FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of November 2006

TOWER SEMICONDUCTOR LTD. (Translation of registrant's name into English)

RAMAT GAVRIEL INDUSTRIAL PARK
P.O. BOX 619, MIGDAL HAEMEK, ISRAEL 23105
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F [X] Form 40-F [_]

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes [_] No [X]

On November 1, 2006, Tower Semiconductor announces it Completes a Private Placement of Approximately \$10.3 million in Equity, attached hereto is a copy of the press release.

This Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

Page 2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TOWER SEMICONDUCTOR LTD.

Date: November 1, 2006 By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa Corporate Secretary

Page 3

TOWER SEMICONDUCTOR COMPLETES A PRIVATE PLACEMENT OF APPROXIMATELY \$10.3 MILLION IN EQUITY

MIGDAL HAEMEK, Israel - November 1, 2006 - Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty foundry, announced today that it received and accepted orders from Israeli investors in a private placement for 58,150 units, each comprised of 100 ordinary shares and 50 warrants. Each unit was sold at a price of NIS 759 (approximately \$177). The price of the ordinary shares included in the units was identical to the closing price of the Company's shares on the Tel-Aviv Stock Exchange on Sunday, October 29, 2006 (NIS 7.59 per share). Total immediate proceeds amounted to approximately NIS 44.1 million (approximately \$10.3 million).

Under Israeli securities laws, the securities are subject to a statutory lock-up. The Company has undertaken to file a prospectus with the Israel Securities Authority to allow for the unrestricted trade of the securities.

Each warrant is exercisable at any time during a period of four years at a price per share equal to a 25% premium to the market price of the Company's shares at the date the prospectus is published or the first date the securities may be sold under Israel's statutory lock-up rules, but not higher than NIS 9.48 (approximately \$2.20). This private placement represents less than 3% of the share capital of Tower, on a fully-diluted basis.

Poalim I.B.I Underwriting & Issuing Ltd. and Clal Finance Underwriting Ltd. acted as co-lead placement agents for the transaction.

In addition, the Company granted a green shoe option to the placement agents for up to approximately NIS 10.7 million (\$2.5 million), which is exercisable until the earlier of December 1, 2006 or the date the prospectus is published, unless agreed to otherwise.

The offering described in this press release was extended to Israeli residents only. The securities offered have not been and will not be registered under the U.S. Securities Act of 1933, as amended, and may not be offered or sold in the United States or to persons of the U.S., absent registration or an applicable exemption from registration requirements.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy the securities described herein.

All figures in dollars are presented herein for convenience only, based on current exchange rates.

ABOUT TOWER SEMICONDUCTOR LTD.

Tower Semiconductor Ltd. is a pure-play independent specialty foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.13 micron; it also provides complementary technical services and design support. In addition to digital CMOS process technology, Tower offers advanced non-volatile memory solutions, mixed-signal and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities: Fab 1 has process technologies from 1.0 to 0.35 micron and can produce up to approximately 16,000 150mm wafers per month. Fab 2 features 0.18 micron and below standard and specialized process technologies and has a current capacity of up to approximately 15,000 200mm wafers per month. Tower's website is located at www.towersemi.com

CONTACT:

Tower Semiconductor Ilanit Vudinsky, +972 4 650 6434 ilanitvu@towersemi.com

Page 5