

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13D/A
Under the Securities Exchange Act of 1934
(Amendment No. 5)

Tower Semiconductor Ltd.

(Name of Issuer)

Ordinary Shares, NIS 1.00 par value per share

M87915100

(Title of Class of Securities)

(CUSIP Number)

Noga Yatziv
Israel Corporation Ltd.
23 Aranha Street
Tel Aviv 61070, Israel
972-3-684-4517

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

May 1, 2006

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(e), 13d-1(f) or 13d-1(g), check the following box.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

(Continued on following pages)
(Page 1 of 11 Pages)

1	NAMES OF REPORTING PERSONS: Israel Corporation Ltd. I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS: 000000000		
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP: (a) <input type="radio"/> (b) <input checked="" type="radio"/>		
3	SEC Use Only		
4	SOURCE OF FUNDS: WC		
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e): <input type="checkbox"/>		
6	CITIZENSHIP OR PLACE OF ORGANIZATION: Israel		
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7	SOLE VOTING POWER: 33,324,887(1)(2)	
	8	SHARED VOTING POWER: 38,139,812(3)	
	9	SOLE DISPOSITIVE POWER: 33,324,887 (1)(2)	
	10	SHARED DISPOSITIVE POWER: 31,039,086(4)	
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY REPORTING PERSON: 71,464,699 (1)(3(4)(5))		
12	CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES: <input type="radio"/>		
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11): 70.05% (5)		
14	TYPE OF REPORTING PERSON: CO		

- (1) Includes (a) 14,260,504 Ordinary Shares and (b) warrants and convertible debentures held by Israel Corporation Ltd. (“TIC”) to purchase 19,064,383 Ordinary Shares (as defined in Item 1 below), of which (i) 823,654 are exercisable within sixty (60) days at an exercise price of \$7.50 per Ordinary Share, (ii) 58,906 are exercisable within sixty (60) days at an exercise price of \$6.17 per Ordinary Share and (iii) 18,181,823 are issuable within sixty (60) days, upon the conversion of all the convertible debentures held by TIC issued pursuant to the Rights Offering (defined in Item 3 below), at a conversion price of \$1.10 per Ordinary Share, representing debt in the amount of \$20,000,006.
- (2) Includes 62,500 Ordinary Shares which are subject to an option granted by TIC’s wholly owned subsidiary, Israel Corporation Technologies (ICTech) Ltd. (“ICTech”), (which thereafter transferred all of its assets to TIC prior to its voluntary dissolution), to a consultant of the issuer and exercisable at an exercise price of \$5.60 per Ordinary Share until December 31, 2008.
- (3) Includes: an aggregate of 30,024,027 Ordinary Shares held by the other parties (the “Wafer Partners”) to the Consolidated Shareholders Agreement (incorporated herein as Exhibit 4) (and the amendment thereto, incorporated herein as Exhibit 12, the “Shareholders’ Agreement Amendment”), and warrants and convertible debentures held by the Wafer Partners, to purchase 8,115,785 Ordinary Shares, of which (i) 1,015,059 are exercisable within sixty (60) days at an exercise price of \$7.50 per Ordinary Share, and (ii) 7,100,726 are issuable within sixty (60) days, upon the conversion of all the debentures held by such parties issued pursuant to the Rights Offering (defined in Item 3 below), at a conversion price of \$1.10 per Ordinary Share, representing debt in the aggregate amount of approximately \$7,810,800.
- (4) Includes: (i) an aggregate of 30,024,027 Ordinary Shares held by the Wafer Partners and (ii) options and warrants held by the Wafer Partners, to purchase 1,015,059 Ordinary Shares exercisable within sixty (60) days at an exercise price of \$7.50 per Ordinary Share.

(5) Consists of an aggregate of 71,464,699 Ordinary Shares (including the number of Ordinary Shares issuable pursuant to the warrants and debentures referred to in footnotes (1) and (3) hereto), of which 33,324,887 Ordinary Shares (including the number of Ordinary Shares issuable pursuant to the warrants and convertible debentures referred to in footnote (1) above) are held by TIC and 38,139,812 Ordinary Shares (including the number of Ordinary Shares issuable pursuant to the warrants and debentures referred to in footnote (3) above) are held by the Wafer Partners. The Shareholders' Agreement Amendment incorporated herein as Exhibit 12 provides for the extension until January 2008, of certain obligations and restrictions with respect to (a) the voting of the Ordinary Shares held by TIC and by the Wafer Partners (including the Ordinary Shares issuable pursuant to the warrants and convertible debentures described in footnotes (1) and (3) above) and (b) the disposition of the Ordinary Shares held by TIC and by the Wafer Partners (including the Ordinary Shares issuable pursuant to the warrants described in footnote (1)(i) and (ii), and in footnote (4) above). The terms of the Consolidated Shareholders Agreement and the Shareholders' Agreement Amendment are hereby specifically incorporated by reference herein. Neither the filing of this Amendment No. 5 to the Schedule 13D nor any of its contents shall be deemed to constitute an admission by any Reporting Person (as defined in Item 2 below) and any other persons or entities constitute a "group" for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder. Further, the filing of this Amendment No. 5 shall not be construed as an admission that any Reporting Person is, for the purposes of Section 13(d) or 13(g) of the Exchange Act, or for any other purpose, the beneficial owner of any Ordinary Shares other than those Ordinary Shares over which the Reporting Person has voting and dispositive power, as reported herein. The Reporting Person disclaims any pecuniary interest in any securities of the issuer owned by any other party, and expressly disclaims the existence of a group. Based on the number of Ordinary Shares of the issuer outstanding as of February 19, 2006 of 74,846,449 (according to publicly available information provided by the issuer to date) the number of Ordinary Shares of the issuer covered by the Consolidated Shareholders Agreement and the Shareholders' Agreement Amendment (assuming the exercise of the Ordinary Shares issuable pursuant to the warrants and convertible debentures referred to in footnotes (1) and (3) hereto) represents approximately 70.05% of the outstanding Ordinary Shares. The above number of outstanding Ordinary Shares does not include 1,300,000 treasury shares held by a trustee for the benefit of Tower's employee stock option plan.

Item 1. Security And Issuer.

The name of the issuer to which this Amendment No. 5 (as defined below) relates is Tower Semiconductor Ltd. ("Tower"). Its principal executive offices are located at Ramat Gavriel Industrial Park, P.O. Box 619, Migdal Haemek, 23105 Israel. This Amendment No. 5 relates to Tower's Ordinary Shares, NIS 1.00 par value per share (the "Ordinary Shares"). This constitutes Amendment No. 5 (the "Amendment No.5") to Schedule 13D filed previously by the Reporting Person (as defined in Item 2 below). The percentage of Ordinary Shares reported in this Amendment No. 5 as being beneficially owned by the Reporting Person and any other information disclosed herein (other than descriptions of agreements and transactions to which the Reporting Person is a party) is based on publicly available information provided by Tower or other third parties.

Item 2. Identity and Background

This Amendment No. 5 is filed on behalf of Israel Corporation Ltd. ("TIC") The Reporting Person was organized under the laws of the State of Israel.

The principal business address of the Reporting Person is 23 Aranaha Street, Tel Aviv 61070 Israel. The principal business of the Reporting Person is a holding company.

Set forth below is certain current information regarding the executive officers and directors of the Reporting Person:

Name/Position with TIC	Business Address	Principal Occupation and Name and Address of Employer	Country of Citizenship
Idan Ofer - Chairman of the Board	23 Aranaha St. Tel-Aviv	23 Aranaha st. Tel-Aviv	Israel
Ehud Angel - Director	23 Aranaha St. Tel-Aviv	6 Benyahu St. Tzahala, Tel-Aviv	Israel
Yair Seroussi - Director	23 Aranaha St. Tel-Aviv	17 Ha'dganim St. Givataym	Israel
Avi Levy - Director	23 Aranaha St. Tel-Aviv	4 Maale Nechama St. Hertzelya B	Israel
Moshe Vidman - Director	23 Aranaha St. Tel-Aviv	14 Megadim ST. Yafe Nof, Jerusalem	Israel
Irit Izakson - Director	23 Aranaha St. Tel-Aviv	15 Matityahu Cohen Gadol St. Tel-Aviv 62268	Israel

Yohi Dvir - Director	23 Aranaha St. Tel-Aviv	15 Amirim St. Tel-Aviv	Israel
Zvi Itskovitch - Director	23 Aranaha St. Tel-Aviv	27 Inshtine St. Raanana	Israel
Amnon Lion - Director	23 Aranaha St. Tel-Aviv	22A Margalit St. Hayfa	Israel
Prof. Issac Ben-Israel - Director	23 Aranaha St. Tel-Aviv	86 Ha'gefen St. Ramat-Ha'sharon	Israel
Avraham Anaby - Director	23 Aranaha St. Tel-Aviv	9 Margalit St. Hayfa	Israel
Yossi Rosen - President & Chief Executive Officer	23 Aranaha St. Tel-Aviv	23 Aranaha St. Tel-Aviv	Israel
Gilad Shavit - Deputy CEO	23 Aranaha St. Tel-Aviv	23 Aranaha St. Tel-Aviv	Israel
Avisar Paz - Chief Financial Officer	23 Aranaha St. Tel-Aviv	23 Aranaha St. Tel-Aviv	Israel
Mici Blumental - Internal Auditor	23 Aranaha St. Tel-Aviv	23 Aranaha St. Tel-Aviv	Israel
Adv. Noga Yatziv - Company Secretary & Assistant to the President	23 Aranaha St. Tel-Aviv	23 Aranaha St. Tel-Aviv	Israel

The Reporting Person is a public company traded on the Tel Aviv Stock Exchange. As such, all decisions relating to the voting or disposition of stock of the issuer are made by the board of directors of the Reporting Person that contains two independent directors. Approximately, 48% of the shares of the Reporting Person are indirectly held by discretionary trusts which are primarily for the benefit of Idan Ofer, his children and his issue. Mr. Ofer also owns 3.3 % of the shares of the Reporting Person. Effective January 2006, ICTech transferred all of its Ordinary Shares to TIC, its parent company as part of its voluntary dissolution. Accordingly, ICTech ceased to be the beneficial owner of any Ordinary Shares and is no longer a Reporting Person.

During the last five years, no Reporting Person nor any of the executive officers or directors of the Reporting Person has been: (i) convicted in a criminal proceeding (excluding traffic violations and similar misdemeanors); or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

Item 3. Source and Amount of Funds or Other Consideration.

During the course of 2003 TIC together with Sandisk Coporation (“Sandisk”), Alliance Semiconductor Corporation (“Alliance”) and Macronix International Co. Ltd. (“Macronix”), entered into certain amendments to their respective investment agreements with Tower pursuant to which TIC purchased directly or indirectly 152,447 Ordinary Shares for an aggregate purchase price of \$454,749 in August 2003, 518,020 Ordinary Shares for an aggregate purchase price of \$1,545,253 in December 2003 and 419,048 Ordinary Shares for an aggregate purchase price of \$2,933,336 in January 2004.

In December 2003, TIC provided Tower’s banks with an undertaking to exercise all of the rights to which TIC may be entitled pursuant to a rights offering, should such a rights offering be demanded by Tower’s banks in accordance with an amendment to Tower’s credit facility. In consideration for this undertaking, Tower granted TIC with warrants to purchase 58,906 Ordinary Shares at an exercise price of \$6.17 per Ordinary Share exercisable until December 2008. During December 2005 and January 2006, Tower offered its shareholders rights to purchase convertible debentures (the “Rights Offering”). Pursuant to the Rights Offering, TIC purchased 200,006 U.S. dollar denominated convertible debentures for an aggregate amount of \$20,000,006. The debentures may be converted into up to 18,181,823 Ordinary Shares at a rate of one Ordinary Share per \$1.10 principal amount of debentures.

The acquisitions of Ordinary Shares by TIC were funded out of working capital. The Reporting Person has no knowledge as to the source of funds used by any of the third parties to purchase such shares.

Item 4. Purpose of Transaction.

The purpose of the acquisitions of Ordinary Shares and Convertible Debentures by TIC was to increase its holdings in Tower and fulfill its obligations to Tower’s banks pursuant to an undertaking dated July 24, 2005.

Item 5. Interest in Securities of the Issuer.

(a)-(b) As a result of the Consolidated Shareholders’ Agreement and the Shareholders’ Agreement Amendment, each party thereto may be deemed to be the beneficial owner of at least 71,464,699 Ordinary Shares. Such shares constitute approximately 70.05% of the outstanding Ordinary Shares, based on the capitalization of the Tower as of the date hereof (according to publicly available information provided by Tower to date) and calculated in accordance with Rule 13d-3(d)(i) of the Act. Such beneficial ownership is based on (i) the ownership, by TIC, Sandisk, Alliance and Macronix of 14,260,504, 10,447,115, 10,803,517, and 8,773,395 Ordinary Shares, respectively, (ii) the right of TIC to purchase 19,064,383 Ordinary Shares exercisable within sixty (60) days of the date hereof (of which 823,654 may be exercised at an exercise price of \$7.50 per Ordinary Share, 58,906 at exercise price of \$6.17 per Ordinary Share and 18,181,823 are issuable upon conversion of all of the convertible debentures issued to TIC in the Rights Offering), (iii) the right of SanDisk, Alliance and Macronix to purchase in the aggregate 8,115,785 Ordinary Shares, of which (a) 1,015,059 are exercisable within sixty (60) days at an exercise price of \$7.50 per Ordinary Share, and (b) 7,100,726 are issuable within sixty (60) days, upon the conversion of all the debentures held by such parties issued pursuant to the Rights Offering.

The statements in this Amendment No. 5 shall not be construed as an admission that the Reporting Person and any other persons or entities constitute a “group” for purposes of Section 13(d) of the Exchange Act and the rules promulgated thereunder. Further, the filing of this Amendment No. 5 shall not be construed as an admission that the Reporting Person is, for the purposes of Section 13(d) or 13(g) of the Exchange Act, or for any other purpose, the beneficial owner of any Ordinary Shares other than those Ordinary Shares over which the Reporting Person has voting and dispositive power, as reported herein. The Reporting Person disclaims any pecuniary interest in any securities of Tower owned by any other party, and expressly disclaims the existence of a group.

(c) Except as set forth above, neither the Reporting Person, nor, to the best of its knowledge, any of their directors or executive officers, has effected any transaction in any securities of Tower during the past sixty (60) days.

(d) No person except is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities covered by this statement.

(e) Effective January 2006, ICTech transferred all of its Ordinary Shares to TIC, its parent company as part of its voluntary dissolution. Accordingly, ICTech ceased to be the beneficial owner of any Ordinary Shares and is no longer a Reporting Person.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

With the exception of the information contained in the aforementioned paragraph and other than the Purchase Agreement, Additional Purchase Agreement (including the Series A5 Additional Purchase Obligation, as amended), the Registration Rights Agreement, the Consolidated Shareholders Agreement, the Amendment to the Shareholders’ Agreement and the Trustee Nomination Letter (including the termination thereof on March 11, 2002) described above or in previous amendments and incorporated herein in their entirety by reference, to the knowledge of the Reporting Person, there are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Tower, including but not limited to transfer or voting of any of the securities, finder’s fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss, or the giving or withholding of proxies.

Item 7. Materials to be Filed as Exhibits.

The following exhibits are filed herewith:

Exhibit No.	Description
1.	Share Purchase Agreement, dated as of December 12, 2000, between Israel Corporation Ltd. and Tower Semiconductor Ltd.*
2.	Additional Purchase Obligation Agreement, dated as of December 12, 2000, between Israel Corporation Ltd. and Tower Semiconductor Ltd.*
3.	Registration Rights Agreement, dated as of January 18, 2001, by and among Israel Corporation Ltd., SanDisk Corporation, Alliance Semiconductor Ltd., Macronix International Co., Ltd. and QuickLogic Corporation.*
4.	Consolidated Shareholders Agreement, dated as of January 18, 2001, by and among Israel Corporation Ltd., SanDisk Corporation, Alliance Semiconductor Ltd. and Macronix International Co., Ltd.*
5.	Trustee Nomination Letter, dated January 25, 2001, between Zvi Ephrat and Israel Corporation Ltd.*
6.	Amendment to Payment Schedules of Series A-3 and Series A-4 Additional Purchase Obligations, dated March 26, 2002.*
7.	Letter, dated July 23, 2002, regarding Participation in Rights Offering, executed by Israel Corporation Technologies (ICTech) Ltd., SanDisk Corporation, Alliance Semiconductor Corporation and Macronix (BVI) Co., Ltd.*
8.	Joint Filing Agreement, dated December, 2002.*
9.	Amendment to Payment Schedules of Series A-5 Additional Purchase Obligations, dated February 24, 2003.*
10.	Amendment to Payment Schedules of Series A-5 Additional Purchase Obligations, dated February 24, 2003.*
11.	Side Letter for Amendment to Payment Schedules of Series A-5 Additional Purchase Obligations, dated April 14, 2003.*
12.	Amendment No.3 to Payment Schedule of Series A-5 Additional Purchase Obligations, Waiver of Series A-5 Conditions, Conversion of Series A-4 Wafer Credits and Other Provisions, dated November 11, 2003. *

*Previously filed.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: April 26, 2006

ISRAEL CORPORATION LTD.

BY: /S/ Gilad Shavit

Gilad Shavit
Deputy Chief Executive Officer

BY: /S/ Avisar Paz

Avisar Paz
Deputy Chief Financial Officer

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