Customers

Our customers include manufacturers in the DRAM, Flash and SoC markets. Our customers use our wafer probe cards to test DRAM chips including DDR, DDR2, DDR3, SDRAM, PSRAM, mobile DRAM, and Graphic DRAM, NOR and NAND flash memory chips, serial data devices, chipsets, microprocessors and microcontrollers.

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Three customers accounted for 51.3% of our revenues in fiscal 2008, four customers accounted for 63.0% of our revenues in fiscal 2007, and three customers accounted for 47.3% of our revenues in fiscal 2006, as follows:

	Fiscal 2008	Fiscal 2007	Fiscal 2006
Elpida	27.7%	26.2%	22.7%
Intel Corporation	12.9	10.0	12.6
Spansion	10.7	14.4	*
Powerchip	*	12.4	12.0

*
Less than 10% of revenues.

Information concerning revenue by geographic region and by country based upon invoicing location appears under "Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations Revenues Revenue by Geographic Region" and Note 12 Operating Segment and Geographic Information of the Notes to our Consolidated Financial Statements, which are included elsewhere in this 10-K.

Backlog

Our backlog was $40.9 million at December 27, 2008 compared to $46.8 million at December 29, 2007. We manufacture our wafer probe cards based on order backlog and customer commitments. In addition, due to our customers' short delivery time requirements, we at times produce our products in anticipation of demand for our products. Backlog includes only orders for which written authorizations have been accepted and shipment dates within 12 months have been assigned. In addition, backlog includes service revenue for existing product service agreements to be earned within the next 12 months. Customers may delay delivery of products or cancel orders prior to shipment, subject to possible cancellation penalties. Due to possible changes in delivery schedules and cancellations of orders, our backlog on any particular date is not necessarily indicative of actual sales for any succeeding period. Delays in delivery schedules and/or a reduction in backlog during any particular period could have a material adverse effect on our business and results of operations.

Manufacturing

Our wafer probe cards are custom products that we design to order for our customers' unique wafer designs. We manufacture our products at our facility located in Livermore, California, United States, and we are ramping parts of our manufacturing processes in regions within Asia as part of our global regionalization strategy.

Another aspect of our global regionalization strategy we are implementing is the movement of operational resources and capabilities to different country regions in Asia to be closer to our customers in order to enhance our customer relationships, improve our responsiveness and increase our product serviceability. The first phase of this strategy was focused on Singapore, where we have established design, sales, procurement and administrative functions. We also established test and assembly manufacturing operations in South Korea in the fourth quarter of 2008. During fiscal 2008, we decided not to proceed with the construction of a new manufacturing facility at our proposed site in Singapore, and in February 2009, we terminated our land lease offer in Singapore and surrendered the land to the lessor. We plan to expand our capabilities in Singapore to include front-end manufacturing processes.

Our proprietary manufacturing processes include wirebonding, photolithography, plating and metallurgical processes, dry and electro-deposition, and complex interconnection system design. The critical steps in our manufacturing process are performed in a Class 100 clean room environment. We

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also expend considerable resources on the assembly and test of our wafer probe cards and on quality control.

We depend upon suppliers for some critical components of our manufacturing processes, including ceramic substrates and complex printed circuit boards, and for materials used in our manufacturing processes. Some of these components and materials are supplied by a single vendor. Generally, we rely on purchase orders rather than long-term contracts with our suppliers which subjects us to risks including price increases and component shortages. We continue to evaluate alternative sources of supply for these components and for materials.

We maintain a repair and service capability in Livermore, California, United States. We also provide repair and service capabilities in our service centers in Gyeonggi-do, South Korea; Dresden, Germany; Yokohama City, Japan and Jubei City, Taiwan.

Research, Development and Engineering

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

Research and development expenses were $65.5 million for fiscal 2008, $61.0 million for fiscal 2007, and $46.6 million for fiscal 2006.

Our research and development activities, including our product engineering activities, are directed by individuals with significant expertise and industry experience. As of December 27, 2008, we had 199 employees in research and development.

Sales and Marketing

We sell our products utilizing a proprietary sales model that emphasizes the customer's total cost of ownership as it relates to the costs of test. With this sales model, we strive to demonstrate how test costs can be reduced by simulating the customer's test floor environment, including testers and probers, utilizing our products and comparing the overall cost of test to that of conventional wafer probe cards.

We sell our products worldwide primarily through our direct sales force, a distributor and three independent sales representatives. As of December 27, 2008, we had 27 sales professionals. In North America, South Korea, Taiwan, Singapore and Japan, we sell our products through our direct sales force. In Europe, our local sales team works with two independent sales representatives and in North America our sales force works with one independent sales representative. In the People's Republic of China, we sell through Spirox Corporation, our regional distributor. We also have the ability to sell our products directly to customers in the People's Republic of China. In July 2008, we terminated our agreement with Spirox for the distribution of our products in Malaysia, Philippines and Singapore and transitioned to a direct sales model in those countries.

Our marketing staff located in Livermore, California, United States, Jubei City, Taiwan 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 our customers.

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We utilize a highly skilled team of field application engineers that support our customers as they integrate our products into their manufacturing processes. Through these customer relationships, we develop a close understanding of customer and product requirements, thereby accelerating our customers' production ramps.

Environmental Matters

We are subject to 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 clean-up of contaminated sites and the maintenance of a safe workplace. We believe that we comply in all material respects with the environmental laws and regulations that apply to us, including those of the California Department of Toxic Substances Control, the Bay Area Air Quality Management District, the City of Livermore Water Resources Division and the California Division of Occupational Safety and Health. We received two notices of violation in fiscal 2007 and one notice of violation in the first quarter of fiscal 2008 from the City of Livermore regarding violation of certain applicable waste water discharge limits. For each notice received, we promptly investigated the violation, took what we believed to be appropriate steps to address the cause of the violation, and implemented corrective measures to prevent a recurrence. We implemented additional waste water treatment capability in consultation with the City of Livermore, and purchased additional waste water discharge capacity, which we required as a result of our then increased manufacturing capacity, through the City of Livermore. No provision has been made for loss from environmental remediation liabilities associated with our Livermore facility because we believe that it is not probable that a liability has been incurred as of December 27, 2008.

While we believe that we are in compliance in all material respects with the environmental laws and regulations that apply to us, in the future, we may receive additional environmental violation notices, and if received, final resolution of the violations identified by these notices could harm our operations, which may adversely impact our operating results and cash flows. 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 also harm our operations, thereby adversely impacting our operating results and cash flows.

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. Our current and potential competitors in the wafer probe card market include Advantest Corporation, Aehr Test Systems, AMST Co., Ltd., Cascade Microtech, Inc., Feinmetall GmbH, Korea Instrument Co., Ltd., Japan Electronic Materials Corporation, SV Probe, Inc., Micronics Japan Co., Ltd., Microfriend Inc., Technoprobe Asia Pte. Ltd., MicroProbe, Inc., Phicom Corporation, Tokyo Cathode Laboratory Co., Ltd., Tokyo Electron Ltd., Touchdown Technologies, Inc., TSE 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 industry in which we compete 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 our 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 we do. We expect that our competitors will enhance their current wafer probe products and that they may introduce new products that will be competitive with our wafer probe cards. In addition, it is possible that new competitors, including test equipment manufacturers, may offer new technologies that reduce the value of our wafer probe cards.

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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 our current competitive advantages. Our ability to compete favorably may also be adversely affected by (1) low volume orders that do not meet our present minimum volume requirements, (2) very short cycle time requirements which may be difficult for us to meet, (3) long-standing relationships between our competitors and certain semiconductor manufacturers, and (4) semiconductor manufacturer test strategies that include low performance semiconductor testers.

Intellectual Property

Our success depends in part upon our ability to continue to innovate and invest in research and development to meet the semiconductor testing requirements of our customers, to maintain and protect our proprietary technology and to conduct our business without infringing the proprietary rights of others. We rely on a combination of patents, trade secrets, trademarks and contractual restrictions on disclosure to protect our intellectual property rights.

As of December 27, 2008, we had 547 issued patents, of which 282 are United States patents and 265 are foreign patents. The expiration dates of these patents range from 2013 to 2027. Our issued patents cover many of the features of our interconnect technology, as well as some of our inventions related to wafer probe cards and testing, wafer-level packaging and test, sockets and assemblies and chips. In addition, as of December 27, 2008, we had 597 patent applications pending worldwide, including 171 United States applications, 426 foreign national or regional stage applications and 27 Patent Cooperation Treaty applications. We cannot provide any assurance that our current patent applications, or any future patent applications that we may file, will result in a patent being issued with the scope of the claims we seek, or at all, or whether any patents that we may obtain will not be challenged or invalidated. Even if additional patents are issued, our patents might not provide sufficiently broad coverage to protect our proprietary rights or to avoid a third party claim against one or more of our products or technologies.

We have both registered and unregistered trademarks, including FormFactor, DC-Boost, Harmony, MicroSpring, MicroForce, MicroLign, RapidSoak, TRE, TrueScale and the FormFactor logo.

We routinely require our employees, customers, suppliers and potential business partners to enter into confidentiality and non-disclosure agreements before we disclose to them any sensitive or proprietary information regarding our products, technology or business plans. We require our employees to assign to us proprietary information, inventions and other intellectual property they create, modify or improve.

Legal protections afford only limited protection for our proprietary rights. We also may not be successful in our efforts to enforce our proprietary rights. To date, for example, we have been unsuccessful in our efforts to enforce certain of our patent rights in South Korea. Notwithstanding our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. From time to time, we have become aware of situations where others are or may be infringing on our proprietary rights. We evaluate these situations as they arise and elect to take actions against these companies as we deem appropriate. Others might independently develop similar or competing technologies or methods or design around our patents, or attempt to manufacture and sell infringing products in countries that do not strongly enforce intellectual property rights or hold invalid our intellectual property rights. In addition, leading companies in the semiconductor industry have extensive patent portfolios and other intellectual property with respect to semiconductor technology. Actions have been filed in the U.S. Patent and Trademark Office and patent offices in other countries, challenging the validity of certain of our patents. In the future, we might receive claims that we are infringing intellectual property rights of others or that our patents or other intellectual property rights are invalid. We have received in the past,

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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.

We have invested significant time and resources in our technology and as a part of our ongoing efforts to protect the intellectual property embodied in our proprietary technologies, including our MicroSpring interconnect technology and design processes, we may pursue actions to enforce our intellectual property rights against infringing third parties.

For a description of the material patent-related proceedings in which we are involved, see "Item 3: Legal Proceedings".

Employees

As of December 27, 2008, we had 940 regular full-time employees, including 199 in research and development, 125 in sales and marketing, 106 in general and administrative functions, and 510 in operations. By region, 785 of our employees were in North America, 56 in Japan, 21 in Taiwan, 36 in South Korea, 26 in Singapore, and 16 in Europe. No employees are currently covered by a collective bargaining agreement. We believe that our relations with our employees are good.

In January 2009, we announced a global reorganization and cost reduction plan that reduced our global workforce. We had 784 regular full-time employees after the January 2009 global reorganization.

Available Information

We maintain a website at *http://www.formfactor.com*. We make available free of charge on our website our 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 we electronically file such material with, or furnish it to, the SEC. The reference to our website does not constitute incorporation by reference of the information contained at the site.

The public may also read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street N.E., 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 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*.

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Directors and Executive Officers

Directors. The names of the members of our board of directors, their ages as of December 27, 2008 and their current occupations are set forth below.

Name of Director	Age	Current Occupation
Dr. Homa Bahrami	53	Senior Lecturer at the Haas School of Business, University of California at Berkeley
Dr. Thomas J. Campbell	56	Presidential Fellow and Distinguished Visiting Professor of Law at Chapman University
G. Carl Everett, Jr.	58	Partner at Accel LLP
Dr. Igor Y. Khandros	54	Chairman of Board of Directors of FormFactor, Inc.
Lothar Maier	53	Chief Executive Officer and Director of Linear Technology Corporation
James A. Prestridge	76	Director of FormFactor
Dr. Mario Ruscev	52	Chief Executive Officer and Director of FormFactor, Inc.
Harvey A. Wagner	67	Chief Executive Officer, President and Director of Caregiver Services, Inc.

Dr. Homa Bahrami has served as a Director since December 2004. Dr. Bahrami is a Senior Lecturer at the Haas School of Business, University of California at Berkeley. Dr. Bahrami has been on the Haas School faculty since 1986 and is widely published on organizational design and organizational development challenges and trends in the high technology sector. Dr. Bahrami currently serves on the board of directors of one privately held company. Dr. Bahrami holds a Ph.D. in organizational behavior from Aston University, United Kingdom.

Dr. Thomas J. Campbell has served as a Director since January 2006. Dr. Campbell previously served as a Director from July 2003 through November 2004, when he resigned to become the Director of Finance for the State of California. Dr. Campbell has served as a professor at the Haas School of Business since August 2002. Dr. Campbell is currently on leave from the University of California at Berkeley to serve as Presidential Fellow and Distinguished Visiting Professor of Law at Chapman University in Orange, California. Dr. Campbell was the Dean of the Haas School of Business at the University of California at Berkeley from August 2002 to July 2008, taking a leave of absence from this post when he became California Director of Finance. Dr. Campbell was the California Director of Finance from December 2004 through November 2005. Dr. Campbell was a professor at Stanford Law School from 1983 to August 2002. Dr. Campbell served as a U.S. congressman from 1989 to 1993 and from 1995 to January 2001, and as a California state senator from 1993 to 1995. Dr. Campbell also served as Director of the Federal Trade Commission's Bureau of Competition from 1981 to 1983. Dr. Campbell serves on the board of directors of Visa Inc., a publicly traded company, where he is Chairman of the Governance Committee and a member of the Compensation Committee. Dr. Campbell holds a B.A., an M.A. and a Ph.D. in economics from the University of Chicago, and a J.D. from Harvard Law School.

G. Carl Everett, Jr. has served as a Director since June 2001. Mr. Everett founded GCE Ventures, a venture advisement firm, in April 2001. Mr. Everett has served as a partner at Accel LLP, a venture capital firm, since 2002. From February 1998 to April 2001, Mr. Everett served as Senior Vice President, Personal Systems Group of Dell Inc. During 1997, Mr. Everett was on a personal sabbatical. From 1978 to December 1996, Mr. Everett held several management positions with Intel Corporation, including Senior Vice President and General Manager of the Microprocessor Products Group, and Senior Vice President and General Manager of the Desktop Products Group. Mr. Everett currently

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serves on the board of directors of three privately held companies. Mr. Everett holds a B.A. in business administration and a Doctorate of laws from New Mexico State University.

Dr. Igor Y. Khandros founded FormFactor in April 1993. Dr. Khandros has served as Chairman of our Board of Directors since June 2008 and as a Director since our company's founding. Dr. Khandros served as our Chief Executive Officer from April 1993 to June 2008. Dr. Khandros also served as our President from April 1993 to November 2004. From 1990 to 1992, Dr. Khandros served as the Vice President of Development of Tessera Technologies, 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, Ukraine. Dr. Khandros holds an M.S. equivalent degree in metallurgical engineering from Kiev Polytechnic Institute in Kiev, Ukraine, and a Ph.D. in metallurgy from Stevens Institute of Technology.

Lothar Maier has served as a Director since November 2006. Mr. Maier has served as the Chief Executive Officer and a member of the board of directors of Linear Technology Corporation, a supplier of high performance analog integrated circuits, since January 2005. Prior to that, Mr. Maier served as Linear Technology's Chief Operating Officer from April 1999 to December 2004. Before joining Linear Technology, Mr. Maier held various management positions at Cypress Semiconductor Corporation, a provider of high-performance, mixed-signal, programmable solutions, from 1983 to 1999, most recently as Senior Vice President and Executive Vice President of Worldwide Operations. Mr. Maier holds a B.S. in chemical engineering from the University of California at Berkeley.

James A. Prestridge has served as a Director since April 2002 and has served as our Lead Independent Director since June 2008. Mr. Prestridge served as Chairman of our Board of Directors from August 2005 to June 2008. Mr. Prestridge served as a consultant for Empirix Inc., a provider of test and monitoring solutions for communications applications, from October 2001 until October 2003. From June 1997 to January 2001, Mr. Prestridge served as a Director of five private companies that were amalgamated into Empirix. Mr. Prestridge served as a director of Teradyne, Inc., a manufacturer of automated test equipment, from 1992 until 2000. Mr. Prestridge was Vice-Chairman of Teradyne from January 1996 until May 2000 and served as Executive Vice President of Teradyne from 1992 until May 1997. Mr. Prestridge holds a B.S. in general engineering from the U.S. Naval Academy and an M.B.A. from Harvard University. Mr. Prestridge served as a Captain in the U.S. Marine Corps.

Dr. Mario Ruscev has served as our Chief Executive Officer since June 2008 and a member of our board of directors since January 2008, when he joined our company. Dr. Ruscev previously served as our President from January 2008 to June 2008. Prior to FormFactor, Dr. Ruscev served as President of Testing Schlumberger Oilfield Services of Schlumberger Limited, a services company supplying technology, project management and information solutions for optimizing performance in the oil and gas industry, from April 2006 to December 2007. He also held several executive positions at Schlumberger during his 23 year career with that company, including President of Schlumberger Water and Carbon Services from April 2002 to March 2006, President of Wireline Schlumberger Oilfield Services from January 2001 to March 2002 and President of Geco-Prakla Schlumberger Oilfield Services from April 1999 to December 2000. Dr. Ruscev received a Doctorate in Nuclear Physics from Université, Pierre et Marie Curie in Paris, France and a Ph.D. in Nuclear Physics from Yale University.

Harvey A. Wagner has served as a Director since February 2005. Mr. Wagner joined Caregiver Services, Inc., a provider of in-home care services, as the President and Chief Executive Officer and a member of the board of directors on April 7, 2008. Mr. Wagner founded the H.A. Wagner Group, LLC, a consulting firm, where he has served as managing principal since July 2007. Mr. Wagner previously served as President and Chief Executive Officer of Quovadx, Inc. (now Healthvision, Inc.), a

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software and services company, from October 2004 to July 2007, and as a member of the board of directors of Quovadx from April 2004 to July 2007. From May 2004 through October 2004, Mr. Wagner served as acting President and Chief Executive Officer of Quovadx. Prior to joining Quovadx, he served as Executive Vice President and Chief Financial Officer of Mirant Corporation, an independent energy company, from January 2003 through April 2004. Prior to joining Mirant, Mr. Wagner was Executive Vice President of Finance, Secretary, Treasurer, and Chief Financial Officer at Optio Software, Inc., a provider of business process improvement solutions, from February 2002 to December 2002. From May 2001 to January 2002, he performed independent consulting services for various corporations. He was Chief Financial Officer and Chief Operating Officer for PaySys International, Inc. from December 1999 to April 2001. Mr. Wagner also serves on the board of directors of Cree, Inc., a publicly traded company, where he is Chairman of the Audit Committee and a member of the Nominating and Governance Committee. Mr. Wagner serves on the Board of Startek, Inc., a publicly traded company, where he is Chairman of the Audit Committee, a member of the Governance Committee and a member of the Compensation Committee. Mr. Wagner holds a B.B.A. in accounting from the University of Miami.

Executive Officers. Our executive officers in fiscal 2008, their ages as of December 27, 2008 and their positions with our company in fiscal 2008 are set forth below.

Name	Age	Position
Dr. Mario Ruscev	52	Chief Executive Officer
Jean B. Vernet	47	Senior Vice President and Chief Financial Officer
Richard M. Freeman	60	Senior Vice President, Operations
Stuart L. Merkadeau	47	Senior Vice President, General Counsel and Secretary

Dr. Mario Ruscev has served as our Chief Executive Officer since June 2008 and a member of our board of directors since January 2008, when he joined our company. Dr. Ruscev previously served as our President from January 2008 to June 2008. Prior to FormFactor, Dr. Ruscev served as President of Testing Schlumberger Oilfield Services of Schlumberger Limited, a services company supplying technology, project management and information solutions for optimizing performance in the oil and gas industry, from April 2006 to December 2007. He also held several executive positions at Schlumberger during his 23 year career with that company, including President of Schlumberger Water and Carbon Services from April 2002 to March 2006, President of Wireline Schlumberger Oilfield Services from January 2001 to March 2002 and President of Geco-Prakla Schlumberger Oilfield Services from April 1999 to December 2000. Dr. Ruscev received a Doctorate in Nuclear Physics from Université, Pierre et Marie Curie in Paris, France and a Ph.D. in Nuclear Physics from Yale University.

Jean B. Vernet joined our company in March 2008, as Chief Financial Officer and Senior Vice President. Mr. Vernet previously served as the Director of Risk and Assistant Treasurer at Rio Tinto Alcan, one of five product groups of Rio Tinto plc, a leading international mining group from July 2007 to March 2008. Prior to joining Rio Tinto, Mr. Vernet worked for more than 10 years at Schlumberger Limited, a services company supplying technology, project management and information solutions for optimizing performance in the oil and gas industry, from October 1996 to June 2007, where he held several key leadership positions, including Finance Director and Controller of the REW Wireline Business Unit and Corporate R&D, from July 2004 to June 2007 and Treasurer of Atlantic Asia from January 2003 to June 2004, as well as various risk management and treasury roles. Mr. Vernet holds a M.S. degree in mechanical engineering from the École Centrale de Lyon in France an M.B.A in analytic finance and accounting from the University of Chicago and a B.S. equivalent in mathematics and physics from Lycée Janson de Sailly in France.

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Richard M. Freeman has served as our Senior Vice President, Manufacturing since January 2009. Mr. Freeman previously served as our Senior Vice President Operations from September 2004 to December 2008. Mr. Freeman previously served as Chief Operating Officer at ChipPAC Inc. a provider of semiconductor packaging, design, assembly, test and distribution services from November 2000 to December 2003. He also served as Senior Vice President of Manufacturing for Cypress Semiconductor Corporation, from April 1999 to November 2000. Prior to this, Mr. Freeman spent over 20 years in semiconductor manufacturing at National Semiconductor Corporation and Fairchild Semiconductor International, Inc., the last position as Vice President of Worldwide Wafer Manufacturing. Mr. Freeman holds a M.S. degree in chemistry from the University of Arizona and a B.S. degree in chemistry from Michigan Technological University.

Stuart L. Merkadeau has served as one of our Senior Vice Presidents since October 2003 and as our General Counsel and Secretary since October 2002. Mr. Merkadeau previously served as one of our Vice Presidents from October 2002 to September 2003, and as our 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.

Item 1A: ***Risk Factors***

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, the trading price of our common stock could decline and you may lose all or part of your investment in our common stock.

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

Our operating results have fluctuated in the past and are likely to continue to fluctuate. As a result, we believe you should not rely on period-to-period comparisons of our financial results as indicators of our future performance. Some of the important factors that could cause our revenues, operating results and outlook to fluctuate from period-to-period include:

customer demand for and adoption of our products;

market and competitive conditions in our industry, the semiconductor industry and the economy as a whole;

our ability to improve operating efficiency to achieve operating cash flow break even in the current business environment and to better position our company for long-term, profitable growth;

the timing and success of new technologies and product introductions by our competitors and by us;

our ability to deliver reliable, cost-effective products that meet our customers' testing requirements in a timely manner;

our ability to bring new products into volume production on time and at acceptable yields and cost;

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our ability to implement measures for enabling efficiencies and supporting growth in our design, applications, manufacturing and other operational activities;

the reduction, rescheduling or cancellation of orders by our customers;

our ability to collect accounts receivables owed by our customers;

our product and customer sales mix and geographical sales mix;

a reduction in the price or the profitability of our products;

the availability or the cost of components and materials utilized in our products;

our ability to efficiently optimize manufacturing capacity and to stabilize production yields and as necessary to meet customer demand, ramp production volume at our manufacturing facilities;

our ability to successfully implement our global regionalization strategy, which includes locating certain operational capabilities and resources in the specific countries where our customers are located;

our ability to protect our intellectual property against third parties and continue our investment in research and design activities;

our ability to obtain tax and other cost advantages from our expansion of operations into Singapore;

any disruption in the operation of our manufacturing facility;

the timing of and return on our investments in research and development; and

seasonality, principally due to our customers' purchasing cycles.

The impact of one or more of these factors might cause our operating results to vary widely. If our revenues, operating results or outlook fall below the expectations of market analysts or investors, the market price of our common stock could decline substantially.

Cyclicality in the semiconductor industry is currently adversely impacting our sales and may do so in the future, and as a result we would experience reduced revenues and 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. The current global economic and semiconductor downturns are causing our operating results to decline dramatically from one period to the next. For example, our revenues in the fourth quarter of fiscal 2008 declined by 66.9% compared to our revenues for the fourth quarter of fiscal 2007 due in significant part to continuing challenges in semiconductor market conditions, particularly in the DRAM and Flash markets, and we cannot provide any assurance when semiconductor market conditions will improve. Our business depends heavily upon the development and manufacture of new semiconductors, the rate at which

semiconductor manufacturers make transitions to smaller nanometer technology nodes and implement tooling cycles, 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 and cell phones, that use semiconductors. Semiconductor manufacturers generally sharply curtail their spending, including their equipment spending, and defer their adoption of emerging technologies during industry downturns and historically have lowered their spending disproportionately more than the decline in their revenues. This is particularly true when there is a point during an industry cycle in which the semiconductor manufacturers' costs related to semiconductor devices approach or exceed the sales price of the devices. As a result, we would

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experience reduced revenues due to the decreased demand for our wafer probe cards by our semiconductor manufacturer customers, which is what we are experiencing in this current downturn. Accordingly, 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 may continue to decline and cause us to experience further operating losses.

If we do not effectively restructure our operations for the current global economic and semiconductor downturns and to better position our company for long-term, profitable growth, we might not succeed.

During an extended period of rapid growth and expansion over the last several years, we primarily focused on growing capacity and meeting customer mission-critical needs. With the current global economic and semiconductor downturn*s*, we are now focusing on improving our operating efficiency to achieve operating cash flow break even in the current business environment and to better position our company for long-term, profitable growth. The timing, length and severity of the cycles in the semiconductor industry are difficult to predict. This cyclicality affects our ability to accurately predict our future operating results and plan our business, and could also impair the value of our tangible and intangible assets. If we do not successfully implement our global cost reduction plan and other measures for optimizing our financial model for prevailing market conditions, our competitiveness could be seriously harmed, our ability to invest in our business for future growth may be negatively impacted and our company might not succeed. If we do not successfully restructure our operations by, for example, placing more decision-making in regions close to our customers to enhance customer relationships, strengthening our local design, application and service capabilities to improve customer responsiveness, changing our manufacturing structure for shorter cycle time and improved product delivery capabilities, and realigning our research and development efforts, and continue to motivate and retain our key employees, we may experience continued deterioration in our business and our company might not succeed. In addition, as the business environment improves, if we are unable to proactively and effectively manage our operations and/or realign our controls, systems and infrastructure to changing business conditions, we may not be in a position to boost our personnel, manufacturing capacity, service capabilities and productivity, and support growth in response to increasing customer demand for our products, which would, in turn, have a negative impact on our operating results. Adverse general economic conditions may also impair the recovery of our business.

The recent financial crisis could negatively affect our business, results of operations, and financial condition.

The recent financial crisis affecting the banking system and financial markets and the going concern threats to financial institutions have resulted in a tightening in the credit markets; a low level of liquidity in many financial markets; and extreme volatility in credit, fixed income, and equity markets. There could be a number of follow-on effects from the credit crisis on our business, including a reduction in demand for consumer and other products incorporating devices tested with our wafer probes, which in turn could cause our customers to curtail their capital expenditures and to defer their adoption of emerging technologies, the insolvency of key suppliers, resulting in product delays, increased expense, and increased impairment charges due to declines in the fair values of marketable debt. Further, a prolonged downturn could result in one or more of our customers filing for bankruptcy protection or insolvency proceedings, which could negatively impact our ability to collect accounts receivables and realize revenue for product shipped to such customers. For example, in fiscal 2009, customers, Spansion Japan, Inc., Qimonda AG, and Qimonda Richmond, LLC filed such actions in Japan, Germany, and North America, respectively. Continued turbulence in the U.S. and international markets and economies may adversely affect our liquidity and financial condition, and the liquidity and financial condition of our customers.

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If we are unable to efficiently manufacture and ramp production of our new probe card products, our business may be materially adversely affected.

We must continuously improve our manufacturing processes in an effort to increase yields and product performance, lower our costs and reduce the time it takes for us to design, manufacture and deliver our products in volume. If we cannot, our new products may not be commercially successful, our revenues may be adversely affected, our customer relationships and our reputation may be harmed, and our business may be materially adversely affected. To improve our manufacturing processes, we have incurred and may incur in the future substantial costs as we optimize capacity and yields, implement new manufacturing technologies, methods and processes, purchase new equipment, upgrade existing equipment and train technical personnel. We have experienced and may experience in the future manufacturing delays and other inefficiencies in connection with implementation of these improvements and customer qualifications of new processes, and expansion of manufacturing capacity and ramp of production volume to meet customer demand, which could cause our operating results to decline. We have also experienced and may experience in the future difficulties in manufacturing our complex products in volume on time and at acceptable yields and cost and installation issues in the field due to complexity of customer design requirements, including integration of wafer probe cards with varying customer test cell environments and testing of semiconductor devices over a wide temperature range. For example, we experienced challenges transitioning our Harmony architecture-based products from a lower-volume, engineering-assisted process to a high-volume manufacturing process. These problems have resulted and could result in the future in missed opportunities with customers. Any continued difficulties could cause additional product delivery delays and lost sales. This increases our vulnerability to our competitors and the likelihood that our customers will seek solutions from other suppliers or to develop solutions themselves. 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.

We derive a substantial portion of our revenues from a small number of customers, and our revenues could decline significantly if any major customer does not place, cancels, reduces or delays a purchase of our products, or does not pay us.

A relatively small number of customers has accounted for a significant portion of our revenues in any particular period. Three customers accounted for 51.3% of our revenues in fiscal 2008, and four customers accounted for 63.0% of our revenues in fiscal 2007. In fiscal 2008 and in fiscal 2007, our ten largest customers accounted for 81.0% and 90.7%, respectively, of our revenues. 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, reduction or deferral of even a small number of purchases of our products could significantly reduce our revenues in any particular quarter. Cancellations, reductions or deferrals could result from a downturn in the semiconductor industry, manufacturing delays, quality or reliability issues with our products, or interruptions to our customers' operations due to fire, natural disasters or other events. Furthermore, because our probe cards are custom products designed for our customers' unique wafer designs, any cancellations, reductions or delays may result in significant, non-recoverable costs. In some situations, our customers might be able to cancel or reduce orders without a significant penalty. Our customers could also fail to pay all or part of an invoice for our products. In the current global economic and semiconductor industry downturns, we are more exposed to this non-payment risk because of concerns regarding the financial viability of certain semiconductor manufacturers. For example, in the fourth quarter of fiscal 2008, we recorded a $4.1 million pre-tax expense to increase our allowance for bad debts as a result of the heightened non-payment risk of accounts receivable primarily related to one customer and on February 20, 2009, we filed a complaint in a California state superior court against Spansion,