

TOWER SEMICONDUCTOR LTD

Form F-3

November 23, 2011

As filed with the Securities and Exchange Commission on November 23, 2011 Registration No. 333-

---

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM F-3

REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

TOWER SEMICONDUCTOR LTD.

(Exact name of Registrant as specified in its charter)

Israel  
(State or other jurisdiction of incorporation or  
organization)

Not Applicable  
(I.R.S. Employer Identification No.)

P.O. Box 619  
Migdal Haemek, Israel, 23105  
972-4-650-6611

(Address and telephone number of Registrant's principal executive offices)

Tower Semiconductor USA  
4300 Stevens Creek Blvd., Suite 175  
San Jose, California 95129  
Tel: 408-551-6500  
Facsimile: 408-551-6509

(Name, address and telephone number of agent for service)

Copies of all Correspondence to:

DAVID H. SCHAPIRO, ADV.  
ELIRAN FURMAN, ADV.  
Yigal Arnon & Co.  
1 Azrieli Center  
Tel Aviv, 67021 Israel  
Tel: 972-3-608-7726

SHELDON KRAUSE, ESQ.  
Eilenberg, Krause & Paul LLP  
11 East 44th Street  
New York, NY 10017  
Tel: 212-986-9700

Approximate date of commencement of proposed sale to the public: From time to time 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:  x

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.  o

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.  o

If this form is a registration statement pursuant to General Instruction I.C. or a post effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.  o

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.C. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.  o

Calculation of Registration Fee

Title of Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Aggregate Price Per Security	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Ordinary Shares, par value NIS 1.00 per share	19,678,322	\$ 0.675	\$ 13,282,867 (2)	\$ 1,522.22

(1) Pursuant to Rule 416 of the Securities Act of 1933, this registration statement also includes an indeterminate number of shares that may be issued to prevent dilution from stock splits, stock dividends or similar transactions that could affect the shares to be offered by selling shareholder.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) of the Securities Act of 1933 on the basis of the average of the high and low prices, as reported on the NASDAQ Global Market on November 21, 2011. The ordinary shares we are registering are to be sold by the selling shareholder, including affiliates. We will not receive any proceeds from the sale of the ordinary shares by the selling shareholder.

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 Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary 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 preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION  
DATED NOVEMBER 23, 2011

PROSPECTUS

19,678,322 Ordinary Shares

This prospectus relates to the resale, from time to time, by the selling shareholder (the "Selling Shareholder") named in this prospectus of up to 19,678,322 ordinary shares which we issued in connection with our recent transaction with Micron Technology Inc.

The Selling Shareholder may, from time to time, sell any or all of their ordinary shares on any stock exchange, market or trading facility on which the shares are traded or quoted or in private transactions. For additional information on the possible methods of sale that may be used by the Selling Shareholder, you should refer to the section entitled "Plan of Distribution" elsewhere in this prospectus. We will not receive any proceeds from the sale of any ordinary shares by the Selling Shareholder.

Our ordinary shares are listed on the NASDAQ Global Market and on the Tel Aviv Stock Exchange in Israel under the symbol "TSEM." On November 22, 2011, the last reported sale price of our ordinary shares on the NASDAQ Global Market was \$.066 per share and on the Tel Aviv Stock Exchange was NIS 2.43 per share.

The securities offered hereby involve a high degree of risk. See "Risk Factors" beginning on page 2.

None of the U.S. Securities and Exchange Commission, the Israeli Securities Authority or any state securities commission have approved or disapproved of these securities or passed upon the adequacy, completeness or accuracy of this prospectus. Any representation to the contrary is a criminal offense under the laws of the United States and the laws of the State of Israel.

The date of this prospectus is \_\_\_\_\_, 2011

TABLE OF CONTENTS

<u>ABOUT TOWER SEMICONDUCTOR LTD.</u>	1
<u>RISK FACTORS</u>	3
<u>SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS</u>	6
<u>CAPITALIZATION</u>	7
<u>USE OF PROCEEDS</u>	8
<u>MARKET FOR OUR ORDINARY SHARES</u>	9
<u>PLAN OF DISTRIBUTION</u>	10
<u>SELLING SHAREHOLDER</u>	11
<u>DESCRIPTION OF SHARE CAPITAL</u>	13
<u>FOREIGN EXCHANGE CONTROLS AND OTHER LIMITATIONS</u>	14
<u>TAXATION</u>	14
<u>DIVIDEND POLICY</u>	17
<u>LEGAL MATTERS</u>	17
<u>EXPERTS</u>	17
<u>ENFORCEABILITY OF CIVIL LIABILITIES AND AGENT FOR SERVICE OF PROCESS IN THE UNITED STATES</u>	18
<u>WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION OF INFORMATION BY REFERENCE</u>	18

---

ABOUT TOWER SEMICONDUCTOR LTD.

As used in this registration statement, “we,” “us,” “our,” “Tower” and “the Company” and words of similar import,, refer Tower Semiconductor Ltd., together with its direct wholly-owned subsidiaries.

We are a pure-play independent specialty wafer foundry dedicated to the manufacture of semiconductors. Typically, pure-play foundries do not offer products of their own, but focus on producing integrated circuits, or ICs, based on the design specifications of their customers. We manufacture semiconductors for our customers primarily based on third party designs and our own process technology and engineering support. We currently offer the manufacture of ICs with geometries ranging from 1.0 to 0.13-micron. We also provide complementary design and technical services. ICs manufactured by us are incorporated into a wide range of products in diverse markets, including consumer electronics, personal computers, communications, automotive, industrial and medical device products.

•

Fab 1

Tower Semiconductor Ltd. was founded in 1993, with the acquisition of National Semiconductor’s 150-mm wafer fabrication facility, or Fab 1, and commenced operations as an independent foundry with a production capacity of approximately 5,000 wafers per month. Since then, we have significantly modernized our Fab 1 facility and equipment and enhanced our process technologies to include CMOS image sensors, embedded flash and mixed-signal technologies. Depending on the process technology and product mix, we estimate Fab 1 is able to achieve capacity levels of approximately 20,000 wafers per month.

•

Fab 2

In January 2001, we commenced construction of a state-of-the-art wafer fabrication facility, which we refer to as Fab 2, located in Migdal Haemek, Israel and adjacent to Fab 1. In 2003, we completed the infrastructure of Fab 2 and commenced production at this Fab. Fab 2 is designed to operate in geometries of 0.18-micron and below, using advanced materials and advanced CMOS technology licensed from Freescale and Toshiba and other technologies that we developed and will develop independently or with development partners. Depending on the process technology and product mix, when fully ramped-up, we estimate that Fab 2 will be able to achieve capacity levels of approximately 45,000 wafers per month. We have not completed the full ramp-up of Fab 2. The timing of that decision and its implementation will depend upon several factors, including funding, cost and availability of equipment and market conditions.

•

Fab 3

In September 2008, we acquired Jazz Technologies in a stock for stock transaction. Jazz Semiconductor, a wholly owned subsidiary of Jazz Technologies, is an independent semiconductor foundry, which we refer to as Fab 3, located in Newport Beach, California, focused on specialty process technologies for the manufacture of analog and mixed-signal semiconductor devices (Jazz Technologies and Jazz Semiconductor are collectively referred to herein as “Jazz”). Jazz’s specialty process technologies include advanced analog, radio frequency, high voltage, bipolar and silicon germanium bipolar complementary metal oxide (“SiGe”) semiconductor processes, for the manufacture of analog and mixed-signal semiconductors. Jazz’s customers use the analog and mixed-signal semiconductor devices in products they design that are used in cellular phones, wireless local area networking devices, digital TVs, set-top boxes, gaming devices, switches, routers and broadband modems.

•  
Fab 4

In June 2011, we acquired a fabrication facility in Nishiwaki City, Hyogo, Japan from Micron Technology Inc. ("Micron"). The assets and related business that we acquired from Micron are held and conducted through a wholly owned Japanese subsidiary, TowerJazz Japan Ltd. ("TJP") and we refer to them as Fab 4. The facility can support geometries down to 95nm and can also be used to manufacture other products using TowerJazz process technologies.

Our 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.

Further details about us and our operations are provided in our Annual Report on Form 20-F, and the other documents incorporated by reference into this prospectus. See "Where You Can Find More Information; Incorporation of Information by Reference". You are encouraged to thoroughly review the documents incorporated by reference into this prospectus as they contain important information concerning our business and our prospects.

Additional information about us and our operations may be found at our web site: [www.towerjazz.com](http://www.towerjazz.com). Information on our website is not incorporated by reference in this prospectus.

## RISK FACTORS

An investment in our securities is speculative and involves a high degree of risk. Therefore, you should not invest in our securities unless you are able to bear a loss of your entire investment. You should carefully consider the risk factors described in our periodic reports filed with the SEC, including those specified in Item 3 to our Annual Report on Form 20-F for the year ended December 31, 2010, filed with the SEC on May 17, 2011 in the section captioned “Risk Factors”, which is incorporated by reference in this prospectus, as well as the risk factors set forth below. You should carefully consider these risks together with the other information in this prospectus before deciding to invest in our securities. If any of these risks actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our ordinary shares could decline, and you may lose all or part of your investment.

If we cannot meet NASDAQ’s continued listing requirements, NASDAQ may delist our ordinary shares, which would have an adverse impact on the liquidity and market price of our ordinary shares and limit our ability to find available financing sources to fund our on-going operations.

On September 19, 2011, NASDAQ Listing Qualifications sent a letter to us indicating that we do not meet the requirement of maintaining a minimum bid price of \$1.00 per share for our listed securities as set forth in Listing Rule 5450(a)(1). We can regain compliance with this requirement if at any time during the 180-day period ending on March 19, 2012, the closing bid price for our ordinary shares is at least \$1.00 per share for a minimum of ten consecutive business days. During the 180-day compliance period, our ordinary shares will continue to be listed and traded on the NASDAQ Global Market under the symbol TSEM, and will continue to be listed and traded on the Tel Aviv Stock Exchange under the same symbol. If the closing bid price of our ordinary shares is at least \$1.00 per share or more for ten consecutive business days during the 180-day compliance period, we will receive written notification that we have achieved compliance with the minimum bid price requirement and our ordinary shares will continue to be listed and traded on the NASDAQ Global Market. In the event we do not regain compliance during the 180-day period ending on March 19, 2012, we will have an additional 180-day period ending September 15, 2012 to regain compliance by transferring our listing to the NASDAQ Capital Market. If our ordinary shares are transferred to be listed and traded on the NASDAQ Capital Market, no change will occur in terms of the continued trading of our ordinary shares and their continued quotation by NASDAQ, and from the perspective of the financial markets, the trading is transparent whether in The NASDAQ Capital Market or The NASDAQ Global Market. This NASDAQ letter does not affect the Company's listing on the Tel-Aviv Stock Exchange, where the Company's ordinary shares will continue to be listed and traded under the symbol TSEM with no change. There is no assurance that the closing bid price for our ordinary shares will be at least at \$1.00 for more than ten consecutive business days prior to March 19, 2012, which means that we may be in a position in which we may need to choose between: (i) delisting from the NASDAQ Global Market; (ii) transferring from the NASDAQ Global Market to the NASDAQ Capital Market, which will provide us with an additional 180 day period to regain compliance with the \$1.00 minimum bid price; or (iii) taking other actions to avoid the delisting of our ordinary shares, such as implementing a reverse stock split. A delisting of our ordinary shares from NASDAQ could reduce the liquidity of our ordinary shares, which may negatively affect the market price, the number of investors willing to hold or acquire our ordinary shares, and our available sources to finance our ongoing operations.

If we do not succeed in achieving the anticipated benefits of the Nishiwaki Fab acquisition, it may negatively affect our business and growth plans, and may cause a loss of current or potential customers whose business is dependent on the added capacity.

In June 2011, we completed the acquisition of Micron's Fab in Nishiwaki, Japan. The post-acquisition operations involve known and unknown risks that could adversely affect our future revenues and operating results. For example:

- The acquisition may expose us to unanticipated liabilities.
- We may fail to successfully integrate the Nishiwaki Fab in accordance with our business strategy.
- We may be unable to retain the skilled employees and experienced management that may be necessary to operate the business we acquired and, if we cannot retain such personnel, we may be unable to attract new skilled employees and experienced management to replace them.
- We may be unable to achieve the full benefits of the anticipated efficiencies from acquiring the Nishiwaki fab, which might negatively affect our future financial results. Achieving the anticipated short-term and long-term benefits of the acquisition depends in particular on achieving the initially-anticipated cost synergies, the optimal utilization of existing and newly acquired support resources and the combination and integration of our significant global activities. There can be no assurance that these objectives will be achieved successfully, which may adversely affect our operations, business and growth plans.

Our plans to ramp-up the Nishiwaki Fab require significant capital expenditures, the funds for which may not be available, thereby having an adverse effect on our operations and business.

To date, the Nishiwaki Fab has served as a fabrication facility for Micron's products. We plan to ramp-up the Nishiwaki Fab to allow transfers of our internal process technologies to this facility, as well as those of other customers, to manufacture a wide range of products. Such a ramp-up will require significant capital expenditures and transfer and qualification of technologies. In order for TJP to have sufficient funds for such a ramp-up, TJP will need to capture new customers and maintain a sufficient level of demand from Micron for its products that enables us to cover our expenses in Nishiwaki until the ramp-up of new customers' products. In the event that TJP is unable to obtain such funds from its business and operation, the Company's financial results may be adversely affected.

We have a material amount of debt which may have significant negative consequences, and there is no assurance that we will be able to obtain sufficient funding sources in a timely manner to allow us to fully or partially repay our short term and long term debt obligations and other liabilities.

We have a material amount of debt and other liabilities. As of September 30, 2011, we had (i) approximately \$146 million of outstanding bank debt under our amended facility agreement, of which approximately \$15 million was presented as short term and (ii) approximately \$223 million of debt in respect of outstanding convertible and non-convertible debentures, to be repaid between 2011 to 2016, of which approximately \$55 million is payable within one year. In addition, as of September 30, 2011, Jazz had (i) approximately \$16 million of outstanding bank debt under its bank loan agreement, of which approximately \$6 million was presented as short term debt, and (ii) approximately \$129 million of debt from outstanding notes to be repaid in 2011 and in 2015, of which approximately

\$35 million is payable within one year. Tower has not guaranteed any of Jazz's debt, including Jazz's debt under its bank loan and Jazz's debt to its note holders and Jazz has not guaranteed any of Tower's debt, including Tower's debt under its bank loan and debentures debt.

Our debt and liabilities could have significant negative consequences, including:

- requiring the use of a substantial portion of our cash flow from operating activities to service our indebtedness rather than investing our cash flows to fund our growth plans, working capital and capital expenditures;
  - increasing our vulnerability to 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;
- placing us at a competitive disadvantage with respect to less leveraged competitors and competitors that have better access to capital resources;
  - increasing our non-cash financing expenses due to increases in the fair value of our debt obligations, which may cause our potential gross and operating profits to result in a net loss or may increase our net loss or reduce our net profits (such non-cash appreciation in our obligations and non-cash financing expenses will either eventually be reversed or be converted into equity, or a combination thereto); and/or
- enforcement by the banks of their liens against Tower and Jazz's respective assets, as applicable (in the event of default).

During the past two years, we experienced business and financial improvement, as reflected by the improvement in our revenue and margins as compared to the period prior to mid-2009 which was also negatively affected by the global economic downturn that commenced in 2008. However, recent analyst reports indicate that the semiconductor industry is experiencing a reduced rate of growth and there are signs of weakening customer demand. Following recent difficult times in worldwide financial and other markets, market analysts are currently cautious regarding global economic conditions forecasted for the short and mid-term future, and there is no assurance that the global economic conditions will not negatively affect our business and financial position. There is no assurance that another downturn in the semiconductor industry and/or in the global economy will not occur. The effects of another downturn in the semiconductor industry and/or in the global economy may include global decreased demand, downward price pressure, excess inventory and unutilized capacity worldwide, which may negatively impact consumer and customer demand for our products and the end products of our customers, as well as commercial relationships with our customers, suppliers, and creditors, including our lenders and our ability to raise funds in the capital markets. A downturn in the semiconductor industry and/or in the global economy may adversely affect our plans to continue capacity growth, and our future financial results and position, including our ability to raise funds in the capital markets and to fulfill short term and long term debt obligations and other liabilities, comprised mainly of banks' loans and debentures.

In order to finance our debt and other liabilities and obligations, in addition to cash on hand and expected cash flow from our ongoing operations, we continue to explore measures to obtain funds from additional sources including debt re-financing, sales of new securities, opportunities for the sale and lease-back of a portion of Tower's real estate assets, sale of other assets, intellectual property licensing, submitting reports with the Israeli Investment Center which are yet to be reviewed and approved in order to receive the recently approved grants under our approval certificate, as well as debt and/or equity restructuring and additional alternatives to reduce our debt. However, there is no assurance that we will be able to obtain sufficient funding from the financing sources detailed above or other sources in a timely manner in order to allow us to fully or partially repay our short term and long term debt and other liabilities and obligations in a timely manner and fund our growth plans, working capital needs and capital expenditures.

#### SPECIAL NOTE ON 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 (the "Securities Act"). 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," and in our other SEC filings 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.

## CAPITALIZATION

The following table sets forth our long-term debt, debentures and capitalization as of September 30, 2011 on an actual basis. This table was prepared in accordance with US GAAP and the financial data is derived from our interim consolidated financial statements as of September 30, 2011.

(US dollars in thousands)

Short term bank debt and current maturities of debentures	\$ 121,298
Long-term loans from banks	100,134
Debentures	230,770
Long-term customers' advances	9,266
Employees related liabilities	101,014
Other long-term liabilities	50,278
Shareholders' equity:	
Ordinary Shares, NIS 1.00 par value per share; 1,100,000,000 authorized shares, 319,525,529 issued shares* and 318,225,529 outstanding shares	\$ 83,003
Additional paid-in capital	820,394
Capital notes	311,472
Cumulative stock based compensation	35,195
Accumulated other comprehensive loss	(2,166 )
Foreign currency translation adjustments	5,136
Accumulated deficit	(1,053,640)
Treasury stock, 1,300,000 shares	(9,072 )
Total shareholders' equity	190,322
Total capitalization	\$ 989,265

\*Includes 1,300,000 treasury shares

The information set forth on an actual basis in the foregoing table excludes the following securities as of October 31, 2011:

- (i) approximately 28.5 million ordinary shares issuable upon exercise of options granted to employees and directors at a weighted average exercise price of \$1.14;
- (ii) 27.3 million ordinary shares issuable upon exercise of options granted to our Chief Executive Officer at a weighted average exercise price of \$1.15;
- (iii) 11.5 million ordinary shares issuable upon exercise of options granted to our Chairman of the Board at an exercise price of \$0.29;
- (iv) 2.5 million ordinary shares issuable upon exercise of warrants issued to our banks with an exercise price of \$2.04 per share exercisable until December 2015;

- (v) 0.9 million ordinary shares issuable upon exercise of warrants issued to our banks in connection with our credit facility with an exercise price of \$6.17 per share exercisable until December 2015;
- (vi) 1.3 million ordinary shares issuable upon exercise of warrants issued to our banks in connection with our credit facility with an exercise price of \$0.79 per share exercisable until December 2015;
- (i) 21.6 million ordinary shares issuable upon conversion of our debentures convertible series E until January 2013, issued pursuant to our June 2007 public offering in Israel at conversion rate of approximately \$1.31;
- (ii) 9.4 million ordinary shares issuable upon conversion of our debentures convertible series B until January 2012, pursuant to the prospectus dated December 15, 2005 at conversion rate of \$1.10;
- (iii) 96.4 million ordinary shares issuable upon conversion of the equity equivalent convertible capital notes we issued to each of our two banks and 206.1 million shares issuable upon conversion of such notes issued to Israel Corp.;
- (iv) 28.5 million ordinary shares issuable upon conversion of our debentures convertible series C until December 2011, issued pursuant to our June 2006 public offering in Israel at conversion rate of approximately \$1.34;
- (v) 3.0 million ordinary shares issuable upon exercise of the warrants series I issued in our March 2007 private placement at an exercise price of \$0.74 exercisable until March 2012;
- (vi) 25.3 million ordinary shares issuable upon exercise of warrants series J with an exercise price of \$1.70 per share and exercisable until June 2015; and
- (vii) ordinary shares issuable upon conversion of approximately \$100 million of our 2010 Series F convertible debentures which first become convertible in September 2012. The conversion price for Series F convertible debentures shall be equal to 120% of the average trading price of our ordinary shares on the Tel-Aviv Stock Exchange during the 15 trading days before September 18, 2012, provided that in no event will the exercise price be more than NIS 6.5 or less than NIS 1.0. For additional information, see Note 12 to our 2010 consolidated annual financial statements contained in our Annual Report on Form 20-F for the year ended December 31, 2010.

#### USE OF PROCEEDS

All of the proceeds from the sale of the ordinary shares offered under this prospectus are for the account of the Selling Stockholder. Accordingly, we will not receive any proceeds from the sales of these securities.

We have agreed to bear all expenses relating to the registration of the securities registered pursuant to this prospectus.

## MARKET FOR OUR ORDINARY SHARES

Our ordinary shares are listed and traded on the NASDAQ Global Market and on the Tel Aviv Stock Exchange (TASE) 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 Global Market and Tel Aviv Stock Exchange:

Period	NASDAQ Global Market		Tel Aviv Stock Exchange	
	High (\$)	Low (\$)	High (NIS)	Low (NIS)
October 2011	0.87	0.60	3.18	2.29
September 2011	0.80	0.62	2.87	2.31
August 2011	1.09	0.71	3.81	2.57
July 2011	1.20	1.02	4.10	3.55
June 2011	1.26	1.02	4.18	3.49
May 2011	1.34	1.15	4.57	4.02
Fourth Quarter through November 22, 2011	0.87	0.60	3.18	2.29
Third Quarter 2011	1.20	0.62	4.10	2.31
Second Quarter 2011	1.45	1.02	5.07	3.49
First Quarter 2011	1.54	1.15	5.49	4.10
Fourth Quarter 2010	1.69	1.34	6.00	4.85
Third Quarter 2010	1.66	1.25	6.12	5.04
Second Quarter 2010	1.74	1.25	6.48	4.90
First Quarter 2010	1.87	0.99	7.02	3.71
Fourth Quarter 2009	1.18	0.89	4.51	3.35
Third Quarter 2009	1.49	0.33	5.13	1.36
Second Quarter 2009	0.39	0.19	1.49	0.84
First Quarter 2009	0.24	0.13	1.02	0.50
2008	1.45	0.09	5.50	0.36
2007	2.08	1.20	8.88	5.25
2006	2.18	1.22	9.14	5.11

On November 22, 2011, the last reported sale price of the ordinary shares was \$ 0.66 on the Nasdaq Global Market and NIS 2.43 on the Tel Aviv Stock Exchange.

## PLAN OF DISTRIBUTION

The Selling Shareholder and any of its pledgees, donees, transferees, assignees and successors-in-interest may, from time to time, subject to the lock-up agreement with the Company, sell any or all of their Company ordinary shares on any stock exchange, market or trading facility on which the shares are traded or quoted or in private transactions. These sales may be at fixed or negotiated prices. The Selling Shareholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits the purchaser;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
  - purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
  - an exchange distribution in accordance with the rules of the applicable exchange;
  - privately negotiated transactions;
- to cover short sales made after the date that this Registration Statement is declared effective by the Commission;
- broker-dealers may agree with the Selling Shareholder to sell a specified number of such shares at a stipulated price per share;
  - a combination of any such methods of sale; and
  - any other method permitted pursuant to applicable law.

The Selling Shareholder may also sell shares under Rule 144 under the Securities Act or pursuant to any other exemption from the registration requirements of Section 5 of the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Shareholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Shareholder (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The Selling Shareholder does not expect these commissions and discounts to exceed what is customary in the types of transactions involved.

The Selling Shareholder may from time to time pledge or grant a security interest in some or all of the Shares owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell ordinary shares from time to time under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 amending the list of Selling Shareholders to include the pledgee, transferee or other successors in interest as Selling Shareholders under this prospectus.

Upon the Company being notified in writing by a Selling Shareholder that any material arrangement has been entered into with a broker-dealer for the sale of ordinary shares through a block trade, special offering, exchange distribution or secondary distribution or a purchase by a broker or dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing (i) the name of each such Selling Shareholder and of the participating broker-dealer(s), (ii) the number of shares involved, (iii) the price at which such ordinary shares are to be offered, (iv) the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable, (v)

that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this prospectus, and (vi) other facts material to the transaction. In addition, upon the Company being notified in writing by a Selling Shareholder that a donee or pledgee intends to sell more than 500 ordinary shares, a supplement to this prospectus will be filed if then required in accordance with applicable securities law.

The Company has advised the Selling Shareholder that it may not use shares registered on this Registration Statement to cover short sales of ordinary shares made prior to the date on which this Registration Statement shall have been declared effective by the Commission. If a Selling Shareholder uses this prospectus for any sale of the ordinary shares, it will be subject to the prospectus delivery requirements of the Securities Act. The Selling Shareholder will be responsible to comply with the applicable provisions of the Securities Act and Securities Act of 1933, as amended (the "Exchange Act"), and the rules and regulations thereunder promulgated, including, without limitation, Regulation M, as applicable to such Selling Shareholder in connection with resales of their respective shares under this Registration Statement.

The Company is required to pay all fees and expenses incident to the registration of the shares, but the Company will not receive any proceeds from the sale of the ordinary shares. The Company has agreed to indemnify the Selling Shareholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

#### Expenses of the Offering

We have incurred, or expect to incur, the following estimated expenses in connection with this prospectus:

Securities and Exchange Commission Registration Fee	\$ 1,522.22
Accounting fees	10,000
Legal fees and expenses	15,000
Miscellaneous	2,000
Total	\$28,522.22

#### SELLING SHAREHOLDER

##### Beneficial Ownership and Other Information

The Selling Shareholder is Micron. In accordance with the terms of our Shareholder Rights and Restriction Agreement with Micron on June 3, 2011, we issued 19,678,322 of our ordinary shares to Micron. Under the agreement, the shares issued to Micron are subject to a lock-up arrangement that commenced in June 2011 and that provides for releases of 25% of the shares every six months thereafter.

The term "Selling Shareholder" includes (i) each person and entity that is identified in the table below (as such table may be amended from time to time by means of an amendment to the registration statement of which this prospectus forms a part) and (ii) any transferee, donee, pledgee or other successor of any person or entity named in the table that acquires any of the ordinary shares covered by this prospectus in a transaction exempt from the registration requirements of the Securities Act of 1933 and that is identified in a supplement or amendment to this prospectus.

Except as described herein under the section entitled "Pro Forma Financial Information", we have not had any material relationships with the Selling Shareholder in the past three years.

Nothing in this Registration Statement shall be construed as an admission that the Selling Shareholder is the beneficial owner of any of our securities, other than the securities held directly by such party, nor that the Selling Shareholder or other persons or entities constitute a "group", for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder.

The information in the table below is as of October 31, 2011 and is based solely upon information provided by the Selling Shareholder. Although the Selling Shareholder has not expressed a specific intention as to a number of shares to be sold, the following table assumes that the Selling Shareholder will sell all of the securities owned by it and covered by this prospectus. Except as set forth in the footnotes to the table, other than the ordinary shares covered by this prospectus and offered hereby, the Selling Shareholder does not beneficially own any of our ordinary shares or other securities or will beneficially own any such securities after completion of the offering. Our registration of the securities covered by this prospectus does not necessarily mean that the Selling Shareholder will sell any or all of the securities. Information included in the table is based upon information provided by the Selling Shareholder.

The Selling Shareholder has represented to us that it did not have an agreement or understanding, directly or indirectly, with any person to distribute the securities at the time it purchased the securities.

Names and Addresses	Securities Being Offered	Securities Beneficially Owned Prior to Offering / Percentage of Class (1)	Securities Beneficially Owned Upon Completion of Offering / Percentage of Class
Micron Technology Inc. (2) 8000 S Federal Way PO Box 6 Boise, ID 83716-9632	19,678,322 shares	19,678,322 shares / 6.18%	0 shares/ 0.0%

1. Beneficial ownership is calculated as of October 31, 2011 in accordance with General Instruction F. to Form 20-F and is based on 318,238,029 ordinary shares outstanding (including the 19,678,322 shares to be offered to the Selling Shareholder).

2. This Selling Shareholder is a public company registered under the Exchange Act.

## DESCRIPTION OF SHARE CAPITAL

### Ordinary Shares

Our authorized share capital consists of 1,100,000,000 ordinary shares, par value NIS 1.00 per share. Under our articles of association, the ordinary shares do not have preemptive rights. We may from time to time, by approval of a majority of our shareholders, increase our authorized share capital. All ordinary shares are registered shares, rather than bearer shares.

The ownership or voting rights of our ordinary shares by non-residents of Israel is not restricted in any way by our memorandum of association or articles of association. The State of Israel does not restrict in any way the ownership or voting rights of ordinary shares of Israeli entities by non-residents of Israel, except with respect to subjects of countries that are in a state of war with Israel. Our ordinary shares do not have cumulative voting rights for the election of directors. The affirmative vote of the shareholders present in person or by proxy that represent more than 50% of the voting power present in person or by proxy have the power to elect all nominees up for election to our board of directors.

In the event of our liquidation, after satisfaction of liabilities to creditors, our assets will be distributed to the holders of our ordinary shares in proportion to the nominal value of their respective holdings. This liquidation right may be affected by the grant of a preferential dividend or distribution right to the holder of a class of shares with preferential rights that may be authorized in the future. Dividends may be paid only out of profits, as defined in the Israeli Companies Law. Our Board of Directors is authorized to declare dividends, although our bank covenants currently in effect prohibit the payment of dividends on our ordinary shares, unless such payments are approved by our banks.

Holders of ordinary shares have one vote for each ordinary share held on all matters submitted to a vote of shareholders. Subject to the provisions set forth in Section 46B of the Israeli Securities Law, these voting rights may be affected by the grant of any special voting rights to the holders of a class of shares with preferential rights that may be authorized in the future. Our major shareholders do not have different voting rights from each other or other shareholders.

Resolutions of shareholders (e.g. resolutions amending our articles of association, electing or removing directors, appointing an independent registered public accounting firm, authorizing changes in capitalization or the rights attached to our shares or approving a wind-up or merger) require the affirmative vote (at a meeting convened upon advance notice of no less than twenty one days) of shareholders present in person or by proxy and holding shares conferring, in the aggregate, at least a majority of the votes actually cast on such resolutions.

The quorum required for a meeting of shareholders is at least two shareholders present, in person or by proxy, within half an hour of the time fixed for the meeting's commencement that together hold shares conferring in the aggregate more than 33% of the total voting power of our shares. A meeting adjourned for lack of a quorum is adjourned to the same day in the following week at the same time and place. At the reconvened meeting, in the event a quorum is not present within half an hour of the time fixed for the meetings commencement, the persons present shall constitute a quorum.

Our registration number at the Israeli Registrar of Companies is 52-004199-7.

The objective stated in our articles of association is to engage in any lawful activity.

Modification or abrogation of the rights of any existing class of shares requires either the written consent of all of the holders of the issued shares of such class or the adoption of a resolution by an ordinary majority of a general meeting of holders of such class. The quorum required for a class meeting is at least two shareholders present, in person or by proxy, within half an hour of the time fixed for the meetings commencement that together hold shares conferring in the aggregate at least 51% of the total voting power of the issued shares of such class. If no quorum is present, the meeting shall be adjourned to another time and at the adjourned meeting a quorum shall be constituted in the presence of any number of participants, regardless of the number of shares held by them.

As of October 31, 2011, 318,238,029 of our ordinary shares were outstanding. The above number of outstanding ordinary shares does not include 1.3 million treasury shares held by us through a trustee.

The transfer agent and registrar for our ordinary shares is American Stock Transfer & Trust Company, 59 Maiden Lane, New York, New York 10007.

#### FOREIGN EXCHANGE CONTROLS AND OTHER LIMITATIONS

Israeli law limits foreign currency transactions and transactions between Israeli and non-Israeli residents. The Controller of Foreign Exchange at the Bank of Israel, through "general" and "special" permits, may regulate or waive these limitations. In May 1998, the Bank of Israel liberalized its foreign currency regulations by issuing a new "general permit" providing that foreign currency transactions are generally permitted, although some restrictions still apply. Under the new general permit, all foreign currency transactions must be reported to the Bank of Israel, and a foreign resident must report to his financial mediator about any contract for which Israeli currency is being deposited in, or withdrawn from, his account.

The State of Israel generally does not restrict the ownership or voting of ordinary shares of Israeli entities by non-residents of Israel, except with respect to subjects of countries that are in a state of war with Israel.

#### TAXATION

The below discussion does not purport to be an official interpretation of the tax law provisions mentioned therein or to be a comprehensive description of all tax law provisions which might apply to our securities or to reflect the views of the relevant tax authorities, and it is not meant to replace professional advice in these matters. The below discussion is based on current, applicable tax law, which may be changed by future legislation or reforms. In this respect, it should be noted that the Trachtenberg Committee recommendations which were adopted recently by the Israeli government are expected to increase the Israeli tax burden for corporations, shareholders and others (e.g., increase in corporate income tax rate and in dividend income tax rates for substantial shareholder and non substantial holder, etc. ). These recommendations have not been enacted yet and therefore the discussion below addresses the current applicable law.

Non-residents should obtain professional tax advice with respect to the tax consequences under the laws of their countries of residence of holding or selling our securities.

#### A. Israeli Capital Gains Tax

Until the end of the year 2002 and provided we maintained our status as an "Industrial Corporation", capital gains from the sale of our securities were generally exempt from Israeli Capital Gains Tax. This exemption did not apply to a shareholder whose taxable income was determined pursuant to the Israeli Income Tax Law (Inflationary Adjustments) 1985, or to a person whose gains from selling or otherwise disposing of our securities were deemed to be business income.

On January 1, 2006 an amendment to the Israeli tax regime became effective (the "2006 Tax Reform"). The 2006 Tax Reform significantly changed the tax rates applicable to income derived from shares.

According to the 2006 Tax Reform, an individual is subject to a 20% tax rate on real capital gains derived from the sale of shares, as long as the individual is not a "substantial shareholder" (generally a shareholder with 10% or more of the right to profits, right to nominate a director or voting rights) in the company issuing the shares (this may be changed to a rate of 25% if the Trachtenberg Committee recommendations are implemented).

A substantial shareholder will be subject to tax at a rate of 25% in respect of real capital gains derived from the sale of shares issued by the company in which he or she is a substantial shareholder (may be changed to a rate of 30% if the Trachtenberg Committee recommendations are implemented). The determination of whether the individual is a substantial shareholder will be made on the date that the securities are sold. In addition, the individual will be deemed to be a substantial shareholder if at any time during the 12 months preceding this date he or she had been a substantial shareholder.

Corporations will be generally subject to corporate tax rates in respect of total income, including capital gains, with the corporate tax rate reduced gradually from 25% in 2010; the corporate tax rate is scheduled to be reduced each year thereafter until it reaches 18% in the year 2016. To the extent the Trachtenberg Committee recommendations are implemented, the reduction of the corporate tax rate is expected to stop at 25%.

Non-Israeli residents are exempt from Israeli capital gains tax on any gains derived from the sale of shares in an Israeli corporation publicly traded on the TASE and/or on a foreign stock exchange, provided such gains do not derive from a permanent establishment of such shareholders in Israel and that such shareholders did not acquire their shares prior to the issuer's initial public offering. However, non-Israeli corporations will not be entitled to such exemption if an Israeli resident (i) has a controlling interest of 25% or more in such non-Israeli corporation, or (ii) is the beneficiary of or is entitled to 25% or more of the revenues or profits of such non-Israeli corporation, whether directly or indirectly.

In some instances where our shareholders may be liable to Israeli tax on the sale of their ordinary shares, the payment of the consideration may be subject to the withholding of Israeli tax at the source.

Pursuant to the treaty between the Governments of the United States and Israel with respect to taxes on income, or the U.S.-Israel tax treaty, the sale, exchange or disposition of our ordinary shares by a person who qualifies as a resident of the United States under the treaty and who is entitled to claim the benefits afforded to him by the treaty, will generally not be subject to Israeli capital gains tax. This exemption shall not apply to a person who held, directly or indirectly, shares representing 10% or more of the voting power in our company during any part of the 12-month period preceding the sale, exchange or disposition, subject to certain conditions. A sale, exchange or disposition of our shares by a U.S. resident qualified under the treaty, who held, directly or indirectly, shares representing 10% or more of the voting power in our company at any time during the preceding 12-month period would be subject to Israeli tax, to the extent applicable; however, under the treaty, this U.S. resident would be permitted, under certain conditions, to claim a credit for these taxes against the U.S. income tax with respect to the sale, exchange or disposition, subject to

the limitations in U.S. laws applicable to foreign tax credits.

15

---

## B. Israeli Tax on Dividend Income

On distributions of dividends other than bonus shares, or stock dividends, to Israeli individuals and foreign resident individuals and foreign resident corporations we would be required to withhold income tax at the rate of 20% (this rate may also be changed by legislation following the Trachtenberg Committee). If the income out of which the dividend is being paid is attributable to an Approved Enterprise under the Law for the Encouragement of Capital Investments, 1959, the rate is generally not more than 15%. A different rate may be provided for in a treaty between Israel and the shareholder's country of residence.

Under the US-Israel Tax Treaty, Israeli withholding tax on dividends paid to a US treaty resident may not, in general, exceed 25%, or 15% in the case of dividends paid out of the profits of an Approved Enterprise, subject to certain conditions. Where the recipient is a US corporation owning 10% or more of the voting stock of the paying corporation and the dividend is not paid from the profits of an Approved Enterprise, the Israeli tax withheld may not exceed 12.5%, subject to certain conditions.

Recently, new legislation amending the Investment Law was adopted. Under this new legislation, a uniform corporate tax rate will apply to all qualifying income of certain industrial Companies (requirement of a minimum export of 25% of the company's total turnover), as opposed to the current law's incentives, which are limited to income from Approved Enterprises during their benefits period. Under the new law, the uniform tax rate will be 10% in areas in Israel designated as Development Zone A and 15% elsewhere in Israel during 2011-2012, 7% and 12.5%, respectively, in 2013-2014, and 6% and 12%, respectively thereafter. The profits of these Industrial Companies will be freely distributable as dividends, subject to a 15% withholding tax (or lower, under an applicable tax treaty).

## D. PFIC Rules

A non-U.S. corporation will be classified as a passive foreign investment company, or a PFIC, for U.S. federal income tax purposes if either (i) 75% or more of its gross income for the taxable year is passive income, or (ii) on a quarterly average for the taxable year by value (or, if it is not a publicly traded corporation and so elects, by adjusted basis), 50% or more of its gross assets produce or are held for the production of passive income.

We do not believe that we satisfied either of the tests for PFIC status in 2010 or in any prior year. However, there can be no assurance that we will not be a PFIC in 2011 or a later year. If, for example, the "passive income" earned by us exceeds 75% or more of our "gross income", we will be a PFIC under the "income test". Passive income for PFIC purposes includes, among other things, gross interest, dividends, royalties, rent and annuities. 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.

If we were to be a PFIC at any time during a U.S. holder's holding period, such U.S. holder would be required to either: (i) pay an interest charge together with tax calculated at maximum ordinary income tax rates on "excess distributions," which is defined to include gain on a sale or other disposition of ordinary shares, or (ii) so long as the ordinary shares are "regularly traded" on a qualifying exchange, elect to recognize as ordinary income each year the excess in the fair market value, if any, of its ordinary shares at the end of the taxable year over such holder's adjusted basis in such ordinary shares and, to the extent of prior inclusions of ordinary income, recognize ordinary loss for the decrease in value of such ordinary shares (the "mark to market" election). For this purpose, the Nasdaq Global Market is a qualifying exchange. U.S. holders are strongly urged to consult their own tax advisers regarding the possible application and consequences of the PFIC rules.

#### DIVIDEND POLICY

Since 1998, we have not declared or paid cash dividends on any of our shares and we have no current intention of paying any cash dividends in the future. The facility agreement that we entered into with our banks, as amended, prohibits the payment of dividends.

The 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 concern that the dividend distribution will prevent us from meeting our existing and future expected obligations as they come due.

#### LEGAL MATTERS

The validity of the securities offered in this prospectus will be passed upon for us by Yigal Arnon & Co., our Israeli counsel. In addition, certain other matters in connection with this offering with respect to United States law will be passed upon for us by Eilenberg & Krause LLP, our U.S. counsel.

#### EXPERTS

The consolidated financial statements of the Company, incorporated in this prospectus by reference from our Annual Report on Form 20-F have been audited by Brightman Almagor Zohar & Co., a member firm of Deloitte Touche Tohmatsu, an independent registered public accounting firm, as stated in their reports, which are incorporated herein by reference. Such financial statements and financial statement schedules have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

The financial statements of Micron Japan Ltd., a subsidiary of Micron ("MJP"), as of September 2, 2010 and September 3, 2009 and for the fiscal years ended September 2, 2010, September 3, 2009 and August 28, 2008 incorporated in this Prospectus by reference have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's related party transactions as described in the Basis of Presentation Note to the financial statements) of PricewaterhouseCoopers Aarata, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## ENFORCEABILITY OF CIVIL LIABILITIES AND AGENT FOR SERVICE OF PROCESS IN THE UNITED STATES

We are incorporated in Israel, most of our executive officers and directors and the Israeli experts named herein are nonresidents of the United States, and a substantial portion of our assets and of such persons' are located outside the United States. For further information regarding enforceability of civil liabilities against us and other persons, see the discussions in Item 3 of our Annual Report on Form 20-F for the year ended December 31, 2010 under the caption "Risk Factors —Risks Related to Our Operations in Israel — 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."

## WHERE YOU CAN FIND MORE INFORMATION; INCORPORATION OF INFORMATION BY REFERENCE

We have filed a registration statement on Form F-3 with the Securities and Exchange Commission in connection with this offering. In addition, we file reports with, and furnish information to, the Securities and Exchange Commission. You may read and copy the registration statement and any other documents we have filed at the Securities and Exchange Commission, including any exhibits and schedules, at the Securities and Exchange Commission's public reference room at 100 F Street N.E., Washington, D.C. 20549. You may call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on this public reference room. As a foreign private issuer, all documents which were filed after November 4, 2002 on the Securities and Exchange Commission's EDGAR system are available for retrieval on the Securities and Exchange Commission's website at [www.sec.gov](http://www.sec.gov). These Securities and Exchange Commission filings are also available to the public on the Israel Securities Authority's Magna website at [www.magna.isa.gov.il](http://www.magna.isa.gov.il) and from commercial document retrieval services. We also generally make available on our own web site ([www.towersemi.com](http://www.towersemi.com)) our quarterly and year-end financial statements as well as other information.

This prospectus is part of the registration statement and does not contain all of the information included in the registration statement. Whenever a reference is made in this prospectus to any of our contracts or other documents, the reference may not be complete and, for a copy of the contract or document, you should refer to the exhibits that are a part of the registration statement.

The Securities and Exchange Commission allows us to "incorporate by reference" into this prospectus the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus and information that we file later with the SEC that is incorporated by reference herein automatically updates and supersedes any information in this prospectus. We incorporate by reference the documents listed below and amendments to them. These documents and their amendments were previously filed with the Securities and Exchange Commission.

- Report on Form 6-K furnished to the SEC on November 23, 2011;
- Report on Form 6-K furnished to the SEC on November 15, 2011, solely with respect to the consolidated balance sheets and consolidated statements of operations annexed as part of Exhibit 99.1 thereto;

- Report on Form 6-K furnished to the SEC on September 23, 2011;
- Report on Form 6-K furnished to the SEC on August 18, 2011;
- Report on Form 6-K furnished to the SEC on August 8, 2011, with respect to the Company's interim financial statements and Management's Discussion and Analysis of Financial Condition and Results of Operations;
- Report on Form 6-K furnished to the SEC on June 6, 2011;
- Annual report on Form 20-F for the year ended December 31, 2010, filed on May 17, 2011, to the extent the information in that report has not been updated or superseded by this prospectus;
- any report on Form 6-K, or parts thereof, meeting the requirements of Form F-3 filed after the date of the initial registration statement and prior to its effectiveness, which states that it, or any part thereof, is being incorporated by reference herein.
- The description of the Company's Ordinary Shares which is contained in its Registration Statement on Form 8-A declared effective on October 25, 1994.

This prospectus shall also be deemed to incorporate by reference all subsequent annual reports filed on Form 20-F or Form 10-K, and all subsequent filings on Forms 10-Q and 8-K filed by the registrant pursuant to the Exchange Act, prior to the termination of the offering made by this prospectus. We may incorporate by reference into this prospectus, any Form 6-K meeting the requirements of Form F-3 which is submitted to the Securities and Exchange Commission after the date of the filing of the registration statement being filed in connection with this offering and before the date of termination of this offering. Any such Form 6-K which we intend to so incorporate shall state in such form that it is being incorporated by reference into this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, a copy of these filings, at no cost, upon written or oral request to us at: Ramat Gavriel Industrial Park, Post Office Box 619, Migdal Haemek, 23105 Israel, Attn: Corporate Secretary, telephone number: 972-4-650-6109. Copies of these filings may also be accessed at our website, [www.towerjazz.com](http://www.towerjazz.com). Click on "Investor Relations" and then "Filings."

A copy of this prospectus, our memorandum of association and our articles of association, are available for inspection at our offices at Shaul Amor Avenue, Ramat Gavriel Industrial Park, Migdal Haemek, Israel and on the Israel Securities Authority's Magna website, [www.magna.isa.gov.il](http://www.magna.isa.gov.il).

As a foreign private issuer, we are exempt from the rules under Section 14 of the Exchange Act prescribing the furnishing and content of proxy statements and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions in Section 16 of the Exchange Act. In addition, we are not required to publish financial statements as promptly as U.S. companies.

19,678,322 Ordinary Shares

---

PROSPECTUS

---

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone to provide you with different information. We are not making any offer to sell or buy any of the securities in any state where the offer or sale is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date that appears below.

\_\_\_\_\_, 2011

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 8. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Israeli Companies Law-1999, or the Companies Law, and the Israeli Securities Law – 1968, or the Securities Law, provides that a company may include in its articles of association provisions allowing it to:

1. partially or fully, exempt in advance, an office holder of the company from his/her responsibility for damages caused by the breach of his/her duty of care to the company, except for damages caused to the Company due to any breach of such office holder's duty of care towards the company in a “distribution” (as defined in the Companies Law).
2. enter into a contract to insure the liability of an office holder of the company by reason of acts or omissions committed in his/her capacity as an office holder of the company with respect to the following:
  - (a) the breach of his/her duty of care to the company or any other person;
  - (b) the breach of his/her fiduciary duty to the company to the extent he/she acted in good faith and had a reasonable basis to believe that the act or omission would not prejudice the interests of the company;
  - (c) monetary liabilities or obligations which may be imposed upon him/her in favor of other persons; and
  - (d) reasonable litigation expenses, including attorneys fees, incurred by the officer as a result of an ongoing administrative enforcement proceeding instituted against him in accordance with the Securities Law; and
  - (e) a payment imposed on the office holder in favor of an injured party as set forth in the Securities Law.
3. indemnify an office holder of the company for:
  - (a) monetary liabilities or obligations imposed upon, or actually incurred by, such officer holder in favor of other persons pursuant to a court judgment, including a compromise judgment or an arbitrator’s decision approved by a court, by reason of acts or omissions of such office holder in his or her capacity as an office holder of the company;
  - (b) reasonable litigation expenses, including attorney’s fees, actually incurred by such office holder or imposed upon him or her by a court, in an action, suit or proceeding brought against him or her by or on behalf of us or by other persons, or in connection with a criminal action from which he or she was acquitted, or in connection with a criminal action which does not require criminal intent in which he/she was convicted, in each case by reason of acts or omissions of such office holder in his or her capacity as an office holder; and

- (c) reasonable litigation expenses, including attorneys' fees, actually incurred by such office holder due to an investigation or a proceeding instituted against such office holder by an authority competent to administrate such an investigation or proceeding, and that was finalized without the filing of an indictment against such office holder and without any financial obligation imposed on such office holder in lieu of criminal proceedings, or that was finalized without the filing of an indictment against such office holder but with financial obligation imposed on such office holder in lieu of criminal proceedings of a crime which does not require proof of criminal intent, in each case by reason of acts of such office holder in his or her capacity as an office holder of the company;
- (d) expenses, including reasonable litigation expenses and attorneys' fees, actually incurred by such office holder as a result of a proceeding instituted against such office holder in relation to infringements that may impose financial or administrative sanctions under the Securities Law; and
- (e) payments made by the office holder to an injured party ordered by the Administrative Enforcement Committee pursuant to an infringement under the Securities Law.

The Companies Law provides that a company's articles of association may provide for indemnification of an office holder post-factum and may also provide that a company may undertake to indemnify an office holder in advance, as described in:

- i. sub-section 3(a) above, provided such undertaking is limited to and actually sets forth the occurrences, which, in the opinion of the company's board of directors based on the current activity of the company, are, at the time such undertaking is provided, foreseeable, and to an amount and degree that the board of directors has determined is reasonable for such indemnification under the circumstances; and
- ii. sub-sections 3(b) and 3(c) above.

The Securities Law provides that a company's articles of association may provide that a company may undertake to indemnify an office holder in advance, as described in sub-sections 3(d) and 3(e) above:

The Companies Law and Securities Law provide that a company may not indemnify or exempt the liabilities of an office holder or enter into an insurance contract which would provide coverage for the liability of an office holder with respect to the following:

1. a breach of his/her fiduciary duty, except to the extent described in sub-section 2(b) above;

2. a breach of his/her duty of care, if such breach was done intentionally, recklessly or with disregard of the circumstances of the breach or its consequences, except if such breach is done only with negligence;
3. an act or omission done with the intent to unlawfully realize personal gain;
4. a fine or monetary settlement imposed upon him/her; or
5. An administrative proceeding instituted against the officer holder under the Securities Law, except as described in sub-sections 3(d) and 3(e) above.

Under the Companies Law, the term "office holder" may include a director, managing director, general manager, chief executive officer, executive vice president, vice president, other managers directly subordinate to the managing director and any other person fulfilling or assuming any such position or responsibility without regard to such person's title.

The grant of an exemption, an undertaking to indemnify or indemnification of, and procurement of insurance coverage for, an office holder of a company requires, pursuant to the Companies Law, the approval of our audit committee and board of directors, and, in certain circumstances, including if the office holder is a director, the approval of our shareholders.

We have entered into an insurance contract for directors and officers and have procured indemnification insurance for our office holders to the extent permitted by our articles of association. We have never had the occasion to indemnify any of our office holders.

ITEM 9. EXHIBITS

Exhibit Number	Description of Document
3.1	Articles of Association of the Registrant, approved by shareholders on November 14, 2000, as amended (incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form F-1, File No. 333-126909, "Form F-1 No. 333-126909").
3.2	Amendment to Articles of Association of the Registrant (incorporated by reference to exhibit 4.2 to the Registration Statement on Form S-8 No. 333-117565 ("Form S-8 No. 333-117565").
3.3	Amendment to the Articles of Association of the Registrant (approved by shareholders on September 28, 2006) (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-8, File No. 333-138837 (the "2006 Form S-8").
3.4	Amendment to Articles of Association of Registrant (approved by shareholders on September 24, 2008) (incorporated by reference to Exhibit 3.4 of the Registrant's Registration Statement on Form S-8, File No. 333-153710 (the "2008 Form S-8").
5.1	Opinion of Yigal Arnon & Co.
10.1	Master Agreement by and among Micron Technology, Inc., Micron Japan, Ltd. and Tower Semiconductor Ltd. dated May 25, 2011
10.2	Credit Support and Subordination Agreement, by and among Micron Technology, Inc., Micron Japan, Ltd., Tower Semiconductor Ltd., TowerJazz Japan, Ltd. (whose address is 302-2 Aza Oikenoue Hirano-cho Nishiwaki-shi Hyogo, Japan), and TowerJazz Japan, Ltd. (whose address is c/o DLA Piper Tokyo Partnership, Meiji Seimei Kan 7f, 1-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan) dated June 3, 2011.
10.3	Shareholder Rights and Restrictions Agreement between Micron Technology, Inc. and Tower Semiconductor Ltd. dated June 3, 2011.
23.1	Consent of Yigal Arnon & Co. (contained in their opinion constituting Exhibit 5.1)
23.2	Consent of Brightman Almagor Zohar & Co.
23.3	Consent of PricewaterhouseCoopers Aarata
24.1	Power of Attorney (set forth on signature page)

ITEM 10. UNDERTAKINGS

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement;

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or any decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) To file a post-effective amendment to the registration statement to include any financial statements required by Item 8.A. of Form 20-F at the start of any delayed offering or throughout a continuous offering. Financial statements and information otherwise required by Section 10(a)(3) of the Securities Act of 1933 need not be furnished, provided, that the Registrant includes in the prospectus, by means of a post-effective amendment, financial statements required pursuant to this paragraph (a)(4) and other information necessary to ensure that all other information in the prospectus is at least as current as the date of those financial statements. Notwithstanding the foregoing, with respect to registration statements on Form F-3, a post-effective amendment need not be filed to include financial statements and information required by Section 10(a)(3) of the Securities Act of 1933 or Rule 3-19 of Regulation S-X if such financial statements and information are contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this Form F-3.

(5) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the Registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(d) The undersigned Registrant hereby undertakes that:

(i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form F-3 and has duly caused this Registration Statement on Form F-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Migdal Haemek, Israel, on November 23, 2011.

TOWER SEMICONDUCTOR LTD.

By: /s/ Russell C. Ellwanger  
 Russell C. Ellwanger  
 Director and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, each director and officer whose signature appears below constitutes and appoints, Russell C. Ellwanger, Oren Shirazi or any of them, his true and lawful attorney-in-fact and agent, with full power of substitution and re-substitution, to sign in any and all capacities any and all amendments or post-effective amendments to this registration statement on Form F-3 and to file the same with all exhibits thereto and other documents in connection therewith with the Securities Exchange Commission, granting such attorneys-in-fact and agents, and each of them, full power and authority to do all such other acts and execute all such other documents as they, or any of them, may deem necessary or desirable in connection with the foregoing, as fully as the undersigned might or could do in person, hereby ratifying and confirming all that such attorneys-in-fact and agents, or any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Amir Elstein Amir Elstein	Chairman of the Board	November 23, 2011
/s/ Russell C. Ellwanger Russell C. Ellwanger	Chief Executive Officer (Principal Executive Officer)	November 23, 2011
/s/ Oren Shirazi Oren Shirazi	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	November 23, 2011
/s/ Ilan Flato Ilan Flato	Director	November 23, 2011

<hr/> Nir Gilad	Director	
/s/ Dana Gross Dana Gross	Director	November 23, 2011
/s/ Rami Guzman Rami Guzman	Director	November 23, 2011
/s/ Kalman Kaufman Kalman Kaufman	Director	November 23, 2011
/s/ Alex Kornhauser Alex Kornhauser	Director	November 23, 2011
/s/ Yoav Doppelt Yoav Doppelt	Director	November 23, 2011

AUTHORIZED  
REPRESENTATIVE  
IN THE UNITED STATES  
Tower Semiconductor USA,  
Inc. November 23, 2011

By: /s/ Russell C. Ellwanger  
Russell C. Ellwanger  
Chief Executive Officer

Exhibit Number	Description of Document
5.1	Opinion of Yigal Arnon & Co.
10.1	Master Agreement by and among Micron Technology, Inc., Micron Japan, Ltd. and Tower Semiconductor Ltd. dated May 25, 2011
10.2	Credit Support and Subordination Agreement, by and among Micron Technology, Inc., Micron Japan, Ltd., Tower Semiconductor Ltd., Towerjazz Japan, Ltd. and Towerjazz Japan, Ltd. dated June 3, 2011
10.3	Shareholder Rights and Restrictions Agreement between Micron Technology, Inc. and Tower Semiconductor Ltd. dated June 3, 2011
23.1	Consent of Yigal Arnon & Co. (contained in their opinion constituting Exhibit 5.1)
23.2	Consent of Brightman Almagor Zohar & Co.
23.3	Consent of PricewaterhouseCoopers Aarata
24.1	Power of Attorney (set forth on signature page)

II - 10

---

---