

TOWER SEMICONDUCTOR LTD.
NOTICE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS
To Be Held On October 24, 2010

Notice is hereby given that the Annual General Meeting (the "Meeting") of the shareholders of Tower Semiconductor Ltd. ("Tower" or the "Company"), an Israeli company, will be held at the offices of the Company, Shaul Amor Street, Ramat Gavriel Industrial Park, Migdal Haemek 23105, Israel, on Sunday, October 24, 2010, at 11:00 a.m. (Israel time) for the following purposes:

1. To elect seven members to the Board of Directors of the Company for the coming year.
2. To appoint Mr. Amir Elstein as the Chairman of the Board of Directors.
3. To approve the appointment of Brightman Almagor & Co. (a member of Deloitte Touche Tohmatsu International) as the independent public accountant of the Company for the year ending December 31, 2010 and for the period commencing January 1, 2011 and until the next annual shareholders' meeting, and to further authorize the Audit Committee of the Board of Directors to determine the remuneration of such auditors.
4. To approve the terms of compensation of our chief executive officer and director, Mr. Russell Ellwanger.
5. To receive the board and management's report on the business of the Company for the year ended December 31, 2009, and to transact such other business as may properly come before the Meeting

Shareholders of record at the close of business on September 20, 2010, are entitled to notice of, and to vote at the Meeting. All shareholders are cordially invited to attend the Meeting in person.

Shareholders who do not expect to attend the Meeting in person are requested to mark, date, sign and mail the enclosed proxy as promptly as possible in the enclosed stamped envelope. Beneficial owners who hold their shares through members of the Tel Aviv Stock Exchange ("TASE") may either vote their shares in person at the Meeting by presenting a certificate signed by a member of the TASE which complies with the Israel Companies Regulations (Proof of Ownership for Voting in General Meetings)-2000 as proof of ownership of the shares, or send such certificate along with a duly executed proxy to the Company at Shaul Amor Street, Ramat Gavriel Industrial Park, Post Office Box 619, Migdal Haemek 23105, Israel, Attention: Associate General Counsel.

By Order of the Board of Directors,

Amir Elstein
Chairman of the Board
September 15, 2010

PROXY STATEMENT

TOWER SEMICONDUCTOR LTD.
Shaul Amor Street, Ramat Gavriel Industrial Park
P.O. Box 619
Migdal Haemek 23105, Israel

ANNUAL GENERAL MEETING OF SHAREHOLDERS

To Be Held On October 24, 2010

The enclosed proxy is being solicited by the board of directors (the "Board of Directors") of Tower Semiconductor Ltd. (the "Company" or "Tower") for use at our Annual General Meeting of Shareholders (the "Meeting") to be held on Sunday, October 24, 2010, or at any postponement or adjournment thereof. The record date for determining shareholders entitled to notice of, and to vote at, the Meeting is established as of the close of business on September 20, 2010.

As of September 1, 2010, we had outstanding 254,954,606 of our ordinary shares, nominal value New Israeli Shekels ("NIS") 1.00 (the "Ordinary Shares").

We expect to solicit proxies by mail and to mail this proxy statement and the accompanying proxy card to shareholders on or about September 20, 2010. We will bear the cost of the preparation and mailing of these proxy materials and the solicitation of proxies. We will, upon request, reimburse banks, brokerage houses, other institutions, nominees, and fiduciaries for their reasonable expenses in forwarding solicitation materials to beneficial owners.

Upon the receipt of a properly executed proxy in the form enclosed, the persons named as proxies therein will vote the Ordinary Shares covered thereby in accordance with the instructions of the shareholder executing the proxy. With respect to the proposals set forth in the accompanying Notice of Meeting, a shareholder may vote in favor of, against, or may abstain from voting on, any of the proposals. Shareholders should specify their choices on the accompanying proxy card. If no specific instructions are given with respect to the matters to be acted upon, the shares represented by a signed proxy will be voted FOR the proposals set forth in the accompanying Notice of Meeting. We are not aware of any other matters to be presented at the Meeting.

Any shareholder returning the accompanying proxy may revoke such proxy at any time prior to its exercise by: (i) giving written notice to us of such revocation; (ii) voting in person at the Meeting or requesting the return of the proxy at the Meeting; or (iii) executing and delivering to us a later-dated proxy. Written revocations and later-dated proxies should be sent to: the Company at Shaul Amor Street, Ramat Gavriel Industrial Park, Post Office Box 619, Migdal Haemek 23105, Israel, Attention: Associate General Counsel.

Each Ordinary Share is entitled to one vote on each matter to be voted on at the Meeting. Subject to the terms of applicable law, two or more shareholders present, personally or by proxy, who hold or represent together at least 33% of the voting rights of our issued share capital will constitute a quorum for the Meeting. If within half an hour from the time scheduled for the Meeting a quorum is not present, the Meeting shall stand adjourned for one week, to October 31, 2010 at the same hour and place, without it being necessary to notify the shareholders. If a quorum is not present at the adjourned date of the Meeting within half an hour of the time scheduled for the commencement thereof, subject to the terms of applicable law, the persons

present shall constitute a quorum.

Each of Proposals 1, 2, 3 and 4 to be presented at the Meeting requires the affirmative vote of shareholders present in person or by proxy and holding Ordinary Shares amounting in the aggregate to at least a majority of the votes actually cast with respect to each such proposal.

PRINCIPAL SHAREHOLDERS

The following table and notes thereto set forth information, as of September 1, 2010, concerning the beneficial ownership (as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended), and on a diluted basis, of Ordinary Shares by any person who is known to own at least 5% of our Ordinary Shares. On such date, 254,954,606 Ordinary Shares were issued and outstanding. The voting rights of our major shareholders do not differ from the voting rights of other holders of our Ordinary Shares. However, certain of our shareholders have entered into a shareholders' agreement pursuant to which they may be able to exercise control over matters requiring shareholder approval, including the election of directors.

<u>Identity of Person or Group</u>	<u>Percent of Class(1)</u>	<u>Percent of Class (Diluted)(2)</u>
Israel Corporation Ltd.	48.09%(3)	24.57%
Bank Leumi Le-Israel, B.M.	28.80%(4)	11.36%
Bank Hapoalim, B.M.	28.89%(5)	11.41%

- (1) Assumes the holder's beneficial ownership of all ordinary shares and all securities that the holder has a right to purchase within 60 days. Also assumes that no other exercisable or convertible securities held by other shareholders has been exercised or converted into shares of the Company.
- (2) Assumes that all currently outstanding securities to purchase ordinary shares, other than those which cannot be calculated as of the date of this proxy statement, have been exercised by all holders.
- (3) Based on information provided by Israel Corporation Ltd, represents 14.3 million shares currently owned by Israel Corporation Ltd, 2.6 million shares issuable upon conversion of debentures, 206.1 million shares issuable upon conversion of capital notes and 0.04 million shares issuable upon the exercise of warrants.
- (4) Based on information provided by Bank Leumi Le-Israel, B.M, represents 6.7 million ordinary shares issuable upon exercise of warrants and 96.4 million shares issuable upon conversion of capital notes.
- (5) Based on information provided by Bank Hapoalim, B.M represents 7.2 million ordinary shares issuable upon exercise of warrants and 96.4 million shares issuable upon conversion of capital notes.

Pursuant to a shareholders' agreement dated January 18, 2001, among Israel Corporation Ltd, SanDisk Corporation, and Macronix International Co., Ltd., under certain terms and conditions, each of Israel Corporation Ltd, SanDisk and Macronix is obligated, among other

things, to vote or cause to be voted all of its respective shares for the election to the Board of Directors of nominees designated by each party, certain nominees recommended by the Board, the election of a designee of the Israel Corporation Ltd to serve as Chairman of the Board (unless agreed to otherwise), and against the election of any other persons to the Board of Directors. In addition, subject to certain exceptions, each party to the agreement agreed to restrictions on the transfer of its shares, including certain rights of first refusal. Nothing in this proxy statement shall be construed as an admission that any of the aforementioned shareholders is the beneficial owner of any of the Company's securities, other than the Company's securities held directly by such party, nor that any such shareholder or other persons or entities constitute a "group", for purposes of Section 13(d) of the Securities Exchange Act of 1934 and the rules promulgated thereunder.

MATTERS RELATING TO THE ANNUAL GENERAL MEETING

At the Meeting, the shareholders will be asked to vote on the following proposals:

PROPOSAL NO. 1

ELECTION OF DIRECTORS

Our Board of Directors is currently comprised of nine members, seven of whom are elected to the Board of Directors until our next annual meeting and two of whom are External Directors who are appointed by our shareholders for fixed terms pursuant to the Israeli Companies Law. The Board of Directors has nominated the seven directors currently serving on the Board of Directors, all named below, for election at the Meeting to serve as directors until the next annual meeting or until their respective successors are duly elected and have qualified.

If a properly executed proxy does not give specific instructions with respect to the election of directors, the persons named as proxies therein will vote the Ordinary Shares covered thereby FOR the election of all nominees. If any of such nominees is unable to serve (which event is not anticipated), the persons named in the proxy will vote the Ordinary Shares for the election of such other nominees as the Board of Directors may propose.

Set forth below are the names of, and certain other information concerning, the nominees for election as directors at the Meeting:

Russell C. Ellwanger has served as our Chief Executive Officer since May 2005. Mr. Ellwanger also serves as Chairman of the Board of Directors of our wholly-owned subsidiaries, Tower Semiconductor USA, Inc. and Jazz Technologies, Inc. From 1998 to 2005, Mr. Ellwanger served in various executive positions for Applied Materials Corporation, including Group Vice President, General Manager of the Applied Global Services (AGS), from 2004 to 2005, Group Vice President, General Manager of the CMP and Electroplating Business Group, from 2002 to 2004. Mr. Ellwanger also served as Corporate Vice President, General Manager of the Metrology and Inspection Business Group, from 2000 to 2002, during which he was based in Israel. From 1998 to 2000, Mr. Ellwanger served as Vice President of Applied Materials' 300-mm Program Office, USA. Mr. Ellwanger served as General Manager of Applied Materials' Metal CVD Division from 1997 to 1998 and from 1996 to 1997, Mr. Ellwanger served as Managing Director of CVD Business Development, during which he was based in Singapore. In addition, Mr. Ellwanger held various managerial positions in Novellus System from 1992 to 1996 and in Philips Semiconductors from 1980 to 1992.

Amir Elstein served as acting Chairman of our Board of Directors since January 2009 (after serving as a member of the Board of Directors since September 2008), was appointed as Chairman of the Board of Directors in April 2009, and has served as a member of our Stock Option and Compensation Committee since June 2009. Mr. Elstein serves as a member of the Board of Directors of Teva Pharmaceutical Industries Ltd., Chairman of the Board of Directors of Israel Corporation Ltd and Chairman of its Strategy Committee. In addition, Mr. Elstein serves as Chairman of the Board of Governors of the Jerusalem College of Engineering and serves as chairman and member of the board of several academic, scientific and educational, social and cultural institutions. Mr. Elstein was a member of Teva Pharmaceutical Industries senior management team from 2005 to 2008, where his latest position was the Executive Vice President at the Office of the CEO, overseeing Global Pharmaceutical Resources. Prior thereto, he was an executive at Intel Corporation, where he worked for 23 years, eventually serving as General Manager of Intel Electronics Ltd., an Israeli subsidiary of Intel. Mr. Elstein received his B.Sc. in Physics and Mathematics from the Hebrew University in 1980 and his M.Sc. in the Solid State Physics Department of Applied Physics from the Hebrew University in 1982. In 1992, Mr. Elstein received his diploma of Senior Business Management from the Hebrew University.

Nir Gilad has served as a director since May 2007. Mr. Gilad is the Chief Executive Officer of Israel Corporation Ltd since June 2007; he previously served as Vice-Chief Executive Officer of Israel Corporation Ltd from May 2006 to May 2007. From 2004-2006, Mr. Gilad served as Vice-Chief Executive Officer of Migdal Holdings Insurance and Financings Ltd., Chief Executive Officer of Migdal Investment Management 2001 Ltd. and chairman of Migdal Capital Markets Ltd. In addition, from 1999-2003, Mr. Gilad served as General Comptroller of the Treasury Office of the State of Israel. Throughout the years, Mr. Gilad was a member and chairman of several boards of directors. Mr. Gilad holds a B.A. in Economics and Agricultural Management in Natural Sciences from the Hebrew University of Jerusalem and an M.A. in business administration from Bar Ilan University.

Ron Moskovitz has served as a director since October 2007. Mr. Moskovitz is the CEO of Quantum Pacific Advisory Limited, a UK based company. From July 2002 until November 2007, Mr. Moskovitz served as Senior Vice President and Chief Financial Officer of Amdocs Limited. From 1998 until July 2002, Mr. Moskovitz served as Vice President of Finance of Amdocs Limited. Between 1994 and 1998, Mr. Moskovitz served in various senior financial positions in Tower Semiconductor Ltd. Mr. Moskovitz serves as a member of the Board of Directors of Israel Corporation Ltd. Mr. Moskovitz is a certified public accountant in Israel. He holds a B.A. in accounting and economics from Haifa University and an MBA from Tel-Aviv University.

Kalman Kaufman has served as a director and as a member of our Audit Committee since August 2005 and as a member of our Stock Option and Compensation Committee since May 2008. Mr. Kaufman is the Chairman of Solgel Nanotechnology and is a member of several boards of directors. Mr. Kaufman served as Corporate Vice President at Applied Materials from 1994 to 2005. Between 1985 and 1994, Mr. Kaufman served as President of KLA Instruments Israel, a company he founded, and General Manager of Kulicke and Soffa Israel. He holds engineering degrees from the Technion - Israel Institute of Technology.

Dana Gross has served as a director since November 2008. Ms. Gross is a venture partner at Carmel Ventures, a leading Israeli venture capital firm. From 2006 to 2008, Ms. Gross served as Senior VP, Israel Country Manager at SanDisk. From 1992 to 2006, Ms. Gross held various senior positions at M-Systems, including Chief Marketing Officer, VP World Wide Sales, President of M-Systems Inc. (US Subsidiary) and CFO, VP Finance and Administration. In

addition, Ms. Gross served as a director of M-Systems Ltd., Audiocodes Ltd. and PoweDsine Ltd. Ms. Gross holds a B.Sc. in Industrial Engineering from Tel-Aviv University and an M.A. in business administration from San Jose State University.

Rami Guzman has served as a director since February 2009. Mr. Guzman is a director of Bank Leumi Le-Israel, B.M, a director in several IT companies and a consultant to IT and telecom companies. Mr. Guzman held various senior positions at Motorola Inc. and Motorola Israel Ltd. since 1985, including VP of Motorola Inc. and Director of Motorola Israel Ltd. In addition, until July 2004, Mr. Guzman was the CFO of Motorola Israel Ltd. Prior to joining Motorola, Mr. Guzman worked for the Ministry of Finance first as senior assistant and deputy to the Director of the Budget and then as Government-wide MIS and IT Commissioner. Mr. Guzman holds a B.A. in Economics (1963) and an M.A. in Business and Public Administration (1969) from the Hebrew University of Jerusalem. He was a Research Fellow at Stanford University and Stanford Research Institute, California, USA, and completed Ph.D. studies at the Hebrew University of Jerusalem.

The Board of Directors will present the following resolution at the Meeting:

"RESOLVED that Mr. Russell C. Ellwanger, Mr. Amir Elstein, Mr. Nir Gilad, Mr. Ron Moskovitz, Mr. Kalman Kaufman, Ms. Dana Gross and Mr. Rami Guzman are hereby elected to serve as members of the Board of Directors of the Company until the next annual meeting of shareholders or until their respective successors are duly elected and qualified."

The election of the director nominees requires the affirmative vote of shareholders present in person or by proxy and holding Ordinary Shares amounting in the aggregate to at least a majority of the votes actually cast with respect to such proposal.

The Board of Directors recommends that the shareholders vote "FOR" the election of Mr. Russell C. Ellwanger, Mr. Amir Elstein, Mr. Nir Gilad, Mr. Ron Moskovitz, Mr. Kalman Kaufman, Ms. Dana Gross and Mr. Rami Guzman to serve as members of the Board of Directors of the Company.

PROPOSAL NO. 2

PROPOSAL TO REAPPOINT MR. AMIR ELSTEIN AS THE CHAIRMAN OF THE BOARD OF DIRECTORS

Appointment of Chairman

Pursuant to a provision of the Company's Articles of Association, our shareholders are to appoint a member of the Board of Directors to serve as its Chairman. The Board of Directors nominated Mr. Amir Elstein to serve as the Chairman of the Board of Directors of the Company until the next annual meeting of the shareholders or until his successor is duly appointed.

The Board of Directors will present the following resolution at the Meeting:

"RESOLVED to appoint of Mr. Amir Elstein as the Chairman of the Board of Directors to serve until the next annual meeting of the shareholders or until his successor shall be duly appointed and qualified is hereby approved."

The reappointment of Mr. Amir Elstein as the Chairman of the Board of Directors requires the affirmative vote of shareholders present in person or by proxy and holding Ordinary Shares amounting in the aggregate to at least a majority of the votes actually cast with respect to such proposal.

The Board of Directors recommends that the shareholders vote "FOR" the appointment of Mr. Amir Elstein as the Chairman of the Board of Directors to serve until the next annual meeting or until his successor shall be duly appointed and qualified.

PROPOSAL NO. 3

PROPOSAL TO APPROVE THE APPOINTMENT OF INDEPENDENT PUBLIC ACCOUNTANT

The Audit Committee of the Board of Directors has authorized and approved the appointment of the accounting firm of Brightman Almagor & Co. (a member of Deloitte Touche Tohmatsu International) to serve as the Company's independent public accountant for the year ending December 31, 2010 and for the period commencing January 1, 2011 and until the next annual shareholders' meeting. The Audit Committee of the Board of Directors believes that such appointment is appropriate and in the best interests of the Company and its shareholders. Subject to the authorization of our shareholders, the Audit Committee of the Board of Directors shall determine the remuneration of Brightman Almagor & Co. in accordance with the volume and nature of its services.

A representative of Brightman Almagor & Co. will be invited to be present at the Meeting. In addition, the fees paid to Brightman Almagor & Co. for its year 2009 audit and non-audit services shall be reported to our shareholders at the Meeting upon request.

The Board of Directors will present the following resolution at the Meeting:

"RESOLVED that the appointment of Brightman Almagor & Co. (a member of Deloitte Touche Tohmatsu International) as the independent public accountant of the Company for the year ending December 31, 2010 and for the period commencing January 1, 2011 and until the next annual shareholders' meeting, and the authorization of the Audit Committee of the Board of Directors to determine the remuneration of such auditor in accordance with the volume and nature of its services, is hereby approved."

The affirmative vote of the holders of a majority of the voting power of the Company represented at the Meeting in person or by proxy and voting thereon is necessary for approval of the appointment of Brightman Almagor & Co. as the independent public accountant of the Company and the authorization of the Audit Committee to determine such auditor's remuneration.

The Audit Committee of the Board of Directors recommends that the shareholders vote "FOR" the appointment of Brightman Almagor & Co. as the independent public accountant of the Company for the year ending December 31, 2010 and for the period commencing January 1, 2011, and the authorization of the Audit Committee to determine such auditors' remuneration.

PROPOSAL NO. 4

PROPOSAL TO APPROVE THE TERMS OF COMPENSATION OF OUR CHIEF EXECUTIVE OFFICER AND DIRECTOR

Mr. Russell Ellwanger has served as the Company's Chief Executive Officer and director since May 2005 and serves as Chairman of the Board of Directors of the Company's wholly-owned subsidiaries, Tower Semiconductor USA, Inc. and Jazz Technologies, Inc. Under Israeli law, the terms of compensation of officers who also serve as members of the Board of Directors of the Company and modifications thereto, require the approval of the Audit Committee, Board of Directors and shareholders of the Company, in such order.

Mr. Ellwanger's compensation is fully described in the Company's report on Form 20-F filed on April 30, 2010. It is hereby proposed to revise the following two provisions: (i) increase his base salary by approximately 22% as compared to 2009 to become \$550,000 on an annual run rate commencing April 2010; (ii) revise his 2010 annual performance bonus matrix as follows:

$[0.7*(A)*(2010 \text{ annual new base salary outlined above}) + 0.3*(B)*(2010 \text{ annual new base salary outlined above})] * 1.5$, where:

A = Corporate MBO score calculated after the end of 2010 based on the same matrix that the board approved for the Company employees' MBO plan for 2010, which can range from 0 to 1.5.

B = Score to be determined by the Chairman of the Board of Directors of the Company, which can range from 0.5 to 1.5.

- This performance-based bonus will not exceed 225% of Mr. Ellwanger's new base salary outlined above
- The above bonus matrix is based on the Company's performance in achieving the goals set in its board approved annual plan and includes financial, business, strategic and operational targets and indices, such as financial results and balance sheet indicators and results, margins, profitability, customer tape-ins and design-wins, execution on strategic opportunities, product development progress and achievement of process qualification milestones, operational efficiencies and employee and customer satisfaction indices.

Except as otherwise set forth hereinabove, the terms of compensation of Mr. Ellwanger which were previously approved by the Company's shareholders shall remain unchanged. Each of the Audit Committee and the Board of Directors of the Company approved these changes to Mr. Ellwanger's compensation.

The Board of Directors will present the following resolution at the Meeting:

“RESOLVED to approve the terms of compensation, of our chief executive officer and director.”

The affirmative vote of the holders of a majority of the voting power of the Company represented at the Meeting in person or by proxy and voting thereon is necessary for approval of the terms of compensation of Mr. Russell Ellwanger.

The Board of Directors recommends that the shareholders vote “FOR” the approval of the terms of compensation of Mr. Russell Ellwanger.

**REVIEW OF THE COMPANY'S BALANCE SHEET AS OF
DECEMBER 31, 2009 AND THE CONSOLIDATED STATEMENT OF
INCOME FOR THE YEAR THEN ENDED**

At the Meeting, shareholders will have an opportunity to review, ask questions and comment on the Company's Consolidated Balance Sheet as of December 31, 2009 and the Consolidated Statement of Income for the year then ended. This financial information may be obtained from the Company's website at www.towerjazz.com under "Investor Relations". Copies will also be mailed to shareholders upon request sent to the Company at Shaul Amor Street, Ramat Gavriel Industrial Park, Post Office Box 619, Migdal Haemek 23105, Israel, Attention: Associate General Counsel.

ADDITIONAL INFORMATION

Foreign Private Issuer. We are subject to the informational requirements of the United States Securities Exchange Act of 1934 (the "Exchange Act"), as amended, as applicable to foreign private issuers. Accordingly, we file reports and other information with the SEC. Shareholders may read and copy any document that we file at the SEC's public reference room at 100 F Street N.E., N.W., Washington, D.C. 20549 U.S.A. Shareholders can call the SEC at 1-800-SEC-0330 for further information on using the public reference room. As a foreign private issuer, all documents which were filed after November 4, 2002 on the SEC's EDGAR system are available for retrieval on the SEC's website at www.sec.gov. These SEC filings are also available to the public on the Israel Securities Authority's Magna website at www.magna.isa.gov.il.

As a "foreign private issuer", we are exempt from the rules under the Exchange Act prescribing certain disclosure and procedural requirements with respect to proxy solicitations. Also, our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions contained in Section 16 of the Exchange Act and the rules thereunder, with respect to their purchases and sales of securities. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act.

ISA Exemption. With the exception of the reporting obligations applicable to a company organized under the laws of the State of Israel whose shares are traded on approved securities exchanges outside of Israel and in Israel as specified in Chapter Five (iii) of the Israeli Securities

Law, 1968 (the "Israeli Securities Law"), we have received from the Securities Authority of the State of Israel an exemption from the reporting obligations as specified in Chapter Six of the Israeli Securities Law. We must, however, make available for public review at our offices in Israel a copy of each report that is filed in accordance with applicable U.S. law. These documents are available for inspection at our offices at Shaul Amor Street, Ramat Gavriel Industrial Park, Migdal Haemek 23105, Israel.

By Order of the Board of Directors,

Amir Elstein
Chairman of the Board
Migdal Haemek, Israel
September 15, 2010