TOWER SEMICONDUCTOR LTD
Form F-3/A
January 20, 2004
AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JANUARY 20, 2004

REGISTRATION STATEMENT NO. 333-110486

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 3
TO
FORM F-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

TOWER SEMICONDUCTOR LTD.

(Exact name of registrant as specified in its charter)

Israel	**3674**	**Not applicable**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

Ramat Gavriel Industrial Park
P.O. Box 619
Migdal Haemek, Israel, 23105
972-4-650-6611

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Tower Semiconductor USA
2350 Mission College Blvd., Suite 500
Santa Clara, California 95054
Tel: 408-327-8900
Facsimile: 408-969-9831

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box:

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, please check the following box:

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box:

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A) MAY DETERMINE.

Subject to Completion, Dated January , 2004

The information in this prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

12,000,000 Shares

Ordinary Shares

$ per share

Tower Semiconductor Ltd. is offering 12,000,000 ordinary shares. The ordinary shares are listed on both the Nasdaq National Market and on the Tel Aviv Stock Exchange in Israel under the symbol "TSEM." On January 16, 2004, the last reported sale prices of the ordinary shares were $10.09 per share on the Nasdaq National Market and NIS 43.62 per share on the Tel Aviv Stock Exchange.

Investing in the ordinary shares involves risks. See "Risk Factors" beginning on page 10.

	Per Share	Total
Price to the public	$	$
Underwriting discount	$	$
Proceeds to Tower (before expenses)	$	$

We have granted an over-allotment option to the underwriters. Under this option, the underwriters may elect to purchase a maximum of 1,800,000 additional shares from us within 30 days following the date of this prospectus to cover over-allotments.

None of the Securities and Exchange Commission, the Israel Securities Authority or 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.

CIBC World Markets

Piper Jaffray

C.E. Unterberg, Towbin

The date of this prospectus is , 2004

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microFLASH® is a registered trademark of Tower, and N-ROM™ is a trademark of Saifun Semiconductors Ltd. Manufacturing capacity refers to installed equipment capacity in our facilities and is a function of the process technology and product mix being manufactured because certain processes require more processing steps than others. All information in this prospectus with respect to the wafer start capacity of our manufacturing facilities is based upon our estimate of the effectiveness of the manufacturing equipment and processes in use or expected to be in use during a period and the actual or expected process technology mix for such period. Unless otherwise specifically stated, all references in this prospectus to "wafers" in the context of capacity in Fab 1 are to 150-mm wafers and in Fab 2 are to 200-mm wafers.

Our manufacturing facilities and executive offices are located in the Ramat Gavriel Industrial Park, Post Office Box 619, Migdal Haemek, 23105 Israel, and our telephone number is 972-4-650-6611.

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Prospectus Summary

This summary highlights information contained in other parts of this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in the ordinary shares. You should read the entire prospectus carefully. The terms "we," "us" and "Tower" mean Tower Semiconductor Ltd. and its consolidated subsidiary. Unless otherwise stated, all information contained in this prospectus assumes no exercise of the over-allotment option granted to the underwriters.

Tower Semiconductor

We are a pure-play independent wafer foundry dedicated to the manufacture of integrated circuits, or ICs, using complementary metal oxide semiconductor, or CMOS, process technology. ICs manufactured by us are incorporated into a wide range of products in diverse markets, including consumer electronics, personal computer and office equipment, communications, automotive, professional photography and medical device products. Pure-play foundries do not offer any products of their own, but focus on producing ICs based on the design specifications of their customers.

We manufacture ICs with geometries ranging from 1.0 to 0.35 microns at our 150-mm fabrication facility, or Fab 1, and 0.18 microns at our recently constructed 200-mm fabrication facility, or Fab 2. We plan to initiate volume production in geometries of 0.13 microns at Fab 2 during 2005. At Fab 1, we have expanded capacity to approximately 16,000 wafer starts per month. We began volume production at Fab 2 during the third quarter of 2003. The production capacity at the end of December 2003 was 8,500 wafer starts per month, and we currently expect to have production capacity ranging between 13,000 and 15,000 wafer starts per month by the end of 2004. We expect the production ramp to be completed by the end of 2006, at which time Fab 2 is expected to have the capacity to produce 33,000 wafer starts per month. While we expect to continue to operate Fab 1, we expect Fab 2 to form the core of our future business.

With increased demand for new semiconductor applications, particularly in the consumer sector, the semiconductor industry is now recovering from its worst downturn in history. According to the Worldwide Semiconductor Trade Statistic Organization, worldwide sales of semiconductors increased 6.8% to $15.4 billion in October 2003, up from $14.4 billion in September 2003, representing the eighth consecutive monthly increase. The consumer sector, which currently represents 17% of semiconductor demand, is expanding worldwide with new applications and multi-functional devices, including those that incorporate technologies in which we specialize: CMOS image sensors, embedded flash and mixed-signal ICs.

Market Opportunity

We believe that the key factors that drive growth in our business include:

- the increasing demand for complex ICs, which creates an expanding market for outsourced manufacturing;
- the growing popularity of applications and products that use technologies in which we focus on, including CMOS image sensors, embedded flash and mixed-signal ICs;
- the incentive of SanDisk, Alliance Semiconductor, Macronix and QuickLogic (which we refer to as our "wafer partners") to utilize their right to purchase up to approximately 50% of the capacity of our Fab 2 facility;
- the limited number of independent foundries due to the prohibitively high cost of building new fabrication facilities, or fabs, which requires high capacity utilization to ensure that fixed costs are absorbed; and

- the current, eight-consecutive-month upswing in semiconductor demand, which we believe, based on market data information made publicly available by leading Asian foundries, will result in a capacity shortage at these foundries and create an opportunity for us to obtain new customers. Two leading Taiwanese foundries, which according to IC Insights account for over 70% of worldwide sales of ICs, recently reported that they both expect to achieve overall utilization rates exceeding 90% in the fourth quarter of 2003.

With Fab 2 having commenced commercial production in the third quarter of 2003, we believe that we are particularly well positioned to benefit from the expected upswing in the

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semiconductor market and corresponding capacity shortage in leading Asian foundries, as we are one of a few semiconductor manufacturers that increased its investments in new capacity during the recent industry downturn.

Target Markets

We focus on the emerging opportunities surrounding CMOS image sensors, embedded flash and mixed-signal ICs where we believe we have strong expertise and proven experience. In addition to the high margins that these products generate, we are focusing on these markets because of their large size and high growth rates. According to In-Stat/MDR, a market research firm, the CMOS image sensor market is expected to grow from $184 million in 2002 to $547 million in 2007, representing a five-year compound annual growth rate of 24%. Semico Research, a market research firm, forecasts that embedded flash in microcontrollers will grow from $4.0 billion in 2002 to $17.0 billion in 2007, representing a five-year compound annual growth rate of 34%. According to Dataquest, a market research firm, the worldwide general-purpose analog and mixed-signal IC market was $9.3 billion in 2002 and is projected to grow to $17.6 billion in 2007, representing a five-year compound annual growth rate of 14%. With our advanced manufacturing technologies and service capabilities, we have established a strong position in these markets with customers which are industry leaders, including Kodak, Motorola, National Semiconductor, SanDisk and Zoran.

Strategy

The key elements of our strategy include:

- Establishing Leading Market Share for Specialized, High Growth Applications. These applications include CMOS image sensors for products such as digital still cameras and camera-equipped cell phones; embedded flash in microcontrollers; and mixed-signal ICs in cell phones, PDAs and DSL modems.
- Pursuing a Partnership Business Model. We believe that the use of our customers as an equity financing source, such as in the case of our wafer partners, will strengthen our long-term relationships with these customers, as our growth objectives are closely aligned. In connection with their investment in us, we granted our existing wafer partners a right to purchase up to approximately 50% of the capacity of our Fab 2 facility, and we believe that their ownership interest provides them added incentive to utilize this capacity.
- Maintaining Our Commitment to Customer Service. We place significant emphasis on providing world-class customer service, as well as engineering support and execution of complex process and product transfers, while maintaining reduced cycle times and higher product yields. We believe that our customer service has helped us differentiate ourselves from our larger competitors, as demonstrated by Motorola naming us "Foundry of the Year" in 1999 and awarding us "Gold

Supplier" status in 2000, 2001 and 2002.

- Expanding Our Technological Expertise through Licensing and Joint Development Efforts with Leading Technology Companies. In addition to our independent research and development resources, we have expanded our core strengths in CMOS image sensors, embedded flash and mixed-signal technologies by combining our proprietary technologies with leading technology companies, such as Matsushita, Motorola and Toshiba.
- Enhancing Our Global Sales and Marketing Efforts. We have recently significantly increased our global sales and marketing efforts in order to establish worldwide coverage to support the ramp-up of our Fab 2 0.18-micron process technology service offering.
- Maximizing Our Capacity Utilization. We seek to maximize capacity utilization by attracting new customers and rapidly transitioning our capabilities to high-margin advanced technologies.
  - Becoming a Preferred Second-Source Foundry Service Provider. As foundry utilization rates peak and available capacity decreases, we aim to attract new customers as part of their risk diversification strategy by becoming their preferred alternative or second-source provider of foundry services.

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Recent Developments

On December 30, 2003, we signed a memorandum of understanding with Siliconix incorporated, an 80.4% owned subsidiary of Vishay Intertechnology, Inc., for a long-term manufacturing and supply arrangement between the parties. Pursuant to the terms of the memorandum of understanding, Siliconix will place with us orders valued at approximately $200 million for the purchase of semiconductor wafers to be manufactured at our Fab 1 facility over a seven to ten year period, of which approximately $53 million is guaranteed and will be delivered over the three year period starting at the first anniversary of the definitive agreement. Siliconix will advance to us $20 million to be used for the purchase of additional equipment required to satisfy Siliconix's orders, which will be credited towards the purchase price of the wafers. The transaction is subject to the approval of both companies' boards of directors, our lending banks and the Israeli Investment Center and the negotiation of definitive documentation. A definitive agreement is expected to be signed during the first quarter of 2004. We can offer no assurance that we will receive the necessary approvals for the transaction from either company's board of directors, our lending banks or the Israeli Investment Center or that, even if such approvals are obtained, a definitive agreement will be reached.

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The Offering

Ordinary shares offered by us	12,000,000 shares
Ordinary shares to be outstanding after the offering	63,696,097 shares (1)(2)(3)
Ordinary shares underlying outstanding options and warrants	18,328,787 (2)
	82,024,884 (2)

Ordinary shares to be outstanding after the offering, assuming the exercise of outstanding options and warrants	
Use of proceeds	We expect to use the net proceeds from this offering to finance the further ramp-up of Fab 2 and for marketing expenses for the sale of our products and services as well as for working capital and other general corporate purposes.
Risk factors	See "Risk Factors" and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our ordinary shares.
Nasdaq National Market and Tel Aviv Stock Exchange symbols	TSEM

(1)The number of ordinary shares to be outstanding after this offering is based on the outstanding shares as of December 31, 2003. This information excludes a total of 18,328,787 shares which may be issued as follows: (i) 6,842,441 ordinary shares issuable upon exercise of options granted to employees and directors at a weighted average exercise price of $7.93; (ii) up to 2,697,068 ordinary shares issuable upon conversion of unsecured, subordinated convertible debentures, net in the amount of NIS 112.9 million (or $25.8 million), which are convertible through December 31, 2008 (linked to the Israel Consumer Price Index); (iii) 2,211,596 ordinary shares issuable upon exercise of options at an exercise price of NIS 40.83 per share linked to the Israel Consumer Price Index (or $9.32); (iv) 3,594,082 ordinary shares issuable upon exercise of warrants with an exercise price of $7.50; (v) 400,000 and 896,596 ordinary shares issuable upon the exercise of warrants issued to our banks in connection with our credit facility with an exercise price of $6.20 and $6.17 per share, respectively; (vi) 1,628,098 shares issuable in connection with the second installment of the fifth milestone payment assuming a purchase price of $10.09 per share (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); and (vii) 58,906 ordinary shares issuable upon exercise of warrants issued to ICTech as a commitment fee in connection with the arrangements described in "Material Agreements — Credit Facility" with an exercise price of $6.17 per share and exercisable until December 2008.

(2)This information excludes the following potential dilutive issuances of securities pursuant to our credit facility and agreements with our major wafer partners and with ICTech, which cannot be calculated as of the date of the prospectus since the number of shares issuable will depend upon future transactions in which we may engage (i) ordinary shares issuable upon conversion of up to $41.7 million in wafer prepayment credits which we have issued our major wafer partners as of December 31, 2003 (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); (ii) ordinary shares issuable to our major wafer partners upon conversion of their remaining wafer credits issued in connection with their fourth milestone payment, as well as shares we may issue to our other shareholders under certain circumstances (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); (iii) ordinary shares issuable upon exercise of warrants issued to ICTech and our banks in the event that we are required by our banks to complete a rights offering in connection with the arrangements described in "Material Agreements — Credit Facility;" and (iv) ordinary shares issuable upon conversion of securities we may be required to issue in connection with the rights offering and outside investor provisions of the arrangements described in "Material Agreements — Credit Facility."

(3)Excludes 1,300,000 treasury shares.

Summary Consolidated Financial Data

You should read the data set forth below in conjunction with our consolidated financial statements and related notes, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other information appearing elsewhere in this prospectus. The following data has been presented in accordance with Israel GAAP. Statements of operations and selected operations data in accordance with US GAAP would not have materially differed from respective data in accordance with Israel GAAP.

	Nine Months Ended September 30,		Year Ended December 31,		
	2003	2002	2002	2001	2000
	(in thousands, except per share data)				
Selected Operations Data in accordance with Israel GAAP:					
Sales	$ 41,545	$ 36,229	$ 51,801	$ 52,372	$104,775
Gross profit (loss)	(34,271)	(13,727)	(15,221)	(24,361)	15,988
Research and development	12,551	10,184	17,031	9,556	8,965
Marketing, general and administrative	17,064	11,807	17,091	14,489	11,428
Operating loss	(63,886)	(35,718)	(49,343)	(48,406)	(4,405)
Loss for the period	$ (68,266)	$ (37,818)	$ (51,402)	$ (38,522)	$ (3,989)
Basic loss per ordinary share	$ (1.49)	$ (1.34)	$ (1.63)	$ (1.92)	$ (0.26)
Other Financial Data:					
Depreciation and amortization	$ 30,386	$ 14,402	$ 18,821	$ 21,721	$ 25,917
Capital expenditures, before Investment Center grants	147,394	156,564	243,431	364,347	79,060

We have presented the unaudited consolidated balance sheet data as of September 30, 2003 on an actual basis and on an as-adjusted basis to reflect the sale of 12,000,000 ordinary shares by us in this offering and our receipt of $114.0 million in estimated net proceeds, after deducting the estimated underwriting discount and commissions and the estimated offering expenses that we expect to pay in connection with this offering.

	As of September 30, 2003	
	Actual	As Adjusted
	(in thousands)	
Consolidated Balance Sheet Data in accordance with Israel GAAP:		
Cash and cash equivalents, including short-term deposits and designated cash	$ 8,377	$122,396
Working capital, net	(28,172)	85,847
Property and equipment	576,425	576,425
Total assets	750,612	864,631

Long-term debt	347,000	347,000
Shareholders' equity	246,117	360,136

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Risk Factors

You should carefully consider the following factors, together with all of the other information in this prospectus before deciding to invest in the shares.

Risks Affecting Our Business

If we do not complete the equipment installation, technology transfer and ramp-up of production in Fab 2, our business will be materially adversely affected.

We have completed the construction of Fab 2 but not the acquisition, installation and equipping necessary for production at our planned full capacity of 33,000 200-mm wafer starts per month, which we expect to reach by the end of 2006. We will also need to transfer 0.13 micron technology from Motorola to Fab 2 and develop new process technologies for Fab 2 in order to suit our customers' needs. The ramp-up of Fab 2 is a substantial and complex project. We are experiencing difficulties customary for projects of this type in the installation, functionality and operation of the Fab 2 equipment during its early manufacturing period. Failures or delays in obtaining and installing the necessary equipment, technology and other resources may delay the completion of the ramp-up of Fab 2 and add to its cost, which would have a material adverse effect on our business and results of operations.

If we do not have sufficient funds to complete the Fab 2 project, our business will be materially adversely affected.

We estimate that, after giving effect to this offering, we will need approximately an additional $245 million to finance the total cost of Fab 2 until we reach full capacity (including cash flow from operations and assuming net proceeds from this offering of $114.0 million). Additionally, the actual cost of Fab 2 may exceed our estimates. If we cannot successfully raise sufficient funding to complete the ramp-up to 33,000 wafer starts per month, we will be required to scale back our equipment purchases and capacity forecasts, and, as a result, we will not fully utilize the substantial investment made in constructing Fab 2, which will adversely affect our financial results.

The cyclical nature of the semiconductor industry and the resulting periodic overcapacity have adversely affected our business in the past, resulting in a history of losses; downward price pressure may seriously harm our business.

The semiconductor industry has historically been highly cyclical. Historically, companies in the semiconductor industry have expanded aggressively during periods of increased demand. This expansion has frequently resulted in overcapacity and excess inventories, leading to rapid erosion of average sale prices. We expect this pattern to repeat itself in the future. Our operating results for 1996 through 1999 were harmed by a downturn in the semiconductor market that resulted in reduced orders, underutilization of our facility and severe price erosion. Although utilization and average sale prices improved during 2000, demand slowed in the overall semiconductor market and in many of our end product markets beginning in the fourth quarter of 2000. This slowing in demand deepened in 2001 and continued in 2002. While sales increased in each of the first three quarters of 2002, and have continued to improve through the first half of 2003, we experienced a decrease in the sales of Fab 1 in the third quarter of 2003. Although the semiconductor industry appears to be recovering, we cannot be assured that this overall recovery will continue or that we will benefit from it through an increase in demand for our products, resulting in an improvement in our financial results.

We have a recent history of operating losses and expect to operate at a loss through the foreseeable future. Our facilities must operate at high utilization rate for us to be profitable.

We operated at a loss for the last five years and expect to operate at a loss for the foreseeable future. Fab 1 operated significantly below capacity from 1996 through 2003. Because fixed costs represent a substantial portion of the operating costs of semiconductor manufacturing operations, we must operate our facilities at a high utilization rate. We are currently operating Fab 1 at a capacity utilization of approximately 50%. During the third quarter of 2003, we completed the construction of Fab 2, the qualification of process technologies and the start

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of ramp-up of production. These technologies and other Fab 2 assets have started to incur significant operating expenses as well as depreciation and amortization expenses.

We may not be able to capitalize on an increase in demand for foundry services.

We are ramping-up Fab 2 based on our expectations of customer demand. In order for demand for our wafer fabrication services to increase, the markets for the end products using these services must develop and expand. For example, the success of our imaging process technologies will depend, in part, on the growth of markets for digital photography and video. Because our services may be used in many new applications, it is difficult to forecast demand. If demand is lower than expected, we may have excess capacity, which may adversely affect our financial results. If demand is higher than expected, we may be unable to fill all of the orders we receive, which may result in the loss of customers.

If we do not meet conditions to receive the Israeli government grants and tax benefits approved for Fab 2, we may be required to seek alternative financing sources.

In connection with Fab 2, we received approval for grants and tax benefits from the Investment Center of the government of Israel under its Approved Enterprise Program. Under the terms of the approval, we are eligible to receive grants of 20% of up to $1.25 billion invested in Fab 2 plant and equipment, or an aggregate of up to $250 million. As of December 31, 2003, we have received approximately $118 million in grants from the Investment Center. The Investment Center requires that we complete our Fab 2 investments and achieve full production capacity of 33,000 wafer starts per month by the end of 2005, and Israeli law limits the ability of the Investment Center to extend this time limitation, unless an exempting amendment to this law is adopted by the Israeli parliament. We have notified the Investment Center of our revised investment schedule and lower than initially projected expectations for Fab 2 sales; this information is currently being evaluated by the Investment Center. While the Investment Center has continued to fund the grant to us under our Approved Enterprise Program, we cannot assure you that it will continue to do so if it does not accept our revised investment schedule. In addition, even if the Investment Center accepts our revised schedule, any failure by us to meet the conditions of our grant may result in the cancellation of all or a portion of our grants and tax benefits and in the Investment Center requiring us to repay all or a portion of previous grants, which total $118 million as of December 31, 2003. If this were to happen, we would be required to seek alternative financing sources to complete the ramp-up of Fab 2, which may have an adverse effect on our operations.

If we do not attract additional customers, our business will be adversely affected.

For the first nine months of 2003, approximately 64% of our business was generated by four customers, National Semiconductor (26%), Motorola, (15%), FillFactory (12%) and SanDisk (11%). We expect to continue to receive a significant portion of our revenue from a limited number of customers, with SanDisk, our largest Fab 2 customer, accounting for a significant portion of the revenues we expect to generate from Fab 2 in 2004. In the third quarter of 2003, SanDisk was instrumental in ramping up our business and accounted for approximately 80% of our Fab 2 revenues. While we currently expect that SanDisk will continue to be a significant customer of Fab 2, the percentage of Fab 2 revenues represented by sales to SanDisk is expected to decrease as additional customers commence or increase their purchase orders following the qualification of their products in Fab 2. Loss or cancellation of business from, or decreases in, the sales volume or sales prices to these customers including SanDisk could seriously harm our financial results and business. Since the sales cycle for our services typically exceeds one year, if our customers order significantly fewer wafers than forecasted, we will have excess capacity that we may not be able to sell in a short period of time, resulting in lower utilization of our facilities. We may have to reduce prices in order to try to sell the excess capacity. In addition to the revenue loss that could result from unused capacity or lower sales prices, we might have difficulty adjusting our costs to reflect the lower revenues, which could harm our financial results.

If we do not receive orders from our wafer partners and technology providers we may have excess capacity.

We have entered into wafer partner agreements and agreements with technology providers under which we have committed a portion of our Fab 2 capacity for future orders from these parties. During the ramp-up of Fab 2, our capacity commitments are limited to approximately 50% of our Fab 2 capacity. These parties are generally not obligated to utilize or pay for all or any portion of their allocated capacity, and generally must confirm their orders to us only three months in advance. If these parties do not place orders with us, we may have unutilized capacity, which we may be unable to fill and could harm our financial results. In addition, in connection with their investments in the Fab 2 project, our wafer partners have been issued credits which may be used to reduce the cash amounts to be paid by them when paying for wafers manufactured in Fab 2. Our major wafer partners have recently agreed to defer the use of their credits until 2007.

If we do not maintain and develop our technology processes and services, we will lose customers and may not be able to attract new ones.

The semiconductor market is characterized by rapid change, including the following:

- rapid technological developments;
- evolving industry standards;
- changes in customer requirements;
- frequent new product introductions and enhancements; and
- short product life cycles with declining prices as products mature.

In order to maintain our current customer base and attract new customers, we must continue to advance our manufacturing process technologies. We are developing and introducing to production specialized process technologies. We have also licensed 0.18-micron technology from Toshiba and have begun the transfer of 0.13-micron technology from Motorola. We are also working on other independent and joint development projects of technologies for Fab 2. Our ability to achieve and maintain profitable operations depends on the successful development and introduction to production of these processes.

If we do not compete effectively, we will lose business to our competitors.

The semiconductor foundry industry is highly competitive. We compete with approximately 10 independent dedicated foundries, all of which are located in Asia-Pacific, including new foundries based in Taiwan, China, Korea and Malaysia, and with over 20 integrated semiconductor and end-product manufacturers that allocate a portion of their manufacturing capacity to foundry operations. The foundries with which we compete benefit from their close proximity to other companies involved in the design and manufacture of ICs. Many of our competitors have one or more of the following competitive advantages over us:

- greater manufacturing capacity;
- multiple and more advanced manufacturing facilities;
- more advanced technological capabilities;
- a more diverse and established customer base;
- greater financial, marketing, distribution and other resources; and/or
- a better cost structure.

If we do not compete effectively, our results of operations will be materially affected.

We have a large amount of debt, which could have significant negative consequences.

As of December 31, 2003, we had $431 million of bank debt. Our current and future indebtedness could have significant negative consequences, including:

- requiring the dedication of a substantial portion of our expected cash flow from operations to service our indebtedness;
- increasing our vulnerability to general adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete;

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- placing us at competitive disadvantage to less leveraged competitors and competitors that have better access to capital resources; and
- affecting our abilities to make interest payments on our indebtedness.

If we fail to satisfy the covenants set forth in our amended credit facility, our banks will be able to call our loans.

Our credit facility requires that we maintain certain financial, capital raising and production milestone covenants. In the past, we failed to meet certain of the requirements of the credit facility. We cannot assure you that we will be successful in satisfying these covenants in the future. Any failure by us to observe covenants or satisfy conditions under the credit facility, some of which are not in our control, may result in the banks accelerating our obligations, which would obligate us to immediately repay all loans made by the banks plus penalties, and the banks would be entitled to exercise the remedies available to them under the credit facility, including enforcement of their lien against all our assets. This would have a material adverse effect on our company.

Israeli banking laws may impose restrictions on the total debt that we may borrow from our banks.

Pursuant to a recent amendment to a directive published by the Israel Supervisor of Banks, which becomes effective on March 31, 2004, we may be deemed part of a group of borrowers comprised of the Ofer Brothers Group, The Israel Corporation, and other companies which are also included in such group of borrowers pursuant to the directive, including companies under the control or deemed control of these entities. The directive provides that an entity will be subject to limitations on the amount of bank financing available to it if such entity is included within a group of borrowers, to which the amount of debt financing that has been extended from such bank amounts to 30% of such bank's capital, or is a member of one of the bank's six largest borrowers or groups of borrowers to which, collectively, the amount of debt financing that has been extended from a bank amounts to 150% of such bank's capital (gradually reduced to 135% between April 2005 and June 2006). Should our banks exceed these limitations, they may limit our ability to draw on our remaining Fab 2 bank facility ($69 million) and may require us to return some or all of our outstanding borrowings (which were $431 million as of December 31, 2003), each of which may have a material adverse effect on our business, financial condition and results of operations. The directive provides that a bank may request that the Israel Supervisor of Banks exempt certain entities from the scope of the definition of a group of borrowers. Since we do not know whether the directive will impact us, we do not currently intend to request that our banks seek an exemption on our behalf from the Israel Supervisor of Banks. Should we decide to make such a request of our banks, there can be no assurance that our banks would agree to request an exemption from the Israel Supervisor of Banks on our behalf or that the Israel Supervisor of Banks would grant an exemption, if requested.

If we experience difficulty in achieving acceptable device yields, product performance and delivery times as a result of manufacturing problems, our business will be adversely affected.

The process technology for the manufacture of semiconductor wafers is highly complex, requires advanced and costly equipment and is constantly being modified in an effort to improve device yields, product performance and delivery times. Microscopic impurities such as dust and other contaminants, difficulties in the production process, defects in the key materials and tools used to manufacture a wafer and other factors can cause wafers to be rejected or individual semiconductors on specific wafers to be non-functional. We have from time to time experienced production difficulties that have caused delivery delays or returns and lower than expected device yields. We may also experience difficulty achieving acceptable device yields, product performance and product delivery times in the future as a result of manufacturing problems. Any of these problems could seriously harm our financial results and business.

If our new chief executive officer is unable to fully transition into his new position, our operations will be adversely affected.

Our former co-chief executive officers left us in June 2003, after ten years of service. Our new chief executive officer took office in July 2003. If our new chief executive officer is unable to fully

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transition into his new position, our operations will be adversely affected.

If we are unable to purchase equipment and raw materials, we will not be able to manufacture our products in a timely fashion, which may result in a loss of existing and potential new customers.

To complete the ramp-up of our Fab 2 facility and to maintain the quality of production in our facilities, we must procure new equipment. In periods of high market demand, the lead times from order to delivery of manufacturing equipment could be as long as 12 to 18 months. In addition, our manufacturing processes use many raw materials, including silicon wafers, chemicals, gases and various metals. Manufacturing equipment and raw materials generally are available from several suppliers. In many instances, however, we purchase equipment and raw materials from a single source. Although supplies for manufacturing equipment and raw materials are adequate, shortages could occur due to an interruption of supply or increased industry demand. Any such shortages could result in production delays that could have a material adverse effect on our business and financial condition.

We must continue to reduce our exposure to currency exchange and interest rate fluctuations, or our cost of operations will increase.

Almost all of our cash generated from operations and from our financing and investing activities is denominated in dollars and New Israeli Shekels, or NIS. Our expenses and costs are denominated in NIS, dollars, Japanese Yen and Euros. We are, therefore, exposed to the risk of currency exchange rate fluctuations.

Our borrowings, including the loans contemplated under our Fab 2 credit facility, provide for interest based on a floating LIBOR rate, and we are therefore subject to exposure to interest rate fluctuations. Furthermore, if our banks incur increased costs in financing our Fab 2 credit facility due to changes in law or the unavailability of foreign currency, our banks may exercise their right to increase the interest rate on our Fab 2 credit facility as provided for in the credit facility, as they did pursuant to its recent amendment.

We regularly engage in various hedging strategies to reduce our exposure to some, but not all, of these risks and intend to continue to do so in the future. However, despite any such hedging activity, we are likely to remain exposed to interest rate and exchange rate fluctuations, which may increase the cost of our activities and, following the ramp-up of Fab 2, will increase our financing expenses.

We depend on intellectual property rights of third parties and failure to maintain or acquire licenses could harm our business.

We depend on third party intellectual property in order for us to provide foundry and design services to our clients. We believe that we are in compliance with the licensing agreements with the owners of these rights and that the licensing agreements adequately protect our rights. If problems or delays arise with respect to the timely development, quality and provision of such intellectual property to us, our customers' design and production could be delayed, resulting in underutilization of our capacity. Failure to maintain or acquire licenses could harm our business. In addition, license fees and royalties payable under these agreements may impact our margins and operating results.

Failure to comply with the intellectual property rights of third parties or defend our intellectual property rights could harm our business.

Our ability to compete successfully depends on our ability to operate without infringing on the proprietary rights of others and defend our intellectual property rights. Because of the complexity of the technologies used and the multitude of patents, copyrights and other overlapping intellectual property rights, it is often difficult for semiconductor companies to determine infringement. Therefore, the semiconductor industry is characterized by frequent litigation regarding patent, trade secret and other intellectual property rights. There are no lawsuits currently pending against us regarding the infringement of patents or intellectual property rights of others. However, we have been a party to such claims in the past and because of the nature of the industry, we may continue to receive such claims in the future. We and some of our customers have recently received a notice from a technology company claiming that we and our customers are infringing its patent rights. This notice was followed by an offer to license the technology company's patents for an immaterial one-time license payment, and we entered into a license agreement with this company. All other prior claims against us have been resolved through license agreements, the terms of which have not had a material effect on our business. One of these agreements expires at the end of 2005, and we may be unable to extend or renew it on similar terms. In the event any third party were to assert infringement claims against us or our customers, we may have to consider alternatives including, but not limited to:

- negotiating cross-license agreements;
- seeking to acquire licenses to the allegedly infringed patents, which may not be available on commercially reasonable terms, if at all;
- discontinuing using certain process technologies, architectures, or designs, which could cause us to stop manufacturing certain ICs if we were unable to design around the allegedly infringed patents;
- fighting the matter in court and paying substantial monetary damages in the event we were to lose; or
- seeking to develop non-infringing technologies, which may not be feasible.

Any one or several of these developments could place substantial financial and administrative burdens on us and hinder our business. Litigation, which could result in substantial costs to us and diversion of our resources, may also be necessary to enforce our patents or other intellectual property rights or to defend us or our customers against claimed infringement of the rights of others. If we fail to obtain certain licenses and if litigation relating to alleged patent infringement or other intellectual property matters occurs, it could prevent us from manufacturing particular products or applying particular technologies, which could reduce our opportunities to generate revenues.

As of December 31, 2003, we held 48 patents worldwide. We intend to continue to file patent applications when appropriate to protect our proprietary technologies. The process of seeking patent protection may take a long time and be expensive. We cannot assure you that patents will be issued from pending or future applications or that, if patents are issued, they will not be challenged, invalidated or circumvented or that the rights granted under the patents will provide us with meaningful protection or any commercial advantage. In addition, we cannot assure you that other countries in which we market our services will protect our intellectual property rights to the same extent as the United States. Further, we cannot assure you that we will at all times enforce our patents or other intellectual property rights or that the rights granted under our patents will provide us with a commercial advantage, which could reduce our opportunities to generate revenues.

We could be seriously harmed by failure to comply with environmental regulations.

Our business is subject to a variety of laws and governmental regulations in Israel relating to the use, discharge and disposal of toxic or otherwise hazardous materials used in our production processes. We are currently operating under a conditional permit from the Israeli Ministry of Environmental Affairs concerning the concentration of fluoride in our wastewater. We believe that we are currently in compliance with the terms of our permit, with one exception: we are monitoring the levels of fluoride in accordance with an oral understanding with the Israeli Ministry of Environmental Affairs, which is less frequent than required by the written terms of our permit. If we do not comply with our permit's conditions or with our other understandings with the Ministry, we may be required to allocate financial resources for the implementation of an infrastructure solution in order to be in compliance with all the conditions. We estimate that such an infrastructure solution would be immaterial. While we believe that we currently comply in all other material respects with applicable environmental laws and regulations, if we fail to use, discharge or dispose of hazardous materials appropriately, or if applicable environmental laws or regulations change in the future, we could be subject to substantial liability or could be required to suspend or adversely modify our manufacturing operations.

We may be subject to the risk of loss due to fire because the materials we use in our manufacturing processes are highly flammable.

We use highly flammable materials such as silane and hydrogen in our manufacturing processes

and may therefore be subject to the risk of loss arising from fires. The risk of fire associated with these materials cannot be completely eliminated. We maintain insurance policies to reduce losses caused by fire, including business interruption insurance. If any of our fabs were to be damaged or cease operations as a result of a fire, it would reduce manufacturing capacity and reduce revenues.

Possible product returns could harm our business.

Products manufactured by us are subject to return for specified periods if they are defective or otherwise fail to meet customers' specifications. Although we establish what we believe to be reasonable reserves against possible product returns based on our past experience, product returns in excess of such reserves may have an adverse effect on our business and financial condition.

We may be required to repay grants to the Israel Investment Center that we received in connection with Fab 1.

We received grants and tax benefits for Fab 1 under the government of Israel Approved Enterprise program. As of December 31, 2001, we completed our investments under our Fab 1 program and are no longer entitled to any further investment grants for future capital investments in Fab 1. We have agreed that if we do not achieve Fab 1 revenues of $90 million for 2003 and $100 million for 2004 and maintain at Fab 1 at least 600 employees for 2003 and 625 employees for 2004, subject to prevailing market conditions, we will, if demanded by the Investment Center, be required to repay the Investment Center up to approximately $2.5 million. Based on our expected level of Fab 1 revenues and employees for the fourth quarter of 2003, we may be required to repay the Investment Center up to approximately $2.5 million.

We are subject to risks related to our international operations.

In 2003 and 2002, we made substantial sales to customers located in Asia-Pacific and in Europe. Because of our international operations, we are vulnerable to the following risks:

- we price our products primarily in U.S. Dollars. If the Euro, Yen and other currencies weaken relative to the U.S. Dollar, our products may be relatively more expensive in these regions, which could result in a decrease in our sales;
- the need to comply with foreign government regulation;
- general geopolitical risks such as political and economic instability, potential hostilities and changes in diplomatic and trade relationships;
- natural disasters affecting the countries in which we conduct our business, such as the earthquakes experienced in China, Japan and Taiwan;
- reduced sales to our customers or interruption in our manufacturing processes in the Pacific Rim that may arise from regional issues in Asia;
- imposition of regulatory requirements, tariffs, import and export restrictions and other barriers and restrictions;
- adverse tax rules and regulations;
- weak protection of our intellectual property rights; and

• delays in product shipments due to local customs restrictions.

Risks Related to this Offering and our Ordinary Shares

Our stock price may decline after the offering and may be volatile in the future.

The public offering price in this offering will be determined through negotiations between the underwriters and us and may not be indicative of our future market prices. As a result, you may not be able to resell any shares you buy from us at or above the public offering price due to a number of factors, including:

- actual or anticipated fluctuations in our operating results;
- changes in expectations as to our future financial performance or changes in financial estimates by securities analysts;
- developments or disputes concerning patents or proprietary rights;

- events or announcements relating to our collaborative relationship with others;
- investors' perceptions;
- volatility in the securities markets;
- general conditions in the economy or other external factors;
- technological innovations by our competitors; and
- the operating and stock price performance of other comparable companies.

In addition, the stock market in general has experienced extreme volatility that often has been unrelated to the operating performance of particular companies. These broad market and industry fluctuations may adversely affect the trading price of our ordinary shares, regardless of our actual operating performance. In particular, the stock prices for many companies in the semiconductor industry have experienced wide fluctuations, which have often been unrelated to the operating performance of such companies. Such fluctuations may adversely affect the market price of our ordinary shares.

Issuance of additional shares pursuant to Fab 2 financing arrangements will dilute the interest of our shareholders; we have also issued warrants to our banks and to one of our shareholders and options to our employees that are exercisable into our ordinary shares below our current market price.

In connection with the Fab 2 project, we have issued to date 39,402,337 ordinary shares to our wafer and equity partners and other shareholders. Upon completion of this offering, we will issue additional shares in connection with the $16.4 million second installment of the fifth and final Fab 2 milestone payments by our wafer and equity partners received in December 2003, based on the price per share in this offering (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule" for a discussion of the approximate aggregate number of ordinary shares to be issued to our Fab 2 investors with respect to the second installment payment at the offering price to the public in this offering). In January 2001, we issued warrants to our banks exercisable into 400,000 ordinary shares with an exercise price of $6.20. In December 2003, we issued to our banks and to one of our shareholders warrants exercisable into 896,596 and 58,906 ordinary shares, respectively, with an exercise price of $6.17. Up to approximately 8.6 million additional ordinary shares may be issued upon the conversion of our outstanding convertible debentures and upon exercise of warrants held by some of our shareholders, our debentureholders and our Fab 2 contractor.

In addition, we have issued to our employees options to purchase up to 6.8 million shares, of which 3.7 million shares have an exercise price below $7.00. We have also entered into a number of agreements which may result in our issuing large numbers of shares, particularly if we complete the transactions contemplated by these agreements at a time when our share price is low. For example, we have agreed that our wafer partners may elect to convert, on a quarterly basis through 2006, wafer credits we have issued them which may be used to reduce the cash payments to be paid by them when paying for wafers manufactured in Fab 2 into our ordinary shares, based on the average trading price of our ordinary shares during the 15 consecutive trading days preceding the relevant quarter. If our major wafer partners purchase an amount of wafers which would otherwise result in their using the full amount of credits available to them and they elect to convert all of these credits into ordinary shares, we will issue them an aggregate of 8.3 million shares, assuming the average trading price of our ordinary shares during the 15 consecutive trading days preceding the last relevant quarter is $5.00; if the average trading price of our ordinary shares is $10.00, we will issue an aggregate of 4.2 million shares. Issuances of these shares will have a substantial dilutive effect on our shareholders.

Market sales of large amounts of our shares eligible for future sale may lower the price of our ordinary shares.

Of our 51,696,097 outstanding ordinary shares as of December 31, 2003, 11,895,032 are freely tradable and held by non-affiliates, and an additional 1,073,905 shares held by non-affiliates are eligible for sale pursuant to Rule 144 under the Securities Act of 1933, subject to the time, volume and manner of sale limitations of Rule 144. Of these shares, 476,213 and 597,692 shares will be freely tradable under Rule 144(k) by April 2004 and October 2004, respectively. An

additional 80,456 and 67,046 shares held by non-affiliates will be eligible for sale under Rule 144(k) by May 2004 and by December 2004, respectively.

In addition, certain of our affiliates (ICTech, SanDisk, Alliance Semiconductor, and Macronix) hold 38,579,658 of our shares, of which 4,086,037 are freely tradable and 26,380,558 are currently eligible for sale subject to the time, volume and manner of sale limitations of Rule 144. An additional 4,425,076, 838,082 and 2,849,905 shares held by these affiliates will be eligible for sale under Rule 144 by May 2004, August 2004 and December 2004, respectively, subject to the share transfer restrictions set forth in the shareholders agreement to which they are a party and which remain in effect through January 2008. ICTech and our large wafer partners, as well as our directors and officers, have agreed under written "lock-up" agreements that, for a period of 180 days from the date of this prospectus, they will not sell their shares. Shares purchased by OTPP in 2002 are registered pursuant to an effective shelf registration statement. The sales of large amounts of our ordinary shares (or the potential for those sales even if they do not actually occur) may depress the market price of our ordinary shares. This could also impair our ability to raise capital through the sale of our equity securities.

Our principal shareholders own a controlling interest in us and will be able to exercise it in ways which may be adverse to your interests.

Our wafer partners and ICTech own approximately 75% of our outstanding shares. Under our articles of association, two shareholders holding together 33% of our outstanding shares constitute a quorum for conducting a shareholders meeting. Our wafer partners and ICTech could constitute a quorum for purposes of conducting a shareholders meeting. While we have always solicited proxies from our shareholders prior to our shareholders meetings, we would have a sufficient quorum with two large shareholders even if none of our other shareholders were to participate in our shareholder meetings. If only two large shareholders were to participate in one of our shareholder meetings, these shareholders would determine the outcome of our shareholder meetings without the benefit of the participation of our other shareholders. In addition, even if our other shareholders were to participate in our shareholders meeting in person or by proxy, our wafer partners and The Israel Corporation effectively control our company and may exercise this control in a manner adverse to the interests of our other shareholders.

Risks Related to Our Operations in Israel

Instability in Israel may harm our business.

All of our manufacturing facilities and our corporate and primary sales offices are located in Israel. Accordingly, political, economic and military conditions in Israel may directly affect our business.

Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors, as well as incidents of civil unrest. In addition, Israel and companies doing business with Israel have, in the past, been the subject of an economic boycott. Although Israel has entered into various agreements with Egypt, Jordan and the Palestinian Authority, there has been an increase in unrest and terrorist activity, which began in September 2000 and which has continued with varying levels of severity into 2003. Parties with whom we do business have sometimes declined to travel to Israel during periods of heightened unrest or tension, forcing us to make alternative arrangements where necessary. In addition, the political and security situation in Israel may result in parties with whom we have agreements claiming that they are not obligated to perform their commitments under those agreements pursuant to force majeure provisions. We do not believe that the political and security situation has had any material impact on our business to date; however, we can give no assurance that security and political conditions will have no such effect in the future. Any hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could adversely affect our operations and could make it more difficult for us to raise capital. Furthermore, our manufacturing facilities are located exclusively in Israel, which is currently experiencing civil unrest, terrorist activity and military action. Since we do not have a detailed disaster recovery plan that would allow us to quickly resume manufacturing, we could

experience serious disruption of our manufacturing if acts associated with this conflict result in any serious damage to our manufacturing facilities. In addition, our business interruption insurance may not adequately compensate us for losses that may occur, and any losses or damages incurred by us could have a material adverse effect on our business.

Our operations may be negatively affected by the obligations of our personnel to perform military service.

In the event of severe unrest or other conflict, individuals could be required to serve in the military for extended periods of time. In response to the increase in terrorist activity and the renewed Palestinian uprising, there has been a significant call up of military reservists, and it is possible that there will be additional call-ups in the future. Most male Israeli citizens, including our employees, are subject to compulsory military service through middle age. Our operations could be disrupted by the absence for a significant period of time of one or more of our key employees or a significant number of our other employees due to military service. Such disruption could harm our operations.

Our operations may be affected by negative economic conditions in Israel.

Israel has been going in recent years through a period of recession in economic activity, resulting in low growth rates and growing unemployment. Our operations could be adversely affected if the economic conditions in Israel continue to deteriorate. In addition, due to significant economic measures proposed by the Israeli Government, there have been several general strikes and work stoppages in 2003, affecting all banks, airports and ports. These strikes have had an adverse effect on the Israeli economy and on business, including our ability to deliver products to our customers or to receive raw materials from our suppliers in a timely manner. Following the passing by the Israeli Parliament of laws to implement the economic measures, the Israeli trade unions have threatened further strikes or work-stoppages, and these may have a material adverse effect on the Israeli economy and us.

If we do not receive a final business license, we may be required to cease our operations.

The construction of our Fab 2 facility has required us to renew our business license, and we are currently operating under a temporary business license, which will expire at the end of May 2004. We are currently in the process of implementing the conditions for the receipt of a final business license. In the event that we do not receive a final business license, we may be required to pay penalties and if we cannot implement the conditions for the receipt of a final business license, we may be required to modify or cease our operations.

If the exemption allowing us to operate our manufacturing facilities seven days a week is not renewed, our business will be adversely affected.

We operate our manufacturing facilities seven days a week pursuant to an exemption from the law that requires businesses in Israel to be closed from sundown on Friday through sundown on Saturday. This exemption, which has been renewed several times in the past, expires on December 31, 2004. In addition, a significant increase in the number of employees permitted to work under this exemption will be needed as we ramp-up production at Fab 2. We expect the exemption to be renewed, but if the exemption is not renewed and we are forced to close the facility for this period each week, our financial results and business will be harmed.

If we are considered to be a passive foreign investment company, either presently or in the future, U.S. Holders will be subject to adverse U.S. tax consequences.

We will be a passive foreign investment company, or PFIC, if 75% or more of our gross income in a taxable year, including our pro rata share of the gross income of any company, U.S. or foreign, in which we are considered to own, directly or indirectly, 25% or more of the shares by value, is passive income. Alternatively, we will be considered to be a PFIC if at least 50% of our assets in a taxable year, averaged over the year and ordinarily determined based on fair market value and including our pro rata share of the assets of any company in which we are considered to own, directly or indirectly, 25% or more of the shares by value, are held for the production of, or produce, passive income. If we were to be a PFIC, and a U.S. Holder does not make an election to treat us as a "qualified electing fund," or QEF, or a "mark to market" election, "excess distributions" to a U.S. Holder, and any gain recognized by a U.S. Holder on a

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disposition or our ordinary shares, would be taxed in an unfavorable way. Among other consequences, our dividends would be taxed at the regular rates applicable to ordinary income, rather than the 15% maximum rate applicable to certain dividends received by an individual from a qualified foreign corporation. The tests for determining PFIC status are applied annually and it is difficult to make accurate predictions of future income and assets, which are relevant to the determination of PFIC status. In addition, under the applicable statutory and regulatory provisions, it is unclear whether we would be permitted to use a gross loss from sales (sales less cost of goods sold) to offset our passive income in the calculation of gross income. In light of the uncertainties described above, we have not obtained an opinion of counsel with respect to our PFIC status and no assurance can be given that we will not be a PFIC in any year. If we determine that we have become a PFIC, we will then notify our U.S. Holders and provide them with the information necessary to comply with the QEF rules. If the IRS determines that we are a PFIC for a year with respect to which we have determined that we were not a PFIC, however, it might be too late for a U.S. Holder to make a timely QEF election, unless the U.S. Holder qualifies under the applicable Treasury regulations to make a retroactive (late) election. U.S. Holders who hold ordinary shares during a period when we are a PFIC will be subject to the foregoing rules, even if we cease to be a PFIC, subject to exceptions for U.S. Holders who made a timely QEF or mark-to-market election.

It may be difficult to enforce a U.S. judgment against us, our officers and directors and some of the experts named in this prospectus or to assert U.S. securities law claims in Israel.

We are incorporated in Israel. Most of our executive officers and directors and our Israeli accountants and attorneys are nonresidents of the United States, and a substantial portion of our assets and the assets of these persons are located outside the United States. Therefore, it may be difficult to enforce a judgment obtained in the United States, against us or any of these persons, in U.S. or Israeli courts based on the civil liability provisions of the U.S. Federal securities laws. Additionally, it may be difficult for you to enforce civil liabilities under U.S. Federal Securities laws in original actions instituted in Israel.

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Forward-Looking Statements

The statements incorporated by reference or contained in this prospectus discuss our future expectations, contain projections of our results of operations or financial condition and include other forward-looking information within the meaning of Section 27A of the Securities Act of 1933, as amended. Our actual results may differ materially from those expressed in forward-looking statements made or incorporated by reference in this prospectus. Forward-looking statements that express our beliefs, plans, objectives, assumptions or future events or performance may involve estimates, assumptions, risks and uncertainties. Therefore, our actual results and performance may differ materially from those expressed in the forward-looking statements. Forward-looking statements often, although not always, include words or phrases such as the following: "will likely result," "are expected to," "will continue," "is anticipated," "estimate," "intends," "plans," "projection" and "outlook."

You should not unduly rely on forward-looking statements contained or incorporated by reference in this prospectus. Various factors discussed in this prospectus, including, but not limited to, all the risks discussed in "Risk Factors" may cause actual results or outcomes to differ materially from those expressed in forward-looking statements. You should read and interpret any forward-looking statements together with these documents.

Any forward-looking statement speaks only as of the date on which that statement is made. We will not update any forward-looking statement to reflect events or circumstances that occur after the date on which such statement is made.

Use of Proceeds

We estimate that the net proceeds from the sale of the ordinary shares we are offering will be approximately $114.0 million. If the underwriters fully exercise the over-allotment option, the net proceeds of the shares we sell will be $131.2 million. "Net proceeds" is what we expect to receive after paying the underwriting discount and other expenses of the offering. For purposes of estimating net proceeds, we are assuming that the public offering price will be $10.09 per share.

The net proceeds will be used towards the further ramp-up and deployment of Fab 2 and for marketing expenses for the sale of our products and services as well as for general corporate purposes, including working capital.

Dividend Policy

Since 1998, we have not declared or paid cash dividends on any of our shares, and we do not anticipate paying dividends on our ordinary shares in the foreseeable future. The credit facility that we entered into with our banks prohibits the payment of dividends prior to January 1, 2008, and before any such distribution, we must have placed on deposit with our banks an amount equal to the debt service for the quarter in which the distribution is to be made and charged such deposit in favor of our banks, and we must have complied with certain financial ratios. In addition, we may only declare and pay a dividend provided that:

- the dividend is only paid from excess cash flow from Fab 2;
- there is no event of default outstanding under the credit facility; and
- an event of default could not reasonably exist after such distribution.

The Israel Companies Law also restricts our ability to declare dividends. We can only distribute dividends from profits (as defined in the law), provided that there is no reasonable suspicion that the dividend distribution will prevent us from meeting our existing and future expected obligations as they come due.

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Ordinary Shares Market Data

The primary trading market for our ordinary shares is the Nasdaq National Market, where our shares are listed and traded under the symbol "TSEM." The following table sets forth, for the periods indicated, the high and low reported sales prices of the ordinary shares on the Nasdaq National Market:

	High (U.S. $)	Low (U.S. $)
2001		
First Quarter 2001	$17.12	$8.94
Second Quarter 2001	13.11	7.50
Third Quarter 2001	11.25	5.42
Fourth Quarter 2001	6.75	3.80
2002		
First Quarter 2002	8.50	5.11
Second Quarter 2002	6.93	5.23
Third Quarter 2002	5.85	3.26
Fourth Quarter 2002	5.51	3.11
2003		
First Quarter 2003	3.56	2.16
Second Quarter 2003	6.46	2.78
Third Quarter 2003	5.30	4.02
Fourth Quarter 2003	7.90	4.00
January 2004	$10.80	$8.26

Our shares also trade on the Tel Aviv Stock Exchange under the symbol "TSEM". The following table sets forth, for the periods indicated, the high and low reported sales price of our ordinary shares on the TASE:

	High (NIS)	Low (NIS)
2001		
First Quarter 2001	71.90	34.00
Second Quarter 2001	55.60	32.00
Third Quarter 2001	48.29	25.05
Fourth Quarter 2001	30.08	16.80
2002		
First Quarter 2002	37.99	24.50
Second Quarter 2002	34.00	25.05
Third Quarter 2002	27.46	18.71
Fourth Quarter 2002	25.11	15.30
2003		
First Quarter 2003	16.46	10.25
Second Quarter 2003	28.60	12.90
Third Quarter 2003	22.90	18.20
Fourth Quarter 2003	35.00	18.30
January 2004	$	$

As of December 31, 2003, the exchange rate of the NIS to the US Dollar was $1=NIS 4.379.

Capitalization

The following table shows:

- Our capitalization on November 30, 2003
- Our capitalization on November 30, 2003, assuming the completion of this offering at an assumed public offering price of $10.09 per share and the use of the net proceeds as described under "Use of Proceeds."

	As of November 30, 2003	
	Actual	As Adjusted
	(in thousands)	
Long-term debt, including current portion (1)	$ 411,000	$ 411,000
Convertible debentures	25,417	25,417
Long-term liability in respect of customer advances	46,596	46,596
Shareholders' equity:		
Ordinary shares, NIS 1.00 par value; authorized 100,000,000 shares*, issued 50,079,146 shares**, as adjusted 62,079,146 shares (2)(3)	12,479	15,177
Additional paid-in capital	415,645	526,966
Shareholder receivable and unearned compensation	(26)	(26)
Accumulated deficit	(203,515)	(203,515)

Treasury stock, 1,300,000 shares	(9,072)	(9,072)
Total shareholders' equity	215,511	329,530
Total capitalization	$ 698,524	$ 812,543

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*Our authorized share capital was increased to NIS 150,000,000 on December 7, 2003.

**Includes 1,300,000 treasury shares.

(1)The indebtedness represented by long-term debt is secured by specific and floating liens on all of our assets.

(2)In December 2003, we issued an additional 2,916,951 shares in connection with the payment of the remainder of the first installment of the fifth milestone. The number of ordinary shares, as adjusted, is based on the issued shares as of November 30, 2003. Based on the 52,996,097 ordinary shares issued as of December 31, 2003, 64,996,097 ordinary shares will be issued, as adjusted. This information excludes as of December 31, 2003 (i) 6,842,441 ordinary shares issuable upon exercise of options granted to employees and directors at a weighted average exercise price of $7.93; (ii) up to 2,697,068 ordinary shares issuable upon conversion of unsecured, subordinated convertible debentures, net in the amount of NIS 112.9 million (or $25.8 million), which are convertible through December 31, 2008; (iii) 2,211,596 ordinary shares issuable upon exercise of options exercisable through January 20, 2006 at an exercise price of NIS 40.83, linked to the Israeli Consumer Price Index (or $9.32); (iv) 3,594,082 ordinary shares issuable upon exercise of warrants with an exercise price of $7.50; (v) 400,000 and 896,596 ordinary shares issuable upon the exercise of warrants issued to our banks in connection with our credit facility with exercise prices of $6.20 and $6.17 per share, respectively; (vi) 1,628,098 in connection with the second installment of the fifth milestone payment assuming a purchase price of $10.09 per share (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); and (vii) 58,906 ordinary shares issuable upon exercise of warrants issued to ICTech as a commitment fee in connection with the arrangements described in "Material Agreements — Credit Facility" with an exercise price of $6.17 per share and exercisable until December 2008.

(3)This information excludes the following potential dilutive issuances of securities pursuant to our credit facility and agreements with our major wafer partners and with IC Tech which cannot be calculated as of the date of the prospectus since the number of shares issuable will depend upon future transactions in which we may engage; (i) ordinary shares issuable upon conversion of up to $41.7 million in wafer prepayment credits which we have issued our major wafer partners as of December 31, 2003, as well as shares we may issue to our other shareholders under certain circumstances (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); (ii) ordinary shares issuable to our major wafer partners upon conversion of their remaining wafer credits issued in connection with their fourth milestone payment (see "Certain Transactions — Amendment to Fifth Milestone Payment Schedule"); (iii) ordinary shares issuable upon exercise of warrants issued to ICTech and our banks in the event that we are required by our banks to complete a rights offering in connection with the arrangements described in "Material Agreements — Credit Facility;" and (iv) ordinary shares issuable upon conversion of securities we may be required to issue in connection with the rights offering and outside investor provisions of the arrangements described in "Material Agreements — Credit Facility."

Selected Consolidated Financial Data

This section presents our selected historical financial data. You should read carefully the financial statements included in this prospectus, including the notes to the financial statements. The selected data in this section is not intended to replace the financial statements.

We derived the statement of operations data for the years ended December 31, 2002, 2001 and 2000, and balance sheet data as of December 31, 2002 and 2001 from the audited financial statements in this prospectus. Those financial statements were prepared in accordance with Israel GAAP and audited by Brightman Almagor & Co., a member of Deloitte Touche Tohmatsu, independent auditors. We derived the statement of operations data for the years ended December 31, 1999 and 1998 and the balance sheet data as of December 31, 2000, 1999 and 1998 from our audited financial statements that are not included in the prospectus, which have been prepared in accordance with Israel GAAP. We derived the statement of operations data for the nine months ended September 30, 2003 and 2002 and balance sheet data as of September 30, 2003 from the unaudited financial statements included in this prospectus, which have been prepared in accordance with Israel GAAP. Statements of operations and selected operations data in accordance with US GAAP would not have materially differed from respective data in accordance with Israel GAAP. Other than as indicated below, balance sheet data in accordance with US GAAP would not have materially differed from respective data in accordance with Israel GAAP. Our management believes that the unaudited historical financial statements contain all adjustments needed to present fairly the information included in those statements and that the adjustments made consist only of normal recurring adjustments. However, the unaudited financial information is not necessarily indicative of full year results.

	Nine Months Ended September 30,		Year Ended December 31,				
	2003	2002	2002	2001	2000	1999	1998
	(in thousands, except per share data)						
Statement of Operations Data:							
Sales	$ 41,545	$ 36,229	$ 51,801	$ 52,372	$104,775	$ 69,815	$ 69,637
Cost of sales	75,816	49,956	67,022	76,733	88,787	77,033	76,781
Gross profit (loss)	(34,271)	(13,727)	(15,221)	(24,361)	15,988	(7,218)	(7,144)
Research and development	12,551	10,184	17,031	9,556	8,965	9,238	8,107
Marketing, general and administrative	17,064	11,807	17,091	14,489	11,428	8,710	8,747
Operating loss	(63,886)	(35,718)	(49,343)	(48,406)	(4,405)	(25,166)	(23,998)
Financing income (expense), net	(4,293)	(2,100)	(2,104)	1,465	1,394	2,277	2,741
Other income (expense), net	(87)	–	45	8,419	(478)	17	13
Loss before income tax benefit (expense)	(68,266)	(37,818)	(51,402)	(38,522)	(3,489)	(22,872)	(21,244)
Income tax benefit (expense)	–	–	–	–	(500)	2,405	5,700
Loss for the period	$ (68,266)	$ (37,818)	$ (51,402)	$ (38,522)	$ (3,989)	$ (20,467)	$ (15,544)
Basic loss per ordinary share	$ (1.49)	$ (1.34)	$ (1.63)	$ (1.92)	$ (0.26)	$ (1.54)	$ (1.18)
Other Financial Data:							
Depreciation and amortization	$ 30,386	$ 14,402	$ 18,821	$ 21,721	$ 25,917	$ 26,643	$ 25,414
Capital expenditures before Investment Center grants	147,394	156,564	243,431	364,347	79,060	15,152	18,779

	As of September 30, 2003	As of December 31, 2002	2001	2000	1999	1998
			(in thousands)			
Selected Balance Sheet Data in accordance with Israel GAAP:						
Cash and cash equivalents, including short-term deposits and designated cash	$ 8,377	$ 69,695	$ 33,202	$ 18,707	$ 41,880	$ 39,282
Working capital	(28,172)	21,927	(16,335)	28,635	56,001	66,037
Total assets	750,612	716,261	472,054	179,298	155,211	180,047
Long-term debt.	347,000	253,000	115,000	12,064	12,106	12,127
Convertible debentures	25,552	24,121	–	–	–	–
Long-term liabilities in respect of customers' advances.	46,920	47,246	17,910	–	–	1,076
Shareholders' equity	246,117	298,334	252,805	134,648	122,121	143,325

	As of September 30, 2003	As of December 31, 2002	2001	2000	1999	1998
			(in thousands)			
Selected Balance Sheet Data in accordance with US GAAP:						
Total assets						
According to Israel GAAP	$750,612	$716,261	$472,054	$179,298	$155,211	$