The information in this prospectus supplement is not complete and may be changed. This prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS SUPPLEMENT (Subject to Completion) (To Prospectus dated January 12, 2004)

Issued January 26, 2004

47,000,000 Shares



ON Semiconductor Corporation is offering 34,000,000 shares of its common stock and the selling stockholder is offering 13,000,000 shares. ON Semiconductor Corporation will not receive any of the proceeds from the sale of shares by the selling stockholder.

Our common stock is quoted on the Nasdaq National Market under the symbol "ONNN". The last reported sale price of our common stock on January 23, 2004 was \$7.54 per share.

Investing in our common stock involves risks. See the "Risk Factors" section beginning on page S-18 of this prospectus supplement.

PRICE \$ A SHARE

	Price to Public	Underwriting Discounts and Commissions	Proceeds to ON Semiconductor	Proceeds to Selling Stockholder
Per Share	\$	\$	\$	\$
Total	\$	\$	\$	\$

ON Semiconductor Corporation has granted the underwriters the right to purchase up to an additional 5,100,000 shares to cover over-allotments, and the selling stockholder has granted the underwriters the right to purchase up to an additional 1,950,000 shares to cover over-allotments, which rights must be exercised by the underwriters on a pro rata basis.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities, or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about February , 2004.

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MORGAN STANLEY	CREDIT SUISSE FIRST BOSTON
CITIGROUPJPMORGANLEHMAN BROTHERS	

FRIEDMAN BILLINGS RAMSEY

NEEDHAM & COMPANY, INC.

, 2004

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of shares of common stock. The second part, the base prospectus, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined, and when we refer to the "accompanying prospectus," we are referring to the base prospectus.

If the description of this offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.

You should rely only on the information contained in this document or to which we have referred you. Neither we nor the selling stockholder has authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information in this document may only be accurate on the date of this document.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any reports, statements or other information that we file at the Public Reference Room of the SEC, located at 450 Fifth Street, N.W., Washington, D.C. 20549.

You may also obtain copies of our SEC filings by mail from the Office of Investor Education and Assistance of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 or by telephone at 800-SEC-0330. You may obtain information on the operation of the Public Reference Room and the Office of Investor Education and Assistance by calling the SEC at 800-SEC-0330. Our SEC filings are also available to the public from commercial document retrieval services and at the SEC's Internet site (http://www.sec.gov).

You may request a copy of any of our filings with the SEC, or any of the agreements or other documents that are exhibits to those filings, at no cost, by writing, emailing or telephoning us at the following address, email address or phone number:

Secretary
ON Semiconductor Corporation
5005 East McDowell Road
Phoenix, AZ 85008
Email: investor@onsemi.com

Telephone: 602-244-6600

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information we file with it into this prospectus supplement, which means that:

- · incorporated documents are considered part of this prospectus supplement, and
- we can disclose to you important business and financial information about us that is not included in or delivered with this prospectus supplement, by referring you to those other documents.

We incorporate by reference into this prospectus supplement the documents listed below, as amended and supplemented, and all documents filed by us with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus supplement and prior to the termination of this offering:

- · Annual Report on Form 10-K for the year ended December 31, 2002;
- · Quarterly Reports on Form 10-Q for the quarters ended April 4, 2003, July 4, 2003 and October 3, 2003;
- · Proxy Statement filed with the SEC on April 9, 2003; and
- Current Reports on Form 8-K that were filed on January 29, 2003, February 7, 2003, February 18, 2003, March 4, 2003, March 18, 2003, September 3, 2003, and September 9, 2003 (which Form 8-K filed on September 9, 2003 includes certain financial information that supersedes financial information included in our Annual Report on Form 10-K for the year ended December 31, 2002 and our Quarterly Report on Form 10-Q for the quarter ended April 4, 2003), September 18, 2003, September 24, 2003, November 26, 2003, December 4, 2003 and January 2, 2004 (which Form 8-K filed on January 2, 2004 includes certain financial information that supersedes financial information included in our Annual Report on Form 10-K for the year ended December 31, 2002) and both of the Current Reports on Form 8-K that were filed on January 5, 2004.

Any statement made in this prospectus supplement concerning the contents of any contract, agreement or other document is qualified in its entirety by reference to that contract, agreement or document. If we have filed any of those contracts, agreements or other documents with the SEC, you should read such document for a more complete understanding of the document or matter involved. Information contained in this prospectus supplement modifies or supersedes, as applicable, the information contained in earlier-dated documents incorporated by reference. Information that we file with the SEC after the date of this prospectus supplement will automatically supersede the information in this prospectus supplement and any earlier filed information incorporated by reference in this prospectus supplement.

You can obtain any of the filings incorporated by reference into this document through us or from the SEC through the SEC's web site or at the addresses listed above under "Where You Can Find More Information."

FORWARD-LOOKING STATEMENTS

This prospectus supplement contains "forward-looking statements." All statements, other than statements of historical facts, included in this prospectus supplement are forward-looking statements, particularly statements about our plans, strategies and prospects under the heading "Prospectus Supplement Summary" and statements relating to fourth quarter 2003 revenues, gross margins, selling prices and restructuring, asset impairment and other charges and expected future job reductions, cost savings and similar matters. Forward-looking statements are often characterized by the use of words such as "believes," "estimates," "expects," "projects," "may," "will," "intends," "plans" or "anticipates," or by discussions of strategy, plans or intentions. All forward-looking statements in this prospectus supplement are made based on our current expectations and estimates, which involve risks, uncertainties and other factors that could cause results or events to differ materially from those expressed in forward-looking statements. Among these factors are changes in overall economic conditions, the cyclical nature of the semiconductor industry, changes in demand for our products, changes in inventories at our customers and distributors, technological and product development risks, availability of raw materials, competitors' actions, loss of key customers, order cancellations or reduced bookings, changes in manufacturing yields, control of costs and expenses, significant litigation, risks associated with acquisitions and dispositions, risks associated with our substantial leverage and restrictive covenants in our debt instruments, risks associated with our international operations, the threat or occurrence of international armed conflict and terrorist activities both in the United States and internationally and risks involving environmental or other governmental regulation. Additional factors that could affect our future results or events are described from time to time in our SEC filings. See in particular the "Risk Factors"

You should carefully consider the trends, risks and uncertainties described in the "Risk Factors" section of this prospectus supplement and other information in this prospectus supplement, the accompanying prospectus and reports filed with the SEC before making any investment decision with respect to the shares. If any of the trends, risks or uncertainties set forth in the "Risk Factors" section of this prospectus supplement actually occurs or continues, our business, financial condition or operating results could be materially adversely affected. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

PRINCIPAL EXECUTIVE OFFICE

Our headquarters are located at 5005 E. McDowell Road, Phoenix, Arizona 85008 and our telephone number is (602) 244-6600.

PROSPECTUS SUPPLEMENT SUMMARY

The following summary includes basic information about our company and this offering. It may not contain all of the information that is important to you. For a more comprehensive understanding of our company and the common stock being sold in this offering, you should read this entire document (including the documents we have incorporated by reference). Industry or business terms used but not defined in this summary are defined in the "Business" section of our Annual Report on Form 10-K for the year ended December 31, 2002, as amended by our Current Report on Form 8-K filed on September 9, 2003. Information regarding our total addressable market reflects revisions thereto as of January 1, 2003. See the "Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Developments" section of our Annual Report on Form 10-K for the year ended December 31, 2002, as amended by our Current Report on Form 8-K filed on September 9, 2003.

We are a global supplier of power and data management semiconductors and standard semiconductor components. We design, manufacture and market an extensive portfolio of semiconductor components that addresses the design needs of sophisticated electronic systems and products. Our power management semiconductor components distribute and monitor the supply of power to the different elements within a wide variety of electronic devices. Our data management semiconductor components provide high-performance clock management and data flow management for precision computing and communications systems. Our standard semiconductor components serve as "building block" components within virtually all electronic devices.

We serve a broad base of end-user markets, including computing and networking, automotive electronics, consumer electronics, industrial electronics and wireless communications. Applications for our products in these markets include portable electronics, computers, game stations, servers, automotive and industrial automation control systems, routers, switches, storage-area networks and automated test equipment.

We have four main product lines: power management and standard analog devices, metal oxide semiconductor (MOS) power devices, high frequency clock and data management devices and standard components. Our extensive portfolio of devices enables us to offer advanced integrated circuits and the "building block" components that deliver system level functionality and design solutions. Our product portfolio currently comprises approximately 16,000 products and we shipped approximately 21.1 billion units in 2002 and approximately 18.4 billion units in the first nine months of 2003. We specialize in micro packages, which offer increased performance characteristics while reducing the critical board space inside today's ever shrinking electronic devices. We believe that our ability to offer a broad range of products provides our customers with single source purchasing on a cost-effective and timely basis.

We have approximately 200 direct customers worldwide, and we also service approximately 300 significant original equipment manufacturers indirectly through our distributor and electronic manufacturing service provider customers. Our direct and indirect customers include: (1) leading original equipment manufacturers in a broad variety of industries, such as DaimlerChrysler, Delphi, Delta Electronics, Intel, Motorola, Nokia, Samsung, Seagate, Siemens, Sony and Visteon; (2) electronic manufacturing service providers, such as Celestica, Flextronics, FoxConn, Jabil, Sanmina-SCI and Solectron; and (3) global distributors, such as Arrow, Avnet, Future Electronics and World Peace.

We currently have design operations in Arizona, Rhode Island, Texas, China, the Czech Republic and France, and we currently operate manufacturing facilities in Arizona, Rhode Island, China, the Czech Republic, Japan, Malaysia, the Philippines and Slovakia.

Recent Developments

Unaudited Preliminary Fourth Quarter 2003 Financial Results. We expect our revenues for the fourth quarter of 2003 to have increased by approximately 5% as compared to the third quarter of 2003 despite an estimated decline in average selling prices of between 2.5% and 3% from the third quarter of 2003 to the fourth quarter of 2003. In addition, we expect our gross margin for the fourth quarter of 2003 to have remained approximately flat as compared to our 28% gross margin for the third quarter of 2003.

Recent Refinancings. In November 2003, we refinanced approximately \$369 million of term loans under our senior bank facilities. We replaced our tranche B, tranche C and tranche D term loan facilities under our senior bank facilities with a single new tranche E term loan facility with terms, other than the interest rate, that are identical to those of the tranche D term loan facility. We also reduced the interest rate on our term loans by 0.75% per annum.

In December 2003, we prepaid approximately \$48 million of the tranche E term loans under our senior bank facilities with the proceeds from a new loan provided to our joint venture in Leshan, China by the China Construction Bank. The new loan facility is comprised of two \$24 million tranches, one with a 10-year term and one with a three-year term extendible for an additional three years under certain circumstances, each of which bears interest at a rate of LIBOR plus 1.5%, as compared to LIBOR plus 3.25% under our senior bank facilities.

As a result of these refinancings, we expect to save approximately \$3.6 million per year in interest costs.

Facilities Closures and Transfers. In December 2003, we announced our decision to phase out manufacturing operations at our facility in East Greenwich, R.I. by the end of 2004 and transfer most of the production of this facility to our lower cost manufacturing facilities outside of North America and the balance to lower cost contract manufacturers, resulting in an expected reduction of 330 jobs and an expected restructuring, asset impairment and other charge of between \$15 million and \$20 million in the fourth quarter of 2003. We estimate that the cash component of this charge, which is primarily related to employee severance payments, will be approximately \$4 million and will be paid throughout 2004. As a result of these actions, we expect to realize manufacturing cost savings of between \$20 million and \$25 million during 2005, as compared to the annualized costs for the third quarter of 2003. We anticipate modest savings during 2004 as we transition the East Greenwich manufacturing operations to other facilities. We plan to maintain and develop our design and business support operations in the Rhode Island area.

In November 2003, we announced our decision to discontinue our assembly and test operations at our site in Roznov, Czech Republic and move these operations to our facility in Seremban, Malaysia and to contract manufacturers. This action is expected to result in restructuring, asset impairment and other charges of between \$5 million and \$10 million in the fourth quarter of 2003. We expect the cash component of this charge to be less than \$1 million, which will be primarily related to severance costs paid during the fourth quarter of 2003. As a result of these actions, we expect to realize manufacturing cost savings of approximately \$1 million for 2004 and between \$4 million and \$5 million on an annual basis thereafter, in each case in comparison to costs from the third quarter of 2003.

Amendment and Waiver Under Senior Bank Facilities

In connection with this offering, we have obtained an amendment and waiver under the credit agreement relating to our senior bank facilities, which will become effective upon completion of this offering. The amendment and waiver, among other things:

· waives the requirement under the credit agreement that 50% of the net proceeds of this offering be used to prepay loans under the senior bank facilities;

- · amends the credit agreement to permit sale and leaseback transactions involving real or personal property with an aggregate fair value of up to \$15 million (and to permit the asset sales in connection therewith) and to provide that net proceeds from asset sales in connection with such transactions will not be required to be used to prepay loans under the senior bank facilities; and
- amends the credit agreement to permit us to purchase, redeem or retire our first lien senior secured notes due 2010, second lien senior secured notes due 2008 and senior subordinated notes due 2009 with the proceeds of this offering within 270 days after the completion of the offering so long as no default or event of default exists under the credit agreement after giving effect to such purchases, redemptions or retirements, such purchases, redemptions or retirements comply with the indentures governing such notes and we immediately cancel any such notes that are purchased, redeemed or retired.

As described below under "Use of Proceeds," we intend to use a portion of the proceeds of this offering to redeem \$70 million outstanding principal amount of our first lien senior secured notes due 2010 and \$105 million outstanding principal amount of our second lien senior secured notes due 2008.

Competitive Strengths

We believe our core strengths are the following:

Leading Market Position. We are one of the largest independent suppliers of power and data management semiconductors in the world, and we produce a broad range of standard semiconductor components. In 2002 and the first nine months of 2003, we had a market share of approximately 5% in our total addressable market. Our total addressable market, consisting of discrete, analog and standard logic semiconductors, comprised approximately \$20.3 billion and \$16.8 billion in sales in 2002 and the first nine months of 2003, respectively. We believe that the combination of our broad product portfolio, high level of customer service, world class quality and technological expertise has enabled us to enter into and maintain long-term relationships with leading original equipment manufacturers, electronic manufacturing service providers and global distributors.

Extensive Product Portfolio Targeting Diverse End Markets. We offer our customers one of the largest and most diverse product offerings for power and data management semiconductors and standard semiconductor components. Our product portfolio consists of approximately 16,000 products, and we shipped approximately 21.1 billion units in 2002 and approximately 18.4 billion units in the first nine months of 2003. Our products have long life cycles, which average approximately 15 years. Additionally, our products are targeted at diverse end markets, including computing and networking, automotive electronics, consumer electronics, industrial and wireless communications. Our ability to provide customers with multiple products across multiple applications serves a growing requirement among our end users for a single source of supply.

Broad Customer Base. We have a broad and diverse direct and indirect customer base that includes leading original equipment manufacturers, such as DaimlerChrysler, Delphi, Delta Electronics, Intel, Motorola, Nokia, Samsung, Seagate, Siemens, Sony and Visteon. We also serve top tier electronic manufacturing service providers, such as Celestica, Flextronics, FoxConn, Jabil, Sanmina-SCI and Solectron, and global distributors, such as Arrow, Avnet, Future Electronics and World Peace. Overall, we serve approximately 200 direct customers, and products incorporating our components are ultimately purchased by end-users in a large number of markets. We are less dependent on either specific customers or specific end-use applications than many manufacturers of more specialized and complex integrated circuits.

Superior Customer Service. High quality customer service is an essential element of our business. Our focused, dedicated and experienced sales and marketing organization consists of approximately 400

professionals as of November 2003, and our direct sales personnel are supported by approximately 250 sales representatives. We meet our customers' demands for reliable delivery and quick responses to inquiries and orders through efficient communication and inventory management, making extensive use of electronic data interchange functions for order and payment processing, just-in-time delivery facilities and internet-based communications. As a result of meeting the demands of our broad customer base, we have received a number of supplier of the year awards from customers in the United States, Europe and Asia. Over the past three years, we have received such awards from Bosch, Celestica, Flextronics, Jabil, Motorola, Philips, Samsung, Siemens, Solectron, Sony and Visteon. We have long-standing relationships with our customers, having served 47 of our 50 largest customers for more than 5 years.

Low Cost Production. Since the fourth quarter of 2000, we have been implementing a profitability enhancement program to improve our cost structure and, as a result, we expect to rank, as compared to our primary competitors, among the lowest in terms of cost structure. As a result of the elements of this program that we started in June 2001 and completed in the fourth quarter of 2002 (the 2000 plan), we achieved \$365 million of annualized cost savings, based on a comparison of our cost structure during the first quarter of 2001 to our cost structure during the third quarter of 2002. As a result of additional cost cutting commenced in the fourth quarter of 2002, which was completed during the fourth quarter of 2003 (the 2002 plan), we believe that we achieved an estimated \$80 million of cost savings in 2003, as compared to our cost structure during the third quarter of 2002, and we expect to achieve an estimated \$119 million of annual costs savings beginning in 2004 from the 2002 plan. These savings are a result of our manufacturing rationalization plan, reductions in non-manufacturing personnel and other cost controls. Our manufacturing rationalization plan included movement of our manufacturing operations from high cost regions in North America to lower cost regions in Asia and Central Europe. As a result, approximately 80% of our cost of goods sold in the third quarter of 2003 related to our manufacturing operations outside of North America. More recently, we announced that we intend to phase out our manufacturing operations in East Greenwich, R.I. and our assembly and test operations in the Czech Republic by the end of 2004.

New Product Innovation. As a result of the success of our research and development initiatives, we introduced 176 new products in 2002 and 235 new products in the first nine months of 2003. The primary emphasis of our new product development efforts is on power management and high frequency clock and data management solutions, which are among the highest margin product families within our portfolio. The portion of our revenue attributable to new products has increased over the last three calendar years and increased in the first nine months of 2003 as compared to the first nine months of 2002, even though our overall revenue has declined over this period. We define new product revenue as revenue from the sale of products that we have introduced in the three years prior to and during the period measured.

Experienced Management Team. Our management team is led by Keith Jackson, President and Chief Executive Officer, who has more than 20 years of industry experience. Mr. Jackson was Executive Vice President and General Manager of the Analog-Mixed Signal division of Fairchild Semiconductor Corporation and, more recently, was selected to head Fairchild's Integrated Circuits Group until he assumed his current role at ON Semiconductor in November 2002. In March 2003, we hired Donald Colvin, who has over 26 years of experience in the management of finance and accounting operations for global semiconductor companies, to serve as Chief Financial Officer. Mr. Colvin came to ON Semiconductor from Atmel Corporation, a manufacturer of advanced semiconductors, where he served as Vice President of Finance and Chief Financial Officer since 1998. Our CEO and CFO join a strong management team that includes Dr. William George, our Senior Vice President, Operations, and William Bradford, our Senior Vice President of Sales and Marketing. Dr. George has worked in the semiconductor industry for over 35 years, including 3 years as COO of Sematech, and Mr. Bradford has worked in the semiconductor industry for over 17 years. The 8 members of our senior management team have an average of 23 years of industry experience.

Business Strategy

Our objective is to build upon our position as a global supplier of power and data management semiconductors and standard semiconductor components. The principal elements of our business strategy are described below.

Intense Focus on our Customers. We believe that we are well positioned to increase our revenues and market share and to improve our operating results by focusing on the needs of our customers through the following initiatives:

- · maintain and refine our broad portfolio of products so that we can capitalize on industry trends and continue to offer our customers a single source of supply for virtually all their component needs;
- · continue to develop leading edge customer support services, such as a full range of internet services that provide advanced search capabilities, device specifications, design engineering capabilities and order entry, to enable us to further improve our response time to customer inquiries and orders and reduce the cost of serving customers; and
- · reduce design cycle time in order to quickly bring new products to customers to meet their changing needs.

Improvement in our Manufacturing Efficiency. We intend to build on our successful cost reduction initiatives to date by continuing to lower our production costs and by increasing our manufacturing efficiency. By continuing to focus on reducing costs, we seek to achieve gross margins as a percentage of revenue at levels higher than those of our primary competitors. While trying to achieve our objectives of improved manufacturing efficiency, we are sensitive to maintaining our manufacturing flexibility to accommodate a possible increase in demand for our products. Some of our key initiatives include:

- · significantly increase our die manufacturing capacity in a cost-effective manner by continuing to move production from 4" to 6" wafers and increasing the number of die per square inch;
- · reduce further the number of new product platforms and process flows to continue to allow us to introduce new products in a more cost-effective manner and increase manufacturing efficiency;
- · continue to manage our existing portfolio of products aggressively in order to focus our production on profitable product lines while continuing to meet our customers' needs for a broad selection of component products; and
- · increase our manufacturing utilization through profitability enhancement programs that reduce the number of production and test lines and manufacturing facilities and enable the low cost production of our products.

Promote Efficient New Product Development. Since our initial public offering of common stock in May 2000, we have introduced over 1,000 new products. We are currently targeting more than 70% of our overall research and development investments towards power management and high frequency clock and data management products. We intend to continue to enhance our current portfolio of products through the following strategies:

- · reduce the number of research and development projects we pursue in order to make our product development efforts more efficient;
- · concentrate on the development of power management and high frequency clock and data management solutions; and
- · focus on target applications in automotive, computing, wireless and power supplies to provide more of a system solution for our key customers.

Focus on Cash Flow Generation. Since the fourth quarter of 2000, we have been implementing a profitability enhancement program to improve our cost structure. By reducing our costs, we seek to lower the break-even level of revenues required to generate cash flow from operations. While we reduce costs, we continue to focus on growing our business through key research and development projects and focused capital expenditures that complement our manufacturing capability.

Improve our Capital Structure. We are committed to reducing our total debt and financial leverage in order to improve our financial performance. We will reduce our debt and reduce our interest expense as a result of this offering. As a result of our September 2003 offering of common stock we reduced our debt and our interest expense and, as a result of financings that we completed in May 2002, March 2003, September 2003 and November 2003, we extended a portion of our debt maturities. In addition, as part of our November 2003 and December 2003 refinancings, we reduced our overall interest costs.

As a result of this offering, we will further reduce our debt. See "Use of Proceeds" and "Capitalization." In the future, if operating results and market conditions permit, we intend to further reduce our overall debt balance through a combination of cash flow from operations as well as additional financing initiatives.

THE OFFERING

Issuer ON Semiconductor Corporation, a Delaware corporation

Common stock offered:

By ON Semiconductor Corporation 34,000,000 shares
By the Selling Stockholder(2) 13,000,000 shares
Total 47,000,000 shares

Common stock outstanding after the offering (1) 251,833,721 shares

Over-allotment options:

By ON Semiconductor Corporation 5,100,000 shares

By the Selling Stockholder(2) 1,950,000 shares

Total 7,050,000 shares

The options granted by ON Semiconductor and the selling stockholder must be exercised on a pro rata

basis.

Dividend Policy We have not paid any cash dividends on our common stock since our initial public offering, and we do

not presently intend to do so. Each of our senior bank facilities, first lien senior secured notes due 2010, second lien senior secured notes due 2008, senior subordinated notes due 2009 and Series A cumulative convertible redeemable preferred stock restricts our ability to pay cash dividends to our common

stockholders. See "Common Stock Price Range and Dividend Policy."

Use of Proceeds We intend to use a portion of the net proceeds of the offering to redeem a portion of our first lien senior

secured notes due 2010 and our second lien senior secured notes due 2008 through the exercise of the "equity clawback" provisions of the indentures governing the notes. We intend to use any remaining proceeds for general corporate purposes, which may include additional reductions in our outstanding debt. We will not receive any of the proceeds from the sale of shares by the selling stockholder. See

"Use of Proceeds."

Nasdaq National Market symbol ONNN

(1) The number of shares of our common stock outstanding immediately after this offering is based on the 217,833,721 outstanding shares at January 21, 2004. The share numbers above do not take into account:

- 4,054,145 shares of common stock issuable upon the exercise of options granted prior to our initial public offering, at an exercise price of \$1.50 per share, under our 1999 Founders Stock Option Plan;
- 18,822,445 shares of common stock issuable upon the exercise of options granted after our initial public offering, at an average exercise price of \$4.73 per share, under our 1999 Founders Stock Option Plan and our amended and restated 2000 Stock Incentive Plan;
- · 16,295,323 additional shares of common stock reserved for future issuance under our 1999 Founders Stock Option Plan, our amended and restated 2000 Stock Incentive Plan and our 2000 Employee Stock Purchase Plan; and

 42,595,774 shares of common stock that TPG ON Holdings LLC has the right to acquire upon conversion of our Series A cumulative convertible redeemable preferred stock (excluding 851,915 additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004).

See "Capitalization."

(2) The selling stockholder owns 124,999,433 shares of our common stock, which is directly held by TPG Semiconductor Holdings LLC, and 10,000 shares of our Series A cumulative convertible redeemable preferred stock, which is directly held by TPG ON Holdings LLC. The shares of preferred stock entitle the holder to vote with holders of common stock as a single class and carry 37,655,198 votes (excluding 753,104 additional votes in respect of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004). Such shares of preferred stock are convertible into 42,595,774 shares of common stock (excluding 851,915 additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004). As of January 21, 2004, the shares of common stock and preferred stock owned by the selling stockholder represented 63.7% of the total voting power of our outstanding capital stock, if such shares of preferred stock had been converted as of such date), in each case excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004.

The selling stockholder will own, upon completion of this offering, shares of capital stock representing 51.7% of the total voting power of our outstanding capital stock (or 52.5% of the total voting power of our outstanding capital stock, if such shares of preferred stock were converted as of such date), in each case based on the number of shares of common stock outstanding on January 21, 2004 and excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004. Assuming the underwriters exercise their over-allotment options in full, the selling stockholder will own, upon completion of this offering, shares of capital stock representing 50.1% of the total voting power of our outstanding capital stock (or 51.0% of the total voting power of our outstanding capital stock, if such shares of preferred stock were converted as of such date), in each case based on the number of shares of common stock outstanding on January 21, 2004 and excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004.

SUMMARY FINANCIAL AND OTHER DATA

The following table summarizes certain of our financial and other data for the periods indicated. We derived the statement of operations and cash flow data set forth below for the years ended December 31, 2000, 2001 and 2002, and the balance sheet data for December 31, 2001 and 2002 from our audited consolidated financial statements included in our Current Report on Form 8-K filed on September 9, 2003. We derived the summary financial and other data for the nine month periods ended September 27, 2002 and October 3, 2003 from our unaudited interim consolidated financial statements included in our Quarterly Report on Form 10-Q for the quarter ended October 3, 2003. The pro forma column for 2000 reflects our results as if the change in distributor revenue recognition discussed below had been applied retroactively. We believe this presentation is useful to investors in comparing historical results and this presentation is used by our management in making historical comparisons. In our opinion, the unaudited financial information includes all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation. Results for the nine-month periods ended September 27, 2002 and October 3, 2003 are not indicative of results for future periods. You should read this information in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in each of our Current Report on Form 8-K filed on September 9, 2003 and our Quarterly Report on Form 8-K filed on September 9, 2003, and our unaudited interim consolidated financial statements and the notes thereto included in our Quarterly Report on Form 10-Q for the quarter ended October 3, 2003.

	Year Ended December 31,						
	2000			_	Nine Months Ended		
	As Reported	Pro Forma	2001	2002	September 27, 2002	October 3, 2003	
			(in ı	nillions)			
Statement of Operations Data(1)(2):							
Total revenues	\$ 2,083.3	\$ 1,968.1	\$1,223.2	\$1,093.7	\$ 825.2	\$ 790.5	
Gross profit	729.1	675.4	227.3	297.8	223.0	221.9	
Research and development expense	69.2	69.2	80.9	67.9	50.4	51.3	
Selling and marketing expense	100.1	100.1	74.8	61.2	44.7	46.5	
General and administrative expense	233.4	233.4	130.9	102.1	79.7	61.4	
Restructuring, asset impairments and other(3)	4.8	4.8	150.4	27.7	10.2	31.3	
Operating income (loss)	277.9	224.2	(232.3)	27.0	29.0	25.5	
Income (loss) before cumulative effect of accounting							
change(4)	71.1	30.8	(715.0)	(141.9)	(102.3)	(102.8)	
Net income (loss)	71.1	30.8	(831.4)	(141.9)	(102.3)	(124.3)	
Net income (loss) applicable to common stock(5)	62.3	22.0	(846.9)	(150.4)	(108.6)	(131.0)	

	As of Dec	As of December 31,		
	2001	2002	October 3, 2003	
		(in millions)		
Balance Sheet Data(2):				
Cash and cash equivalents	\$ 186.0	\$ 190.4	\$ 183.6	
Receivables, net	135.6	115.4	152.4	
Inventories, net	185.6	163.5	172.4	
Net working capital	205.1	195.2	207.0	
Property, plant and equipment, net	686.5	585.3	519.9	
Total assets	1,399.2	1,243.4	1,189.4	
Total debt (including current maturities)	1,406.9	1,423.2	1,292.9	
Total stockholders' equity (deficit)(6)	(517.4)	(662.1)	(603.9)	
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Year Ended December 31,			Nine Months Ended				
2000	2001	2002				October 3, 2003	
		(in millions)					
\$ 312.2	\$ (116.4)	\$ 46.4	\$	34.3	\$	17.9	
(493.2)	(115.4)	(36.0)		(33.9)		(30.1)	
239.3	226.2	(7.0)		(3.4)		4.4	
\$ 254.1	\$ 149.0	\$ 40.5	\$	37.2	\$	41.5	
167.5	177.1	148.0		111.0		100.6	
	2000 \$ 312.2 (493.2) 239.3 \$ 254.1	2000 2001 \$ 312.2 \$ (116.4) (493.2) (115.4) 239.3 226.2 \$ 254.1 \$ 149.0	2000 2001 2002 (in millions) \$ 312.2 \$ (116.4) \$ 46.4 (493.2) (115.4) (36.0) 239.3 226.2 (7.0) \$ 254.1 \$ 149.0 \$ 40.5	2000 2001 2002 Septer 2 (in millions) \$ 312.2 \$ (116.4) \$ 46.4 \$ (493.2) (115.4) (36.0) 239.3 226.2 (7.0) \$ 254.1 \$ 149.0 \$ 40.5 \$	2000 2001 2002 September 27, 2002 (in millions) \$ 312.2 \$ (116.4) \$ 46.4 \$ 34.3 (493.2) (115.4) (36.0) (33.9) (239.3 226.2 (7.0) (3.4) \$ 254.1 \$ 149.0 \$ 40.5 \$ 37.2	2000 2001 2002 September 27, 2002 (in millions) \$ 312.2 \$ (116.4) \$ 46.4 \$ 34.3 \$ (493.2) (115.4) (36.0) (33.9) 239.3 226.2 (7.0) (3.4) \$ 254.1 \$ 149.0 \$ 40.5 \$ 37.2 \$	

- (1) Effective January 1, 2001, we changed our accounting method for recognizing revenue on sales to distributors. Recognition of revenue and related gross profit on sales to distributors is now deferred until the distributor resells the product. We believe that this change better aligns reported results with, focuses us on, and allows investors to better understand end user demand for the products that we sell through distributors. This revenue recognition policy is commonly used in the semiconductor industry. The cumulative effect of this accounting change for periods prior to January 1, 2001 was a charge of \$155.2 million (\$116.4 million, net of income taxes) and was recorded in 2001.
- (2) In the second quarter of 2003, we adopted FASB Interpretation No. 46, "Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51." FASB Interpretation No. 46 requires that certain variable interest entities be consolidated by the primary beneficiary, as that term is defined in FASB Interpretation No. 46. We determined that our investment in Leshan-Phoenix Semiconductor Company Limited meets the definition of a variable interest entity as our economic interest in Leshan is proportionately greater than our ownership interest in Leshan and, therefore, our investment in Leshan should be consolidated under FASB Interpretation No. 46. We had previously accounted for our investment in Leshan using the equity method. While consolidation of our investment in Leshan did not impact our previously reported net income (loss) or stockholders' equity (deficit), financial information for periods beginning on or after January 1, 2000 that appears in this prospectus supplement has been revised for comparative purposes as allowed by FASB Interpretation No. 46. Financial information for the periods following our August 4, 1999 recapitalization and ending prior to January 1, 2000 that appears in documents incorporated by reference into this prospectus supplement has not been so revised.
- (3) Results of operations for the year ended December 31, 2000 include restructuring, asset impairments and other charges of \$4.8 million and are comprised of \$2.4 million to cover employee separation costs and \$2.4 million for asset impairments. Results of operations for the year ended December 31, 2001 include restructuring, asset impairments and other charges of \$150.4 million and are comprised of \$80.4 million to cover employee separation costs, \$66.2 million of asset impairments and costs related to facilities closures and termination of contracts and \$3.8 million to cover the costs associated with the separation of one of our

executive officers. Results of operations for the year ended December 31, 2002 include restructuring charges, asset impairment charges and other items of \$27.7 million and are comprised of \$21.2 million of employee separation costs, \$15.9 million of asset impairments and costs related to facilities closures and termination of contracts and \$4.9 million to cover the costs associated with the termination of executive officers, which were partially offset by \$1.9 million from the release of reserves and a \$12.4 million gain from the settlement of various contractual issues with Motorola. Results of operations for the first nine months of 2003 include restructuring, asset impairments and other of \$31.3 million and are comprised of \$1.8 million to cover employee separation costs, \$12.9 million of fixed asset impairments and costs related to termination of contracts and \$21.3 million of other non-cash impairment charges primarily related to developed technology from our acquisition of Cherry Semiconductor in 2000, which were partially offset by a gain of \$4.6 million relating to the sale of our Guadalajara, Mexico facility and the release of reserves of \$0.1 million.

- (4) Effective January 1, 2001, we changed our accounting method for recognizing revenue on sales to distributors. Recognition of revenue and the related gross profit on sales to distributors is now deferred until the distributor resells the product to the end user. The cumulative effect of this accounting change for periods prior to January 1, 2001 was a charge of \$155.2 million (\$116.4 million net of taxes). Effective January 1, 2003, we changed our method of accounting for net unrecognized actuarial gains or losses related to our defined benefit pension obligations. The cumulative effect of this accounting change for the periods prior to January 1, 2003 was a charge of \$21.5 million both before and after income taxes.
- (5) Net income (loss) applicable to common stock reflects the deduction of dividends relating to the Series A cumulative convertible redeemable preferred stock held by an affiliate of Texas Pacific Group, our controlling stockholder. On or after September 7, 2009, this preferred stock is redeemable in whole or in part at the option of the holder at a redemption price equal to the greater of stated value plus all unpaid dividends accumulated or 50% of the current market price of our common stock into which the preferred stock is then convertible. We are required to accrete the value of the preferred stock to its redemption value, and any resulting non-cash charge would reduce net income applicable to common stock. As a result, net income applicable to common stock may be reduced by any such non-cash charges resulting from changes in the market price of our common stock.
 - For periods through September 30, 2003, we were not required to accrete any non-cash charge in respect of the redemption price due to the levels of the market price of our common stock during those periods (although we did, and will continue to, record charges in respect of the dividends on the preferred stock). Any such accretion due to the market price of our common stock in respect of the fourth quarter of 2003 would not be material. Based on a common stock price of \$7.54 per share, the last reported sale price of our common stock on January 23, 2004, we estimate that the amount of any non-cash charge in respect of such accretion and dividends on the preferred stock would be approximately \$4.2 million in the first quarter of 2004. However, the amount of the redemption price and therefore the amount of the quarterly non-cash charge will vary in the future based on changes in the market price of our common stock.
- (6) The increase in stockholders' deficit between December 31, 2001 and December 31, 2002 is primarily attributable to the 2002 net loss of \$141.9 million. The decrease in stockholders' deficit between December 31, 2002 and October 3, 2003 is primarily attributable to \$158.1 million associated with our September 2003 public offering of common stock and \$19.6 million associated with the change in our method of accounting for net unrecognized actuarial gains and losses related to our defined benefit pension obligations, which was partially offset by our net loss of \$124.3 million for the first nine months of 2003

RISK FACTORS

You should carefully consider the risks and uncertainties described below before purchasing our common stock.

Statement of operations data referred to in this section for the year ended December 31, 2000 are pro forma for the change in our revenue recognition policy for sales to distributors. See Note 3 "Significant Accounting Policies" and Note 4 "Accounting Changes" of the notes to the audited consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Current Report on Form 8-K filed on September 9, 2003. Financial information that is referred to in this section for periods following our August 4, 1999 recapitalization reflects the consolidation of our Leshan joint venture and, for periods prior to the nine months ended October 3, 2003 has been revised to reflect such consolidation for comparative purposes, as permitted by FASB Interpretation No. 46. See Note 1 "Background and Basis of Presentation" of the notes to the unaudited interim consolidated financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Quarterly Report on Form 10-Q for the quarter ended October 3, 2003.

Risks Relating to Our Company

We have recently experienced declines in revenues and increases in operating losses, and we may experience additional declines in revenues and increases in operating losses in the future.

Our historical financial results have been, and our future financial results are anticipated to be, subject to substantial fluctuations. Our total revenues for 2000, 2001, 2002 and the first nine months of 2003 were \$1,968.1 million, \$1,223.2 million, \$1,093.7 million and \$790.5 million, respectively. The decline in revenues from 2000 to 2001 resulted from price declines and reduced demand for our products, while the decline in revenues from 2001 to 2002 was primarily due to price declines for our products. We had a net income of \$30.8 million in 2000 and we incurred net losses of \$831.4 million in 2001, \$141.9 million in 2002 and \$124.3 million in the first nine months of 2003. The most recent downturn in our business has been most pronounced with respect to our high frequency clock and data management products. Net revenues from high frequency clock and data management products represented \$295.9 million, \$118.5 million, \$72.0 million and \$58.0 million, or 15.0%, 9.7%, 6.6%, and 7.3%, of the total revenues in 2000, 2001, 2002 and the first nine months of 2003, respectively.

Reduced end-user demand, continued price declines, excess inventory, underutilization of our manufacturing capacity and other factors could adversely affect our business in the near term and we may experience additional declines in revenue and operating losses in the future. In order to return to profitability, we must successfully implement our business plan, including our cost reduction initiatives. However, we also currently face an environment of uncertain demand and pricing pressures in the markets our products address. We cannot assure you that we will be able to return to profitability or that we will be able to sustain our profitability, if achieved.

We operate in the highly cyclical semiconductor industry, which is subject to significant downturns.

The semiconductor industry is highly cyclical. The industry has experienced significant downturns, often in connection with, or in anticipation of, maturing product cycles (for semiconductors and for the end-user products in which they are used) and declines in general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. We have experienced these conditions in our business in the past, are currently experiencing a significant and prolonged downturn and may experience such downturns in the future. The most recent downturn, which began in the fourth quarter of 2000, was severe and prolonged. It is uncertain whether recent improvements in semiconductor industry performance will continue or whether such improvements will benefit us to the same extent as they benefit other industry participants. Future downturns in the semiconductor industry, or any failure of the

industry to recover fully from its recent downturn, could seriously impact our revenues and harm our business, financial condition and results of operations.

During the 1990s and continuing into 2000, the semiconductor industry enjoyed unprecedented growth, benefiting from the rapid expansion of the internet and other computing and communications technologies. During 2001, we—like many of our customers and competitors—were adversely affected by a general economic slowdown and an abrupt decline in demand for many of the end-user products that incorporate our integrated circuits and standard semiconductors. The terrorist attacks of September 11, 2001 also further depressed economic activity and demand for end-user products. The impact of slowing end-customer demand was compounded by higher than normal levels of equipment and component inventories among our original equipment manufacturer, subcontractor and distributor customers, resulting in increasing pricing pressure. We expect that factors including, but not limited to, economic uncertainty and downturns relating to the threat or actual occurrence of armed international conflict or terrorist attacks, reduced demand for end-user products, underutilization of our manufacturing capacity and changes in our revenue mix could adversely impact our operating results in the near term.

Our gross margin is dependent on a number of factors, including our level of capacity utilization.

Semiconductor manufacturing requires significant capital investment, leading to high fixed costs, including depreciation expense. If we are unable to utilize our manufacturing and testing facilities at a high level, the fixed costs associated with these facilities will not be fully absorbed, resulting in higher average unit costs and lower gross margins. The decline in product orders and shipments in 2001 resulted in reduced capacity utilization of our facilities as we have attempted to match production with anticipated customer demand. From 2000 to 2001, gross margins declined primarily due to lower factory utilization resulting from lower customer demand, lower selling prices and a change in product mix towards lower margin devices, partially offset by cost reduction initiatives. As a percentage of total revenues, gross margin was 34.3% for 2000, 18.6% for 2001, 27.2% for 2002 and 28.1% for the first nine months of 2003. Although our gross margin as a percentage of revenues improved between 2001 and 2002, gross margin declined sequentially in the fourth quarter of 2002, the first quarter of 2003 and the third quarter of 2003, in each case as a result of pricing pressure. Increased competition and other factors may lead to further price erosion, lower revenues and lower margins for us in the future.

The failure to implement, as well as the completion and impact of, our restructuring programs and cost reductions could adversely affect our business.

Between 2000 and the end of 2003, we implemented a number of cost reduction initiatives in response to the significant downturn in our industry. These initiatives have included accelerating our manufacturing moves into lower cost regions, transitioning higher-cost external supply to internal manufacturing, working with our material suppliers to further lower costs, personnel reductions, reductions in employee compensation, temporary shutdowns of facilities with mandatory vacation and aggressively streamlining our overhead. However, we cannot assure you that these cost reduction initiatives will, in and of themselves, return us to profitability.

The impact of our restructuring actions on our ability to compete effectively is subject to risks and uncertainties. Because our restructuring activities involve changes to many aspects of our business, the cost reductions could adversely impact productivity and sales to an extent we have not anticipated. Even if we fully execute and implement these activities and they generate the anticipated cost savings, there may be other unforeseeable factors that could adversely impact our profitability and business.

If we are unable to implement our business strategy, our revenues and profitability may be adversely affected.

Our future financial performance and success are largely dependent on our ability to implement our business strategy successfully. Our present business strategy to build upon our position as a global supplier of power and data management semiconductors and standard semiconductor components includes, without limitation, plans to: (1) maintain and refine our product portfolio; (2) continue to develop leading edge customer support services; (3) expand further our just-in-time delivery capabilities; (4) increase our die manufacturing capacity in a cost-effective manner; (5) reduce further the number of our product platforms and process flows; (6) continue to manage our existing portfolio of products aggressively; (7) rationalize our manufacturing operations; (8) relocate manufacturing operations or outsource to lower cost regions; (9) reduce selling and administrative expenses; (10) reduce capital expenditures; (11) actively manage working capital; (12) develop new products in a more efficient manner; and (13) focus on the development of power management and standard analog and high frequency clock and data management products. We cannot assure you that we will successfully implement our business strategy or that implementing our strategy will sustain or improve our results of operations. In particular, we cannot assure you that we will be able to build our position in markets with high growth potential, increase our volume or revenue, rationalize our manufacturing operations or reduce our costs and expenses.

Our business strategy is based on our assumptions about the future demand for our current products and the new products and applications that we are developing and on our ability to produce our products profitably. Each of these factors depends on our ability, among other things, to finance our operating and product development activities, maintain high quality and efficient manufacturing operations, relocate and close manufacturing facilities and reduce operating expenses as part of our ongoing cost restructuring with minimal disruption to our operations, access quality raw materials and contract manufacturing services in a cost-effective and timely manner, protect our intellectual property portfolio and attract and retain highly-skilled technical, managerial, marketing and finance personnel. Several of these and other factors that could affect our ability to implement our business strategy, such as risks associated with international operations, the threat or occurrence of armed international conflict or terrorist activities, increased competition, legal developments and general economic conditions, are beyond our control. In addition, circumstances beyond our control and changes in our business or industry may require us to change our business strategy.

We may require additional capital in the future, and additional funds may not be available on terms acceptable to us.

We believe that our existing cash and cash equivalents, together with the cash that we expect to generate from our operations and sales of assets in the ordinary course of business, will be sufficient to meet our planned capital needs for the next twelve months. However, it is possible that we may need to raise additional capital to fund our future activities or to consummate acquisitions of other businesses, products or technologies. As of January 15, 2004, we had \$12.4 million of borrowing capacity available under our revolving credit facility. Subject to the restrictions contained in our senior bank facilities and the indentures governing our first lien senior secured notes due 2010, our second lien senior secured notes due 2008 and our senior subordinated notes due 2009, we may be able to raise these funds by selling securities to the public or selected investors, or by borrowing money. We may not be able to obtain additional funds on favorable terms, or at all. If adequate funds are not available, we may be required to curtail our operations significantly, reduce planned capital expenditures and research and development, make selective dispositions of our assets or obtain funds through arrangements with strategic partners or others that may require us to relinquish rights to certain technologies or potential markets, or otherwise impair our ability to remain competitive.

We may be unable to make the substantial research and development investments required to remain competitive in our business.

The semiconductor industry requires substantial investment in research and development in order to develop and bring to market new and enhanced technologies and products. We are committed to maintaining spending on new product development in order to stay competitive in our markets. We cannot assure you that we will have sufficient resources to maintain the level of investment in research and development that is required to remain competitive. The primary emphasis of our new product development is in the power management and high frequency clock and data management solutions, with more than 70% of our overall research and development investment targeted in these areas.

Uncertainties involving the ordering and shipment of, and payment for, our products could adversely affect our business.

Our sales are typically made pursuant to individual purchase orders and we generally do not have long-term supply arrangements with our customers. Generally, our customers may cancel orders 30 days prior to shipment without incurring a significant penalty. We routinely purchase inventory based on customers' estimates of demand for their products, which is difficult to predict. This difficulty may be compounded when we sell to original equipment manufacturers indirectly through distributors or contract manufacturers, or both, as our forecasts for demand are then based on estimates provided by multiple parties. In addition, our customers may change their inventory practices on short notice for any reason. The cancellation or deferral of product orders, the return of previously sold products or overproduction due to failure of anticipated orders to materialize could result in excess obsolete inventory, which could result in write-downs of inventory or the incurrence of significant cancellation penalties under our arrangements with our raw materials and equipment suppliers.

During 2001, the markets in which our customers operate were characterized by a dramatic decline in end-user demand and continued high levels of channel inventories, which reduced visibility of future demand for our products and, in some cases, led to delays or defaults in payments for our products. In 2002 and the first half of 2003, short customer lead times prevailed given the over-capacity in the industry, and these and other factors adversely affected our revenues during this period.

An inability to introduce new products could adversely affect us, and changing technologies or consumption patterns could reduce the demand for our products.

Rapidly changing technologies and industry standards, along with frequent new product introductions, characterize the industries that are currently the primary end-users of semiconductors. As these industries evolve and introduce new products, our success will depend on our ability to predict and adapt to these changes in a timely and cost-effective manner by designing, developing, manufacturing, marketing and providing customer support for our own new products and technologies.

We cannot assure you that we will be able to identify changes in the product markets and requirements of our customers and end-users and adapt to such changes in a timely and cost-effective manner. Nor can we assure you that products or technologies that may be developed in the future by our competitors and others will not render our products or technologies obsolete or noncompetitive. A fundamental shift in technologies or consumption patterns in our existing product markets or the product markets of our customers or end-users could have a material adverse effect on our business or prospects.

Competition in our industry could prevent us from maintaining our revenues and from raising prices to offset increases in costs.

The semiconductor industry, particularly the market for semiconductor components, is highly competitive. As a result of the recent economic downturn, competition in the markets in which we operate has

intensified as manufacturers of semiconductor components have offered reduced prices in order to combat production overcapacity and high inventory levels. Although only a few companies compete with us in all of our product lines, we face significant competition within each of our product lines from major international semiconductor companies as well as smaller companies focused on specific market niches. In addition, companies not currently in direct competition with us may introduce competing products in the future. The semiconductor components industry has also been undergoing significant restructuring and consolidations that could adversely affect our competitiveness.

Many of our competitors may have certain advantages over us, including substantially greater financial and other resources with which to withstand adverse economic or market conditions and pursue development, engineering, manufacturing, marketing and distribution of their products; longer independent operating histories and presence in key markets; and greater name recognition.

Because our components are often building block semiconductors that in some cases can be integrated into more complex integrated circuits, we also face competition from manufacturers of integrated circuits, application-specific integrated circuits and fully customized integrated circuits, as well as customers who develop their own integrated circuit products.

We compete in different product lines to various degrees on the basis of price, quality, technical performance, product features, product system compatibility, customized design, strategic relationships with customers, new product innovation, availability, delivery timing and reliability and customer sales and technical support. Gross margins in the industry vary by geographic region depending on local demand for the products in which semiconductors are used, such as personal computers, industrial and telecommunications equipment, consumer electronics and automotive goods. Our ability to compete successfully depends on elements both within and outside of our control, including industry and general economic trends.

Unless we maintain manufacturing efficiency, our future profitability could be adversely affected.

Manufacturing semiconductor components involves highly complex processes that require advanced equipment. We and our competitors continuously modify these processes in an effort to improve yields and product performance. Impurities or other difficulties in the manufacturing process can lower yields. Our manufacturing efficiency will be an important factor in our future profitability, and we cannot assure you that we will be able to maintain our manufacturing efficiency or increase manufacturing efficiency to the same extent as our competitors.

From time to time, we have experienced difficulty in beginning production at new facilities, transferring production to other facilities or effecting transitions to new manufacturing processes that have caused us to suffer delays in product deliveries or reduced yields. We cannot assure you that we will not experience manufacturing problems in achieving acceptable yields or experience product delivery delays in the future as a result of, among other things, capacity constraints, construction delays, transferring production to other facilities, upgrading or expanding existing facilities or changing our process technologies, any of which could result in a loss of future revenues. Our results of operations could also be adversely affected by the increase in fixed costs and operating expenses related to increases in production capacity if revenues do not increase proportionately.

We could be required to incur significant capital expenditures for manufacturing technology and equipment to remain competitive.

In view of industry conditions in recent years, we reduced our capital expenditures from \$254.1 million in 2000 to \$149.0 million in 2001 and \$40.5 million in 2002. However, in the first nine months of 2003, our capital expenditures totaled \$41.5 million, and we estimate that our capital expenditures in 2003 were approximately \$60 million. We may be required to increase our future capital expenditures to meet increased demand.

Semiconductor manufacturing has historically required, and in the future is likely to continue to require, a constant upgrading of process technology to remain competitive, as new and enhanced semiconductor processes are developed which permit smaller, more efficient and more powerful semiconductor devices. We maintain certain of our own manufacturing, assembly and test facilities, which have required and will continue to require significant investments in manufacturing technology and equipment. We have made substantial capital expenditures and installed significant production capacity to support new technologies and increased production volume.

We cannot assure you that we will have sufficient capital resources to make necessary investments in manufacturing technology and equipment. In addition, our principal credit agreement limits the amount of our capital expenditures.

If we were to lose one of our large customers, our revenues and profitability could be adversely affected.

Product shipments to our ten largest customers accounted in the aggregate for approximately 49%, 51% and 55% of our total shipments in 2001, 2002 and the first nine months of 2003, respectively. Many of our customers operate in cyclical industries, and in the past we have experienced significant fluctuations from period to period in the volume of our products ordered. Generally, our agreements with our customers impose no minimum or continuing obligations to purchase our products. We cannot assure you that any of our customers will not significantly reduce orders or seek price reductions in the future or that the loss of one or more of our customers would not have a material adverse effect on our business or prospects.

The loss of our sources of raw materials or manufacturing services, or increases in the prices of such goods or services, could adversely affect our operations and productivity.

Our results of operations could be adversely affected if we are unable to obtain adequate supplies of raw materials in a timely manner or if the costs of our raw materials increase significantly or their quality deteriorates. Our manufacturing processes rely on many raw materials, including silicon wafers, copper lead frames, mold compound, ceramic packages and various chemicals and gases. Generally, our agreements with suppliers impose no minimum or continuing supply obligations, and we obtain our raw materials and supplies from a large number of sources on a just-in-time basis. From time to time, suppliers may extend lead times, limit supplies or increase prices due to capacity constraints or other factors. Although we believe that our current supplies of raw materials are adequate, shortages could occur in various essential materials due to interruption of supply or increased demand in the industry.

In addition, for some of our products, such as our new Silicon Germanium (SiGe) technology, we are dependent upon a limited number of highly specialized suppliers for required components and materials. The number of qualified alternative suppliers for these kinds of technologies is extremely limited. We cannot assure you that we will not lose our suppliers for these key technologies or that our suppliers will be able to meet performance and quality specifications or delivery schedules. Disruption or termination of our limited supply sources for these components and materials could delay our shipments of products utilizing these technologies and damage relationships with current and prospective customers.

We also use third-party contractors for some of our manufacturing activities, primarily for wafer fabrication and the assembly and testing of final goods. These contract manufacturers, including AIT, Amkor, ASAT, ASE, Chartered, Hynix, Liteon, Motorola, Phenitec and PSI, accounted for approximately 37%, 29%, 23% and 22% of our cost of sales in 2000, 2001, 2002 and the first nine months of 2003, respectively. Our agreements with these manufacturers typically require us to forecast product needs and commit to purchase services consistent with these forecasts, and in some cases require longer-term commitments in the early stages of the relationship. Our operations could be adversely affected if these contractual relationships were disrupted or terminated, the cost of such services increased significantly, the quality of the services provided deteriorated or our forecasts proved to be materially incorrect.

Acquisitions and strategic alliances may harm our operating results or cause us to incur debt or assume contingent liabilities.

We may in the future acquire and form strategic alliances relating to other businesses, products and technologies. Successful acquisitions and alliances in the semiconductor industry are difficult to accomplish because they require, among other things, efficient integration and aligning of product offerings and manufacturing operations and coordination of sales and marketing and research and development efforts. The difficulties of integration and alignment may be increased by the necessity of coordinating geographically separated organizations, the complexity of the technologies being integrated and aligned and the necessity of integrating personnel with disparate business backgrounds and combining different corporate cultures. The integration and alignment of operations following an acquisition or alliance requires the dedication of management resources that may distract attention from the day-to-day business, and may disrupt key research and development, marketing or sales efforts. We may also incur debt or assume contingent liabilities in connection with acquisitions and alliances, which could harm our operating results. Without strategic acquisitions and alliances we may have difficulty meeting future customer product and service requirements.

Our international operations subject us to risks inherent in doing business on an international level that could adversely impact our results of operations.

Approximately 40%, 39% and 21% of our total revenues in 2001, 37%, 45% and 18% of our total revenues in 2002 and 31%, 51% and 18% of our total revenues during the first nine months of 2003 were derived from the Americas, the Asia/Pacific region and Europe (including the Middle East), respectively. We maintain significant operations in Seremban, Malaysia; Carmona, the Philippines; Aizu, Japan; Leshan, China; Roznov, the Czech Republic; and Piestany, the Slovak Republic. In addition, we rely on a number of contract manufacturers (primarily for assembly and testing) whose operations are primarily located in the Asia/Pacific region.

We cannot assure you that we will be successful in overcoming the risks that relate to or arise from operating in international markets. Risks inherent in doing business on an international level include, among others, the following:

- economic and political instability (including as a result of the threat or occurrence of armed international conflict or terrorist attacks);
- · changes in regulatory requirements, tariffs, customs, duties and other trade barriers;
- transportation delays;
- power supply shortages and shutdowns;
- · difficulties in staffing and managing foreign operations and other labor problems;
- · currency convertibility and repatriation;
- taxation of our earnings and the earnings of our personnel; and
- other risks relating to the administration of or changes in, or new interpretations of, the laws, regulations and policies of the jurisdictions in which we conduct our business.

Our activities outside the United States are subject to additional risks associated with fluctuating currency values and exchange rates, hard currency shortages and controls on currency exchange. While our sales are primarily denominated in U.S. dollars, worldwide semiconductor pricing is influenced by currency rate fluctuations.

If we fail to attract and retain highly-skilled personnel, our results of operations and competitive position could deteriorate.

Our success depends upon our ability to attract and retain highly-skilled technical, managerial, marketing and finance personnel. The market for personnel with such qualifications is highly competitive. For example, analog component designers are difficult to attract and retain, and the failure to attract and retain analog component designers could compromise our ability to keep pace with our competitors in the market for analog components. We have not entered into employment agreements with all of our key personnel. As employee incentives, we issue common stock options that generally have exercise prices at the market value at time of the grant and that are subject to vesting. Declines in our stock price may reduce the effectiveness of these incentives. Loss of the services of, or failure to effectively recruit, qualified personnel, including senior managers and design engineers, could have a material adverse effect on our business.

We use a significant amount of intellectual property in our business. Some of that intellectual property is currently subject to disputes with third parties, and litigation could arise in the future. If we are unable to protect the intellectual property we use, our business could be adversely affected.

We rely on patents, trade secrets, trademarks, mask works and copyrights to protect our products and technologies. Some of our products and technologies are not covered by any patents or pending patent applications, and we cannot assure you that:

- any of the substantial number of U.S. and foreign patents and pending patent applications that we employ in our business, including those that Motorola assigned, licensed or sublicensed to us in connection with our recapitalization, will not lapse or be invalidated, circumvented, challenged, abandoned or licensed to others;
- the license rights granted by Motorola in connection with our recapitalization will provide competitive advantages to us;
- any of our pending or future patent applications will be issued or have the coverage originally sought;
- · any of the trademarks, copyrights, trade secrets, know-how or mask works that Motorola has assigned, licensed or sublicensed to us in connection with our recapitalization will not lapse or be invalidated, circumvented, challenged, abandoned or licensed to others; or
- · any of our pending or future trademark, copyright, or mask work applications will be issued or have the coverage originally sought.

In addition, our competitors or others may develop products or technologies that are similar or superior to our products or technologies, duplicate our products or technologies or design around our protected technologies. Effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in the United States and in foreign countries.

Also, we may from time to time in the future be notified of claims that we may be infringing third-party patents or other intellectual property rights. Motorola has agreed to indemnify us for a limited period of time with respect to some claims that our activities infringe on the intellectual property rights of others. If necessary or desirable, we may seek licenses under such patents or intellectual property rights. However, we cannot assure you that we will obtain such licenses or that the terms of any offered licenses will be acceptable to us. The failure to obtain a license from a third party for technologies we use could cause us to incur substantial liabilities or to suspend the manufacture or shipment of products or our use of processes requiring the technologies. Litigation could cause us to incur significant expense, by adversely affecting sales of the challenged product or technologies and diverting the efforts of our technical and management personnel, whether or not such litigation is resolved in our favor. In the event of an adverse outcome in any such litigation, we may be required to:

· pay substantial damages;

- · cease the manufacture, use, sale or importation of infringing products;
- expend significant resources to develop or acquire non-infringing technologies;
- · discontinue the use of processes; or
- · obtain licenses to the infringing technologies.

We cannot assure you that we would be successful in any such development or acquisition or that any such licenses would be available to us on reasonable terms. Any such development, acquisition or license could require the expenditure of substantial time and other resources.

We will also seek to protect our proprietary technologies, including technologies that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with our collaborators, advisors, employees and consultants. We cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that persons or institutions will not assert rights to intellectual property arising out of our research.

We are party to securities class action litigation which may be costly to defend and the outcome of which is uncertain.

In July 2001, three stockholder class action lawsuits were filed in the United States District Court for the Southern District of New York against us, certain of our former officers, current and former directors and various investment banking firms who acted as underwriters in connection with our initial public offering in May 2000. In April 2002, the plaintiffs filed a consolidated, amended complaint that supercedes the individual complaints originally filed. The amended complaint generally alleges that our offering documents failed to disclose certain underwriting fees and commissions and underwriter tie-ins and other arrangements with certain customers of the underwriters that impacted the price of our common stock in the after-market. The plaintiffs are seeking unspecified damages. On July 15, 2002, together with other issuer defendants, we filed a collective motion to dismiss the class action lawsuit. On February 19, 2003, as to the claims brought against us under the antifraud provisions of the securities laws, the Court dismissed these claims with prejudice. As to the claims brought under the registration provisions of the securities laws, the Court denied the motion to dismiss these claims. In addition, the parties have stipulated to the voluntary dismissal without prejudice of the current and former directors and officers who were named as individual defendants in the litigation. In June 2003, upon the determination of a special independent committee of our Board of Directors, we elected to participate in a proposed settlement with the plaintiffs in this litigation. Formal settlement documents for submission to the court are currently being drafted. If this proposed settlement is ultimately finalized and then submitted to and approved by the Court, it would result in a dismissal, with prejudice, of all claims in the litigation against us and against any of the other issuer defendants who elect to participate in the proposed settlement, together with the current or former officers and directors of parti

We can provide no assurance as to the outcome of this securities litigation. Any conclusion of this litigation in a manner adverse to us could have a material adverse effect on our business, financial condition, results of operations and cash flows. In addition, the cost to us of defending the litigation, even if resolved in our favor, could be substantial. Such litigation could also substantially divert the attention of our management and our resources in general. Uncertainties resulting from the initiation and continuation of this litigation could harm our ability to compete in the marketplace. Because the price of our common stock has been, and may continue to be, volatile, we can provide no assurance that additional securities litigation will not be filed against us in the future.

Environmental and other regulatory matters could adversely affect our ability to conduct our business and could require expenditures that could have a material adverse affect on our results of operations and financial condition.

Our manufacturing operations are subject to various environmental laws and regulations relating to the management, disposal and remediation of hazardous substances and the emission and discharge of pollutants into the air and water. Our operations are also subject to laws and regulations relating to workplace safety and worker health, which, among other things, regulate employee exposure to hazardous substances. Motorola has agreed to indemnify us for environmental and health and safety liabilities related to the conduct or operations of our business or Motorola's ownership, occupancy or use of real property occurring prior to the closing of our recapitalization transaction. We also have purchased environmental insurance to cover certain claims related to historical contamination and future releases of hazardous substances. However, we cannot assure you that such indemnification arrangements and insurance policy will cover all material environmental costs. In addition, the nature of our operations exposes us to the continuing risk of environmental and health and safety liabilities related to events or activities occurring after our recapitalization.

Based upon information currently available to us, we believe that the future cost of compliance with existing environmental and health and safety laws and regulations, and any liability for environmental conditions, will not have a material adverse effect on our business or prospects. However, we cannot predict:

- · changes in environmental or health and safety laws or regulations;
- the manner in which environmental or health and safety laws or regulations will be enforced, administered or interpreted;
- our ability to enforce and collect under indemnity agreements and insurance policies relating to environmental liabilities; or
- the cost of compliance with future environmental or health and safety laws or regulations or the costs associated with any future environmental claims, including the cost of clean-up of currently unknown environmental conditions.

Terrorist attacks, such as the attacks that occurred in New York and Washington D.C. on September 11, 2001, or threats or occurrences of international armed conflict or other terrorist activities both in the United States and internationally may affect the markets in which our common stock trades, the markets in which we operate and our profitability.

On September 11, 2001, the United States was the target of terrorist attacks of unprecedented scope. The threat or occurrences of international armed conflict or other terrorist activities both in the United States and internationally may affect the markets in which our securities trade, the market in which we operate and our profitability. The terrorist attacks caused instability in the global financial markets, and future or threatened terrorist attacks or occurrences of international armed conflict could result in greater economic instability.

The September 11 attacks and other terrorist attacks have disrupted the global insurance and reinsurance industries, and we may experience delays in renewing some insurance policies and may not be able to obtain insurance at historical levels on all of our facilities. Future terrorist attacks or occurrences of international armed conflict could affect our domestic and international sales, disrupt our supply chain and impair our ability to produce and deliver our products. Such conflicts and hostilities could directly impact our physical facilities or those of our joint ventures, suppliers or customers, both in the United States and elsewhere. Our primary facilities are located in the United States, Malaysia, the Philippines, Japan, the Czech Republic, China and Slovakia. In addition, these sorts of activities may make transportation of our supplies and products more difficult or cost prohibitive. Due to the broad and uncertain effects that terrorist attacks have had on financial and economic markets generally, we cannot provide any reliable measure of the impact that these terrorist attacks have had on our recent financial performance or any estimate as to how these sorts of attacks and activities might affect our future results.

Risks Relating to Our Indebtedness

Our substantial debt could impair our financial condition and adversely affect our ability to operate our business.

We are highly leveraged and have substantial debt service obligations. As of October 3, 2003, we had total long-term indebtedness of \$1,292.9 million (including current maturities, but excluding unused commitments) and interest expense of \$114.7 million for the first nine months of 2003. Also, we may incur additional debt in the future, subject to certain limitations contained in our debt instruments.

The degree to which we are leveraged could have important consequences to you, including:

- our ability to obtain additional financing in the future for working capital, capital expenditures, acquisitions, general corporate purposes or other purposes may be impaired;
- · a significant portion of our cash flow from operations must be dedicated to the payment of interest and principal on our debt, which reduces the funds available to us for our operations;
- some of our debt is and will continue to be at variable rates of interest, which may result in higher interest expense in the event of increases in market interest rates;
- our debt agreements contain, and any agreements to refinance our debt likely will contain, financial and restrictive covenants, and our failure to comply with them may result in an event of default which, if not cured or waived, could have a material adverse effect on us;
- · our level of indebtedness will increase our vulnerability to general economic downturns and adverse industry conditions;
- our debt service obligations could limit our flexibility in planning for, or reacting to, changes in our business and the semiconductor industry; and
- our substantial leverage could place us at a competitive disadvantage vis-à-vis our competitors who have less leverage relative to their overall capital structures.

We may incur more debt, which could exacerbate the risks described above.

We and our subsidiaries may be able to incur substantial additional indebtedness in the future. The agreements relating to our outstanding indebtedness restrict us from incurring additional indebtedness, but do not fully prohibit us or our subsidiaries from doing so. If new debt is added to our and our subsidiaries' current debt levels, the related risks that we and they now face could intensify. See "Prospectus Supplement Summary—Summary Financial and Other Data" and "Capitalization." Some of the debt we may incur may be secured by the collateral securing certain of our existing indebtedness.

The agreements relating to our indebtedness may restrict our current and future operations, particularly our ability to respond to changes or to take some actions.

Our debt agreements contain, and any future debt agreements may include, a number of restrictive covenants that impose significant operating and financial restrictions on, among other things, our ability to:

- · incur additional debt, including guarantees;
- · incur liens;
- · sell or otherwise dispose of assets;
- · make investments, loans or advances;
- · make some acquisitions;

- · engage in mergers or consolidations;
- · make capital expenditures;
- · pay dividends, redeem capital stock or make certain other restricted payments or investments;
- pay dividends from our subsidiary, Semiconductor Components Industries, LLC, to ON Semiconductor Corporation;
- · engage in sale and leaseback transactions;
- · enter into new lines of business;
- · issue some types of preferred stock; and
- · enter into transactions with our affiliates.

In addition, our senior bank facilities require that we maintain minimum consolidated EBITDA as defined in the credit agreement and a minimum amount of cash and cash equivalents. Any future debt could contain financial and other covenants more restrictive than those that are currently applicable.

Our failure to comply with the agreements relating to our outstanding indebtedness, including as a result of events beyond our control, could result in an event of default that could materially and adversely affect our operating results and our financial condition.

If there were an event of default under any of the agreements relating to our outstanding indebtedness, the holders of the defaulted debt could cause all amounts outstanding with respect to that debt to be due and payable immediately. We cannot assure you that our assets or cash flow would be sufficient to fully repay borrowings under our outstanding debt instruments, either upon maturity or if accelerated upon an event of default or, if we were required to repurchase any of our debt securities upon a change of control, that we would be able to refinance or restructure the payments on those debt securities. Further, if we are unable to repay, refinance or restructure our indebtedness under our secured debt, the holders of such debt could proceed against the collateral securing that indebtedness. In addition, any event of default or declaration of acceleration under one debt instrument could also result in an event of default under one or more of our other debt instruments.

We may not be able to generate sufficient cash flow to meet our debt service obligations.

Our ability to generate sufficient cash flow from operations to make scheduled payments on our debt obligations will depend on our future financial performance, which will be affected by a range of economic, competitive and business factors, many of which are outside of our control. If we do not generate sufficient cash flow from operations and proceeds from sales of assets in the ordinary course of business to satisfy our debt obligations, we may have to undertake alternative financing plans, such as refinancing or restructuring our debt, selling additional assets, reducing or delaying capital investments or seeking to raise additional capital. The terms of our financing agreements contain limitations on our ability to incur indebtedness. As of January 15, 2004, we had \$12.4 million of borrowing capacity available under our revolving credit facility. As of January 9, 2003, we amended our primary foreign exchange hedging agreement to provide for termination if at any time the amount available under our revolving credit facility is less than \$2.5 million. We cannot assure you that any refinancing would be possible, that any assets could be sold, or, if sold, of the timing of the sales and the amount of proceeds realized from those sales, or that additional financing could be obtained on acceptable terms, if at all, or would be permitted under the terms of our various debt instruments then in effect. Our inability to generate sufficient cash flow to satisfy our debt obligations, or to refinance our obligations on commercially reasonable terms, would have an adverse effect on our business, financial condition and results of operations, as well as on our ability to satisfy our debt obligations.

Risks Relating to Our Common Stock

Fluctuations in our quarterly operating results may cause our stock price to decline.

Given the nature of the markets in which we participate, we cannot reliably predict future revenues and profitability, and unexpected changes may cause us to adjust our operations. A large portion of our costs are fixed, due in part to our significant sales, research and development and manufacturing costs. Thus, small declines in revenues could negatively affect our operating results in any given quarter. Factors that could affect our quarterly operating results include:

- the timing and size of orders from our customers, including cancellations and reschedulings;
- the timing of introduction of new products;
- the gain or loss of significant customers, including as a result of industry consolidation;
- · seasonality in some of our target markets;
- · changes in the mix of products we sell;
- changes in demand by the end-users of our customers' products;
- · market acceptance of our current and future products;
- · variability of our customers' product life cycles;
- changes in manufacturing yields or other factors affecting the cost of goods sold, such as the cost and availability of raw materials and the extent of utilization of manufacturing capacity;
- · changes in the prices of our products, which can be affected by the level of our customers' and end-users' demand, technological change, product obsolescence, competition, or other factors;
- · cancellations, changes or delays of deliveries to us by our third-party manufacturers, including as a result of the availability of manufacturing capacity and the proposed terms of manufacturing arrangements;
- · our liquidity and access to capital; and
- · our research and development activities and the funding thereof.

Holders of our common stock may experience dilution and the price of our common stock may decline as a result of the issuance of stock in the future.

In September 2001, we sold 10,000 shares of our Series A Cumulative Convertible Redeemable Preferred Stock to TPG ON Holdings LLC, an affiliate of the Texas Pacific Group. Each share of the preferred stock is convertible at the option of the holder into approximately 3,546 shares of our common stock as of the issue date, excluding shares into which the preferred stock is convertible due to accumulated and unpaid dividends and subject to customary anti-dilution adjustments. Under the anti-dilution provisions, the conversion price (currently \$2.82) is subject to downward adjustment in the event we issue common stock, or derivative securities entitling the holder to subscribe for or acquire common stock, at a price below the then-current conversion price or market price. Holders of preferred stock are entitled to cumulative dividends, payable quarterly in cash, at a rate of 8% per annum (or if greater during the relevant quarterly period, in an amount equal to the value of the dividends that would be paid on our common stock then issuable upon conversion of the preferred stock), subject to applicable restrictions imposed by our senior bank facility. In the event dividends are not paid, the dividends will accumulate on a compounded basis and the number of shares of common stock into which the preferred stock is convertible will increase proportionately.

There is a possibility that the preferred stock will be converted at a price per share that is less than the then current market price of our common stock. If this were to occur, it may cause substantial dilution to our existing

common stockholders. Additionally, we registered the shares of common stock issuable upon conversion of the preferred stock under the Securities Act for public resale. Therefore, in the event that the preferred stock is converted, a substantial number of shares of our common stock may be sold into the market, which could decrease the trading price of our common stock and encourage short sales by the selling shareholder or others. Short sales could place further downward pressure on the price of our common stock.

In addition to the preferred stock, we may issue more stock in the future, which may cause dilution and a decline in the price of our common stock.

Our stock price may be volatile, which could result in substantial losses for investors in our securities.

The stock markets in general, and the markets for high technology stocks in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock.

The market price of the common stock may also fluctuate significantly in response to the following factors, some of which are beyond our control:

- · variations in our quarterly operating results;
- · changes in management's or securities analysts' estimates of our financial performance;
- changes in market valuations of similar companies;
- · announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures, capital commitments, new products or product enhancements;
- · loss of a major customer or failure to complete significant transactions; and
- · additions or departures of key personnel.

The trading price of our common stock since our initial public offering has ranged from a closing price high of \$25.00 on May 1, 2000 to a closing price low of \$0.91 on October 4, 2002. The last reported sale price of our common stock on January 23, 2004 was \$7.54 per share.

Our stock price could be affected because a substantial number of shares of our common stock will be available for sale in the future.

Sales in the public market of a substantial number of shares of common stock, including shares of common stock issued upon conversion of the Series A preferred stock, could depress the market price of the common stock and could impair our ability to raise capital through the sale of additional equity securities. A substantial number of shares of our common stock will be available for future sale.

Texas Pacific Group, as our principal stockholder, controls our company, which will limit the ability of our other stockholders to influence the outcome of director elections and other matters submitted for a vote of the stockholders.

Affiliates of Texas Pacific Group own 124,999,433 shares of our common stock and 10,000 shares of our Series A cumulative convertible redeemable preferred stock. The shares of preferred stock entitle the holder to vote with holders of common stock as a single class and carry 37,655,198 votes (excluding 753,104 additional votes in respect of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004). Such shares of preferred stock are convertible into 42,595,774 shares of common stock (excluding 851,915 additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004). As of January 21, 2004, the shares of common stock and preferred stock owned by affiliates of Texas Pacific Group represented 63.7% of the total voting power of our outstanding

capital stock (or 64.4% of the total voting power of our outstanding capital stock, if such shares of preferred stock had been converted as of such date), in each case excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004. As a result, Texas Pacific Group, through its affiliates, is able to:

- · elect all of our directors and, as a result, control matters requiring board approval;
- · control matters submitted to a stockholder vote, including mergers and consolidations with third parties and the sale of all or substantially all of our assets; and
- · otherwise control or influence our business direction and policies.

Affiliates of Texas Pacific Group will own, upon completion of this offering, shares of capital stock representing 51.7% of the total voting power of our outstanding capital stock (or 52.5% of the total voting power of our outstanding capital stock, if such shares of preferred stock were converted as of such date), in each case based on the number of shares of common stock outstanding on January 21, 2004 and excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004. Assuming the underwriters exercise their over-allotment options in full, affiliates of Texas Pacific Group will own, upon completion of this offering, shares of capital stock representing 50.1% of the total voting power of our outstanding capital stock (or 51.0% of the total voting power of our outstanding capital stock, if such shares of preferred stock were converted as of such date), in each case based on the number of shares of common stock outstanding on January 21, 2004 and excluding additional shares of common stock expected to be issuable in respect of accumulated and unpaid dividends as of March 31, 2004.

In addition, our certificate of incorporation provides that the provisions of Section 203 of the Delaware General Corporation Law, which relate to business combinations with interested stockholders, do not apply to us.

Provisions in our charter documents may delay or prevent the acquisition of our company, which could decrease the value of our stock.

Our certificate of incorporation and bylaws contain provisions that could make it harder for a third party to acquire us without the consent of our Board of Directors. These provisions:

- · create a Board of Directors with staggered terms;
- · permit only our board of directors or the Chairman of our Board of Directors to call special meetings of stockholders;
- establish advance notice requirements for submitting nominations for election to the Board of Directors and for proposing matters that can be acted upon by stockholders at a meeting;
- · prohibit stockholder action by written consent;
- authorize the issuance of "blank check" preferred stock, which is preferred stock with voting or other rights or preferences that could impede a
 takeover attempt and that our Board of Directors can create and issue without prior stockholder approval; and
- require the approval by holders of at least 66 ²/3% of our outstanding common stock to amend any of these provisions in our certificate of incorporation or bylaws.

Although we believe these provisions make a higher third-party bid more likely by requiring potential acquirors to negotiate with our Board of Directors, these provisions apply even if an initial offer may be considered beneficial by some stockholders.

USE OF PROCEEDS

We estimate that the net proceeds we will receive from the sale of our common stock in the offering will be approximately \$242.4 million, after deducting the underwriters' discounts and commissions on shares sold by us and other expenses related to the offering, based on a per share price of \$7.54, the last reported sale price of our common stock on January 23, 2003. If the underwriters exercise their over-allotment option to purchase additional shares from us in full, we estimate that our net proceeds will be approximately \$278.9 million, after deducting the underwriters' discounts and commissions on shares sold by us and other related expenses (including an arrangement fee and amendment fees with respect to the amendment and waiver under the credit agreement described under "Prospectus Supplement Summary—Amendment and Waiver Under Senior Bank Facilities," legal, accounting and other professional expenses and printing and other costs in connection with this offering). We will not receive any proceeds from the sale of shares of common stock by the selling stockholder.

We intend to use a portion of the net proceeds of the offering to redeem \$70 million outstanding principal amount of our first lien senior secured notes due 2010 and \$105 million outstanding principal amount of our second lien senior secured notes due 2008 promptly after completion of the offering. In connection with this offering, we have obtained an amendment and waiver under the credit agreement relating to our senior bank facilities that, among other things, amends the credit agreement to permit such redemptions and waives the requirement under the credit agreement that 50% of the net proceeds of this offering be used to prepay loans under the senior bank facilities. See "Prospectus Supplement Summary—Amendment and Waiver Under Senior Bank Facilities."

We intend to use the remaining net proceeds of the offering for general corporate purposes, which may include additional reductions in our outstanding debt. We may also use a portion of such remaining net proceeds to fund working capital requirements, possible investments in, or acquisition of, complementary businesses, products or technologies or establishing joint ventures. Pending their ultimate use, we intend to invest such remaining net proceeds in short-term, interest-bearing, investment grade securities.

Assuming that the net proceeds to us from this offering total \$242.4 million, the following is a summary of the estimated uses of funds (dollars in millions):

Redemption of first lien senior secured notes due 2010 (1):	\$ 78.4
Redemption of second lien senior secured notes due 2008 (1):	117.6
General corporate purposes:	46.4
Total Uses	\$ 242.4

⁽¹⁾ The first lien senior secured notes due 2010 bear interest at a rate of 12% per annum and the second lien senior secured notes due 2008 bear interest at a rate of 13% per annum. Each of the indentures governing our first lien senior secured notes due 2010 and our second lien senior secured notes due 2008 permits us to redeem up to 35% of the outstanding principal amount of the notes issued thereunder with the proceeds of this offering for a redemption price of 112% of the principal amount of such notes plus accrued and unpaid interest to the date of redemption.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and consolidated capitalization as of October 3, 2003, on an actual and pro forma basis to give effect to this offering and the application of the proceeds as described in "Use of Proceeds," after deducting the underwriters' discounts and commissions on shares sold by us and other related expenses (assuming that the underwriters do not exercise their options to purchase additional shares from ON Semiconductor and the selling stockholder) and our November 2003 and December 2003 refinancings, which are described above under "Prospectus Supplement Summary — Recent Developments — Recent Refinancings."

	As of October 3, 2003		
	Actual	Adjustments	Pro Forma
		(dollars in millions)	<u> </u>
Cash and cash equivalents	\$ 183.6	\$ 46.4	\$ 230.0
Long-term debt (including current portion):			
Senior bank facilities(1):			
Revolving facility	\$ —		\$ —
Tranche B term facility	5.7	(5.7)	_
Tranche C term facility	164.9	(164.9)	_
Tranche D term facility	197.3	(197.3)	
Tranche E term facility	_	320.0	320.0
First lien senior secured notes due 2010(2)	191.4	(67.0)	124.4
Second lien senior secured notes due 2008(2)	292.3	(102.3)	190.0
Senior subordinated notes due 2009	260.0	_	260.0
Junior subordinated note due 2011(3)	136.7	_	136.7
Other debt(4)	44.6	48.0	92.6
Total long-term debt	1,292.9	(169.2)	1,123.7
Minority interest in consolidated subsidiaries	26.2	_	26.2
Series A cumulative convertible redeemable preferred stock	116.8	_	116.8
Stockholders' equity (deficit):			
Common stock, par value \$0.01 per share, 500,000,000 shares authorized, 216,323,816			
shares issued and outstanding, actual; 250,323,816 shares issued and outstanding, as			
adjusted	2.2	0.3	2.5
Additional paid-in capital	892.0	242.1	1,134.1
Accumulated other comprehensive income (loss)	(6.8)	_	(6.8)
Accumulated deficit	(1,491.3)	(34.5)	(1,525.8)
			
Total stockholders' deficit(5)	(603.9)	207.9	(396.0)
`,			
Total capitalization	\$ 832.0		\$ 870.7

⁽¹⁾ In November 2003, we refinanced approximately \$369 million of term loans under our senior bank facilities. We replaced our tranche B, tranche C and tranche D term loan facilities under our senior bank facilities with a single new tranche E term loan facility with terms, other than the interest rate, that are identical to those of the tranche D term loan facility. We also reduced the interest rate on our term loans by 0.75% per annum.

In December 2003, we prepaid approximately \$48 million of the tranche E term loans under our senior bank facilities with the proceeds from a new loan provided to our joint venture in Leshan, China by the China Construction Bank. The new loan facility is comprised of two \$24 million tranches, one with a final maturity of ten years and one with a final maturity of three years, which is extendible for an additional three years under certain circumstances. Each loan bears interest at a rate of LIBOR plus 1.5%, as compared to LIBOR plus 3.25% under our senior bank facilities.

See "Prospectus Supplement Summary — Recent Developments — Recent Refinancings."

- (2) The first lien senior secured notes due 2010 bear interest at a rate of 12% per annum and the second lien senior secured notes due 2008 bear interest at a rate of 13% per annum. Each of the indentures governing the first lien senior secured notes due 2010 and the second lien senior secured notes due 2008 permits us to redeem up to 35% of the outstanding principal amount of the notes issued thereunder with the proceeds of this offering at a redemption price of 112% of the principal amount of such notes plus accrued and unpaid interest to the date of redemption. Because each of the first lien senior secured notes due 2010 and the second lien senior secured notes due 2008 were issued at an original issue discount, the balances set forth above, and the adjustments thereto, reflect the accreted value thereof as of October 3, 2003.
 - In connection with this offering, we have obtained an amendment and waiver under the credit agreement relating to our senior bank facilities that, among other things, amends the credit agreement to permit such redemption with the proceeds of this offering and waives the requirement under the credit agreement that 50% of the net proceeds of this offering be used to prepay loans under the senior bank facilities. See "Prospectus Supplement Summary Amendment and Waiver Under Senior Bank Facilities."
- (3) The amount of our junior subordinated note due 2011 shown in the table above includes accrued interest of \$45.7 million. Interest on this note compounds semi-annually and is payable at maturity.
- (4) Other debt, actual and pro forma, reflects a \$23.6 million unsecured loan by a Japanese bank to one of our Japanese subsidiaries that requires semi-annual principal and interest payments through September 2010, a \$20.0 million loan facility with a Chinese bank due in the fourth quarter of 2004 (which was subsequently extended until 2007) that requires quarterly interest payments, and a \$1.0 million capital lease obligation. Other debt, pro forma, also reflects the new \$48 million loan from a Chinese bank described in note (1) above.
- (5) Pro forma total stockholders' deficit reflects the assumed write-off, which will be reflected in other expenses in our statement of operations for the first quarter of 2004, of approximately \$34.5 million, comprised of \$21.0 million in redemption premiums, \$7.8 million of deferred financing costs, which are currently included in other assets in our consolidated balance sheet as of October 3, 2003, and \$5.7 million of accelerated original issue discount associated with the redemption of a portion of each of our first lien senior secured notes due 2010 and second lien senior secured notes due 2008, as described above in "Use of Proceeds."

The table above does not reflect:

- 4,892,988 shares of common stock issuable, as of October 3, 2003, upon the exercise of options granted prior to our initial public offering, at an exercise price of \$1.50 per share, under our 1999 Founders Stock Option Plan;
- 18,674,088 shares of common stock issuable, as of October 3, 2003, upon the exercise of options granted after our initial public offering, at an average exercise price of \$4.73 per share, under our 1999 Founders Stock Option Plan and our amended and restated 2000 Stock Incentive Plan;
- · 12,626,739 additional shares of common stock reserved, as of October 3, 2003, for future issuance under our 1999 Founders Stock Option Plan, our amended and restated 2000 Stock Incentive Plan and our 2000 Employee Stock Purchase Plan; and
- 41,760,562 shares of common stock that TPG ON Holdings LLC has the right to acquire upon conversion of our Series A cumulative convertible redeemable preferred stock as of October 3, 2003.

COMMON STOCK PRICE RANGE AND DIVIDEND POLICY

Our common stock has traded under the symbol "ONNN" on the Nasdaq National Market since April 28, 2000, except for the period from October 25, 2002 until September 3, 2003 during which our common stock was quoted on the Nasdaq SmallCap Market. The following table sets forth the high and low closing sale prices for our common stock for the fiscal periods indicated as reported by the Nasdaq National Market or the Nasdaq SmallCap Market, as applicable.

	Common	Stock Price
	High	Low
Year Ended December 31, 2001		
First Quarter	\$8.2188	\$4.7500
Second Quarter	7.4800	4.0000
Third Quarter	4.7900	1.6800
Fourth Quarter	2.3599	1.3300
Year Ended December 31, 2002		
First Quarter	4.2000	2.2500
Second Quarter	5.9900	1.6000
Third Quarter	2.8100	1.1600
Fourth Quarter	2.6200	0.9100
Year Ended December 31, 2003		
First Quarter	1.9500	1.0400
Second Quarter	2.7100	1.0300
Third Quarter	5.4600	2.6900
Fourth Quarter	7.0500	4.1900
Year Ended December 31, 2004		
First Quarter (through January 23)	\$8.3200	\$6.3500

A recent reported last sale price for our common stock as reported on the Nasdaq National Market is set forth in the cover page of this prospectus supplement. On January 21, 2004, there were approximately 244 holders of record of our common stock.

We have not paid any cash dividends on our common stock since our initial public offering, and we do not presently intend to do so. Our future dividend policy with respect to our common stock will depend upon our earnings, capital requirements, financial condition, debt restrictions and other factors deemed relevant by our Board of Directors. Each of our senior bank facilities, senior secured first lien notes, senior secured second lien notes, senior subordinated notes and Series A cumulative convertible redeemable preferred stock restricts our ability to pay cash dividends to our common stockholders. Therefore, we do not anticipate paying any cash dividends in the foreseeable future.

DILUTION

Our net tangible book value as of October 3, 2003 was approximately negative \$681.2 million, or negative \$3.15 per share of our common stock. Our net tangible book value per share represents our total tangible assets less total liabilities divided by the number of shares of our common stock outstanding on October 3, 2003.

After giving effect to the sale of 34,000,000 shares of common stock offered by us in this offering based on a per share price of \$7.54 per share, the last reported sale price of our common stock on January 23, 2004, and deducting underwriters' discounts and commissions on shares sold by us and other expenses related to the offering, our net tangible book value as of October 3, 2003 would have been approximately negative \$473.3 million, or negative \$1.89 per share of our common stock. This amount represents an immediate decrease in the negative net tangible book value of \$1.26 per share to our existing stockholders and an immediate dilution in net tangible book value of \$9.43 per share of our common stock to new investors purchasing shares in this offering. The following table illustrates the dilution in net tangible book value per share to new investors.

Public offering price per share	\$ 7.54
Net tangible book value per share as of October 3, 2003	(3.15)
Increase per share attributable to new investors	1.26
Net tangible book value per share after this offering	(1.89)
Dilution in net tangible book value per share to new investors	\$ 9.43

The following table summarizes, as of October 3, 2003, on the basis described above, the number of shares of our common stock purchased from us, the total consideration paid to us, and the average price per share paid to us by existing stockholders and to be paid by new investors purchasing shares of our common stock in this offering based on a per share price of \$7.54 per share, the last reported sale price of our common stock on January 23, 2004, deducting underwriters' discounts and commissions on shares sold by us and other expenses related to the offering.

	Shares Purcha	sed	d Total Consideration		Average	
	Number	Percent		Amount	Percent	Price Per Share
Existing stockholders	216,323,816	86.4%	\$	944,300,000	78.6%	\$4.37
New investors	34,000,000	13.6		256,360,000	21.4	7.54
Total	250,323,816	100.0%	\$	1,200,660,000	100.0%	

The table above does not reflect:

- 4,892,988 shares of common stock issuable, as of October 3, 2003, upon the exercise of options granted prior to our initial public offering, at an exercise price of \$1.50 per share, under our 1999 Founders Stock Option Plan;
- 18,674,088 shares of common stock issuable, as of October 3, 2003, upon the exercise of options granted after our initial public offering, at an average exercise price of \$4.73 per share, under our 1999 Founders Stock Option Plan and our amended and restated 2000 Stock Incentive Plan;
- · 12,626,739 additional shares of common stock reserved, as of October 3, 2003, for future issuance under our 1999 Founders Stock Option Plan, our amended and restated 2000 Stock Incentive Plan and our 2000 Employee Stock Purchase Plan; and
- 41,760,562 shares of common stock that TPG ON Holdings LLC has the right to acquire upon conversion of our Series A cumulative convertible redeemable preferred stock as of October 3, 2003.

UNDERWRITERS

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus supplement the underwriters named below, for whom Morgan Stanley & Co. Incorporated, Credit Suisse First Boston LLC, Citigroup Global Markets Inc., J.P. Morgan Securities Inc., Lehman Brothers Inc., Friedman, Billings, Ramsey & Co., Inc. and Needham & Company, Inc. are acting as representatives, have severally agreed to purchase, and we and the selling stockholder have agreed to sell to them, severally, 47,000,000 shares of common stock, as indicated below:

Name	Number of Shares
	
Morgan Stanley & Co. Incorporated	
Credit Suisse First Boston LLC	
Citigroup Global Markets Inc.	
J.P. Morgan Securities Inc.	
Lehman Brothers Inc.	
Friedman, Billings, Ramsey & Co., Inc.	
Needham & Company, Inc.	
Total	47,000,000

The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the common stock offered by this prospectus supplement and the accompanying prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the common stock offered by this prospectus supplement and the accompanying prospectus if any shares of common stock are taken. However, the underwriters are not required to take or pay for any shares covered by the option of the underwriters to purchase additional shares as described below.

In the event the underwriters sell more than 47,000,000 shares of common stock, we and the selling stockholder have granted to the underwriters an option (exercisable for 30 days from the date of this prospectus supplement) to purchase, on a pro rata basis, up to an additional 5,100,000 shares of common stock from us and up to an additional 1,950,000 shares of common stock from the selling stockholder at the public offering price set forth on the cover page of this prospectus supplement, less underwriting discounts and commissions.

The following table shows the total underwriting discounts and commissions to be paid to the underwriters by us and the selling stockholder for the common stock. These amounts are shown assuming both no exercise and full exercise of the option of the underwriters to purchase up to an additional 7,050,000 shares of common stock.

Pe	r Share	To	otal
No Exercise	Full Exercise	No Exercise	Full Exercise

Underwriting Discounts and Commissions Paid by Us

Underwriting Discounts and Commissions Paid by the Selling Stockholder

We, our directors and executive officers, the selling stockholder and affiliates of Texas Pacific Group have agreed, without the prior written consent of Morgan Stanley & Co. Incorporated and Credit Suisse First Boston LLC, not to, during the period ending 90 days after the date of this prospectus supplement:

• offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock; or

 enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock:

whether any transaction described above is to be settled by delivery of our common stock or such other securities, in cash or otherwise.

The restrictions described in the preceding paragraph do not apply to:

- the sale of the shares to the underwriters;
- · the granting of stock options or restricted stock units or the sale of stock pursuant to our existing employee benefit plans;
- the sale of shares of common stock or other securities acquired in the open market by any person other than us and the selling stockholder after the completion of this offering;
- the issuances by us of shares of common stock in connection with any acquisition of or merger with another company or the acquisition of assets, provided that each recipient of common stock agrees that these shares shall remain subject to the lock-up restrictions for the remainder of the period for which we are bound:
- agreements entered into by any director or executive officer to establish certain plans meeting the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, for the pre-arranged sale of shares of our common stock occurring after the expiration of such 90-day period; or
- certain other transfers and dispositions, provided that the recipient remains subject to the lock-up restrictions for the remainder of the period for which we are bound.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell a greater amount of common stock than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the amount of common stock available for purchase by the underwriters under their option to purchase additional common stock. An underwriter can close out a covered short sale by exercising its option to purchase additional common stock or purchasing the common stock in the open market. In determining the source of common stock to close out a covered short sale, an underwriter will consider, among other things, the open market price of common stock compared to the price available under the over-allotment option. The underwriters may also sell common stock in excess of the over-allotment option, creating a naked short position. The underwriters must close out any naked short position by purchasing common stock in the open market. A naked short position is more likely to be created if an underwriter is concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. As an additional means of facilitating the offering, the underwriters may bid for, and purchase, common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities, and may end any of these activities at any time.

We and the selling stockholder have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

From time to time, certain of the underwriters have provided, and may provide, investment banking services to us. An affiliate of J.P. Morgan Securities Inc., is a lender under our senior bank facility. In addition, affiliates of Morgan Stanley & Co. Incorporated and Lehman Brothers Inc. are holders of our first lien senior secured notes due 2010 and our senior subordinated notes due 2009. An affiliate of Morgan Stanley & Co. Incorporated is a holder of our second lien senior secured notes due 2008.

LEGAL MATTERS

The validity of the shares of the common stock offered by this prospectus supplement will be passed upon by Cleary, Gottlieb, Steen & Hamilton, New York, New York. Certain legal matters will be passed upon for the underwriters by Cravath, Swaine & Moore LLP, New York, New York.

EXPERTS

The consolidated financial statements and financial statement schedule of ON Semiconductor Corporation as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 incorporated by reference in this prospectus supplement from ON Semiconductor's Current Report on Form 8-K filed with the SEC on September 9, 2003 have been so incorporated by reference in reliance on the reports of PricewaterhouseCoopers LLP, independent accountants, given on authority of said firm as experts in auditing and accounting. The separate financial statements of each of Semiconductor Components Industries, LLC, SCG Malaysia Holdings Sdn. Bhd. and SCG Philippines, Incorporated as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 and of ON Semiconductor Trading Ltd as of December 31, 2002 and 2001 and for the years ended December 31, 2002 and 2001 and for the period from October 27, 2000 through December 31, 2000, incorporated in this prospectus supplement by reference from ON Semiconductor Corporation's Current Report on Form 8-K dated January 2, 2004, have been so incorporated by reference in reliance on the reports of PricewaterhouseCoopers LLP, independent accountants, given on authority of said firm as experts in auditing and accounting.

PROSPECTUS

63,250,000 Shares

ON SEMICONDUCTOR CORPORATION

Common Stock

We and the selling stockholder named in this prospectus may from time to time offer and sell up to an aggregate of 63,250,000 shares of our common stock, par value \$.01 per share, including 17,250,000 shares owned by the selling stockholder, at prices and on terms to be determined at or prior to the time of sale. We will not receive any proceeds from the sale of shares by the selling stockholder.

We and the selling stockholder may from time to time offer and sell our respective shares of common stock, in the same offering or in separate offerings, to or through underwriters, dealers and agents or directly to purchasers. The names of any underwriters or agents involved in the sale of our common stock and their compensation will be described in the accompanying prospectus supplement.

This prospectus may not be used to consummate a sale of our common stock unless accompanied by a supplement to the prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is January 12, 2004.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission ("SEC") using a shelf registration process. Under this process, ON Semiconductor and the selling stockholder may offer and sell from time to time up to an aggregate of 63,250,000 shares of common stock, including up to 17,250,000 shares owned by the selling stockholder.

This prospectus describes our common stock and the general manner in which we and the selling stockholder will offer our common stock. Each time shares of common stock are sold, we will provide a supplemental prospectus that describes the specific manner in which they may be offered. You should read the prospectus supplement and this prospectus, along with the documents incorporated by reference and described under the heading "WHERE YOU CAN FIND MORE INFORMATION", before making your investment decision.

WHERE YOU CAN FIND MORE INFORMATION

ON Semiconductor files annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms in Washington, D.C. and New York, New York. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public from the SEC's web site at http://www.sec.gov.

FORWARD-LOOKING STATEMENTS

This prospectus and each prospectus supplement include and incorporate forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. All statements, other than statements of historical facts, included or incorporated in this prospectus or any prospectus supplement regarding our strategy, future operations, financial position, future revenues, projected costs, prospects, plans and objectives are forward-looking statements. The words "anticipates," "estimates," "expects," "intends," "may," "plans," "projects," "will," "would," and similar expressions are intended to identify forward-looking statements.

Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included in this prospectus and each prospectus supplement important factors that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. We do not have any obligation to release updates or any changes in events, conditions or circumstances on which any forward-looking statement is based or to conform those statements to actual results.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information that we incorporate by reference is considered to be part of this prospectus.

Information that we file later with the SEC will automatically update and supersede this information. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any documents previously incorporated by reference have been modified or superseded. ON Semiconductor incorporates by reference into this prospectus the following documents:

· Annual Report on Form 10-K for the year ended December 31, 2002.

- · Quarterly Reports on Form 10-Q for the quarters ended April 4, 2003, July 4, 2003 and October 3, 2003.
- · Proxy Statement filed with the SEC on April 9, 2003.
- Current Reports on Form 8-K that were filed on January 29, 2003, February 7, 2003, February 18, 2003, March 4, 2003, March 18, 2003, September 3, 2003, September 9, 2003 (which Form 8-K filed on September 9, 2003 includes certain financial information that supersedes financial information included in our Annual Report on Form 10-K for the year ended December 31, 2002 and our Quarterly Report on Form 10-Q for the quarter ended April 4, 2003), September 18, 2003, September 24, 2003, November 26, 2003, December 4, 2003 and January 2, 2004 (which Form 8-K filed on January 2, 2004 includes certain financial information that supersedes financial information included in our Annual Report on Form 10-K for the year ended December 31, 2002).
- The description of our common shares contained in the Registration Statement on Form 8-A filed with the SEC on April 21, 2000.
- · All documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of the initial registration statement and before effectiveness of this registration statement, and after the date of this prospectus and before the termination of this offering.

You may request a copy of these filings at no cost, by writing, telephoning or e-mailing us:

ON Semiconductor Corporation 5005 E. McDowell Road Phoenix, Arizona 85008 (602) 244-3437 investor@onsemi.com

ON SEMICONDUCTOR CORPORATION

We are a global supplier of power and data management semiconductors and standard semiconductor components. We design, manufacture and market an extensive portfolio of semiconductor components that addresses the design needs of sophisticated electronic systems and products. Our power management semiconductor components distribute and monitor the supply of power to the different elements within a wide variety of electronic devices. Our data management semiconductor components provide high-performance clock management and data flow management for precision computing and communications systems. Our standard semiconductor components serve as "building block" components within virtually all electronic devices.

We serve a broad base of end-user markets including wireless communications, consumer electronics, automotive and industrial electronics and networking and computing. Applications for our products in these markets include portable electronics, computers, game stations, servers, automotive and industrial automation control systems, routers, switches, storage-area networks and automated test equipment.

We have four main product lines: power management and standard analog devices, metal oxide semiconductor (MOS) power devices, high frequency clock and data management devices and standard components. Our extensive portfolio of devices enables us to offer advanced integrated circuits and the complementary parts that deliver system level functionality and design solutions. We specialize in micro packages, which offer increased performance characteristics while reducing the critical board space inside today's ever shrinking electronic devices. We believe that our ability to offer a broad range of products provides our customers with single source purchasing on a cost-effective and timely basis.

USE OF PROCEEDS

Except as may be otherwise set forth in the prospectus supplement accompanying this prospectus, we will use the net proceeds we receive from sales of these securities for general corporate purposes, which may include the repayment of indebtedness. We will not receive any of the proceeds from the sale of shares of our common stock hereunder by the selling stockholder.

SELLING STOCKHOLDER

TPG Advisors II, Inc. may from time to time offer and sell pursuant to this prospectus and the applicable prospectus supplement up to an aggregate of 17,250,000 shares of our common stock. All of the shares of common stock being registered for sale by the selling stockholder were issued in connection with our August 4, 1999 recapitalization ("August 1999 Recapitalization"). Our registration of up to 17,250,000 shares of common stock held by the selling stockholder does not necessarily mean that the selling stockholder will sell all or any of such shares of common stock.

Beneficial Ownership

The following table sets forth, as of December 29, 2003, the number of shares of our common stock that the selling stockholder beneficially owns and the number of shares being registered for sale by the selling stockholder. The percentage of outstanding shares beneficially owned before the offering is based on 259,763,039 shares of common stock outstanding as of December 29, 2003 and assumes the conversion to common stock of our Series A preferred stock. The number and percentage of shares beneficially owned after the offering also assumes the sale of the 63,250,000 shares of common stock offered by us and the selling stockholder.

	Shares Beneficially Owned Prior to the Offering (1)		Maximum Number of	Shares Beneficially Owned After the Offering	
Name	Number	Percent	Shares Being Offered	Number	Percent
TPG Advisors II, Inc. 201 Main Street, Suite 2420 Fort Worth, Texas 76102	167,595,207	64.5%	17,250,000	150,345,207	49.2%

(1) The shares of common stock indicated as beneficially owned by TPG Advisors II, Inc. include (a) 124,999,433 shares of common stock directly held by TPG Semiconductor Holdings LLC and (b) 42,595,774 shares of common stock that TPG ON Holdings LLC has the right to acquire upon conversion of Series A preferred stock, which includes 7,134,781 shares that are or may become issuable as a result of accrued and unpaid dividends as of 60 days after December 29, 2003. At the option of its holder, each share of Series A preferred stock is convertible into a number of shares of common stock determined by dividing (a) its stated value of \$10,000, plus accrued and unpaid dividends, by (b) the conversion price of \$2.82, which is subject to specified anti-dilution adjustments. TPG Advisors II, Inc. indirectly controls both TPG Semiconductor Holdings LLC and TPG ON Holdings LLC. The foregoing entities are affiliated with the Texas Pacific Group.

Certain Relationships and Related Transactions

Immediately prior to our August 1999 Recapitalization, we were a wholly owned subsidiary of Motorola, Inc. We held and continue to hold, through direct and indirect subsidiaries, substantially all of the assets and operations of the Semiconductor Components Group of Motorola's Semiconductor Products Sector. As part of the August 1999 Recapitalization, an affiliate of Texas Pacific Group purchased a portion of our common stock from Motorola. As a result, Texas Pacific Group's affiliate became the beneficial owner of approximately 91%,

and Motorola was the beneficial owner of approximately 9% of our common stock. As of December 29, 2003, Texas Pacific Group was the beneficial owner of 64.5% of our common stock, assuming conversion of Series A preferred stock and including shares that are or may become issuable as a result of accrued and unpaid dividends as of 60 days after December 29, 2003. As a result of the August 1999 Recapitalization, we agreed to pay Texas Pacific Group a management fee of not more than \$2 million annually. Three of our Directors, Richard Boyce, Justin Chang and John Marren, are also Texas Pacific Group partners. Another Director, William Franke, is the beneficial owner of a minority equity interest in TPG Semiconductor Holdings LLC, our majority stockholder, an equity partner with Texas Pacific Group in other investment entities, and a former President, Chief Executive Officer and Chairman of America West Holdings Corp., a company in which Texas Pacific Group has a controlling interest.

In connection with the amendment to our senior bank facilities in August 2001, Texas Pacific Group agreed that all management fees payable by us to Texas Pacific Group or its affiliates will accrue and not be payable in cash until our quarterly financial statements establish compliance with certain financial ratios. Prior to such time, however, we may pay management fees to Texas Pacific Group or its affiliates with our common stock or warrants in respect of our common stock. Texas Pacific Group subsequently agreed that these fees will not accrue during the period in which we are not permitted to pay such fees in cash. No Texas Pacific Group management fee was paid or incurred during 2002 or 2003.

On September 7, 2001, TPG ON Holdings LLC purchased 10,000 shares of our Series A preferred stock for \$100.0 million in cash. The Series A preferred stock was sold to TPG ON Holdings LLC in a private offering exempt from registration under the Securities Act of 1933. Each share of Series A preferred stock is convertible at the option of the holder any time into shares of common stock at a conversion price of \$2.82 per share of common stock, representing a \$0.37 discount from the closing price per share price of our common stock on the issuance date, subject to specified anti-dilution adjustments. As of December 29, 2003, the shares of Series A preferred stock were convertible into 42,595,774 shares of our common stock, including shares that are or may become issuable as a result of accrued and unpaid dividends as of 60 days after December 29, 2003. At any time on or after the eighth anniversary of the issuance date of the Series A preferred stock, the holders may require that we redeem their shares at a redemption price per share equal to the greater of (i) the stated value of the Series A preferred stock plus all accrued and unpaid dividends thereon or (ii) 50% of the then current market price of the common stock (based upon the average closing price of the common stock over the preceding 30 trading days) and other assets and property, if any, into which one share of Series A preferred stock is then convertible. Upon a change in control, the holders of the Series A preferred stock may "put" their shares to us at 101% of the stated value plus accumulated and unpaid dividends. TPG ON Holdings LLC was also granted registration rights in respect of the common stock underlying the Series A preferred stock. On November 14, 2001, we filed a registration statement to register for future resale the common stock that is issuable upon the future conversion by TPG ON Holdings LLC of the Series A preferred stock. The holders of the Series A preferred stock will be entitled to vote with the holders of the common stock as a single class. As of the issuance date, each share of Series A preferred stock was entitled to approximately 3,135 votes, subject to certain adjustments for accumulated dividends and those made in accordance with the anti-dilution provisions. As the holder of our Series A preferred stock, TPG ON Holdings LLC is entitled to designate two Directors to serve on our Board of Directors for so long as TPG ON Holdings LLC and its affiliates beneficially own at least 50% of the Series A preferred stock. In connection with the Texas Pacific Group investment, the Board of Directors appointed a Special Independent Committee, which was comprised solely of independent Directors, to negotiate, consider and recommend approval or disapproval of the proposed investment transaction. The Special Independent Committee engaged an investment banker and independent legal counsel to assist in its negotiation and consideration of the Texas Pacific Group investment. The investment banker rendered an opinion that the Texas Pacific Group investment was fair, from a financial point of view, to holders of our common stock other than Texas Pacific Group. The Special Independent Committee unanimously recommended the approval and adoption of the Texas Pacific Group investment by the Board of Directors. For further information with respect to the Series A preferred stock, see our Form 8-K Current Report filed with the SEC on September 7, 2001.

DESCRIPTION OF COMMON STOCK

The following summary does not purport to be complete. You should read the applicable provisions of the Delaware General Corporation Law, our restated certificate of incorporation and by-laws.

We are authorized to issue up to 500,000,000 shares of common stock, par value \$.01 each. At December 29, 2003, we had outstanding 259,763,039 shares of common stock (assuming conversion of our Series A preferred stock) and had reserved approximately 43,250,000 shares of common stock for issuance with respect to our various employee benefit plans.

Subject to the prior dividend rights of the holders of shares of our Series A preferred stock and any other shares of preferred stock from time to time outstanding, holders of shares of common stock are entitled to receive dividends when, as and if declared by the Board of Directors out of funds legally available therefor. Each of our senior bank facilities, senior secured first lien notes, senior secured second lien notes, senior subordinated notes and Series A preferred stock restricts our ability to pay cash dividends to our common stockholders.

Each share of common stock is entitled to one vote on all matters submitted to a vote of stockholders. Holders of shares of common stock do not have cumulative voting rights. In the event of any liquidation, dissolution or winding up of ON Semiconductor, after the satisfaction in full of the liquidation preferences of holders of shares of our Series A preferred stock and any other shares of preferred stock then outstanding, holders of shares of common stock are entitled to ratable distribution of the remaining assets available for distribution to stockholders. The shares of common stock are not subject to redemption by operation of a sinking fund or otherwise. Holders of shares of common stock are not entitled to pre-emptive rights. The issued and outstanding shares of common stock are fully paid and nonassessable.

PLAN OF DISTRIBUTION

ON Semiconductor or the selling stockholder may sell the shares of common stock described in this prospectus from time to time in one or more of the following ways:

- · to or through underwriters or dealers;
- · directly to one or more purchasers;
- through agents; or
- · through a combination of any of such methods of sale.

The prospectus supplement with respect to the offered shares of common stock will describe the terms of the offering, including:

- the name or names of any agents or underwriters;
- the purchase price of such shares and any proceeds to us from such sale;
- \cdot $\;$ any underwriting discounts and other items constituting underwriters' or agents' compensation;
- · any initial public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- · any securities exchanges on which such shares may be listed.

Only agents or underwriters named in the prospectus supplement are deemed to be agents or underwriters in connection with the shares of common stock offered thereby. If underwriters are used in the sale, the shares will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, either:

- · at a fixed public offering price or prices;
- at market prices prevailing at the time of sale;
- at varying prices determined at the time of sale; or
- · at negotiated prices.

The obligations of the underwriters to purchase the shares of common stock will be subject to various conditions precedent, and the underwriters will be obligated to purchase all of the shares offered by the applicable prospectus supplement if any of such shares are purchased. Any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

ON Semiconductor or the selling stockholder may also sell shares of common stock directly or through agents designated from time to time. Any agent involved in the offering and sale of the offered shares of common stock will be named in the applicable prospectus supplement. Any commissions payable by us or by the selling stockholder to such agent will be set forth in the applicable prospectus supplement. Unless otherwise indicated in such prospectus supplement, any such agent is acting on a best efforts basis for the period of its appointment.

If so indicated in a prospectus supplement, we or the selling stockholder will authorize agents, underwriters or dealers to solicit offers by certain institutional investors to purchase shares of common stock providing for payment and delivery on a future date specified in such prospectus supplement. There may be limitations on the number of shares that may be purchased by any such institutional investor or on the number of shares that may be sold pursuant to such arrangements.

Institutional investors to which such offers may be made, when authorized, include, commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions we may approve. The obligations of any such purchasers under this delayed delivery and payment arrangement will only be subject to the following two conditions:

- at the time of delivery the purchase of the shares of common stock by an institution will not be prohibited under the laws of any jurisdiction in the United States to which such institution is subject; and
- · if the shares of common stock are being sold to underwriters, ON Semiconductor or the selling stockholder will have sold to such underwriters the total number of shares less the number of shares covered by such arrangements.

Underwriters will not have any responsibility in respect of the validity of such arrangements or the performance of ON Semiconductor, the selling stockholder or such institutional investors.

Shares of our common stock may be offered or sold in connection with the settlement of forward purchase contracts we or the selling stockholder enter into from time to time with a financial institution. The financial institution may be deemed to be an underwriter or may be deemed to be a selling stockholder. If any such sales are conducted, whether the third party is deemed to be an underwriter or a selling stockholder, the prospectus supplement related to such sales will set forth, as required, the following information:

- the identity of the underwriter or selling stockholder;
- the number of shares being sold;
- \cdot the aggregate number of shares held by the financial institution before and after the proposed sale; and
- any material arrangements between us or the selling stockholder and the financial institution within the past three years.

In connection with an offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions

created by short sales. Short sales involve the sale by underwriters of a greater number of shares than they are required to purchase in an offering. Stabilizing transactions consist of certain bids or purchases made for the purpose of preventing or retarding a decline in the market price of the securities while an offering is in progress.

The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the underwriters have repurchased shares of common stock sold by or for the account of the underwriter in stabilizing or short-covering transactions.

These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the shares of common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. These transactions may be effected on an exchange or automated quotation system, if the securities are listed on that exchange or admitted for trading on that automated quotation system, or in the over-the-counter market or otherwise.

Agents and underwriters may be entitled under agreements entered into with ON Semiconductor or the selling stockholder to indemnification against certain civil liabilities, including liabilities under the Securities Act of 1933, or to contribution with respect to payments which the agents or underwriters may be required to make in respect thereof. Agents and underwriters may be customers of, may engage in transactions with, or perform services for, ON Semiconductor or the selling stockholder in the ordinary course of business.

LEGAL MATTERS

Cleary, Gottlieb, Steen & Hamilton, New York, New York, will pass upon the validity of the securities for us.

EXPERTS

The consolidated financial statements and financial statement schedule of ON Semiconductor Corporation as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002 incorporated by reference in this prospectus from ON Semiconductor Corporation's Current Report on Form 8-K dated September 9, 2003, have been so incorporated by reference in reliance on the reports of PricewaterhouseCoopers LLP, independent accountants, given on authority of said firm as experts in auditing and accounting. The separate financial statements of (a) Semiconductor Components Industries, LLC, SCG Malaysia Holdings Sdn. Bhd. and SCG Philippines, Incorporated as of December 31, 2002 and 2001 and for each of the three years in the period ended December 31, 2002, and (b) ON Semiconductor Trading Ltd. as of December 31, 2002 and 2001 and for the years ended December 31, 2002 and 2001 and for the period from October 27, 2000 through December 31, 2000, incorporated in this prospectus by reference from ON Semiconductor Corporation's Current Report on Form 8-K dated January 2, 2004, have been so incorporated in reliance on the reports of PricewaterhouseCoopers LLP, independent accountants, given on authority of said firm as experts in auditing and accounting.

