

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of July 2005 No. 2

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

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 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

On July 27, 2005, the Registrant announced a proposed rights distribution. 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.

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: July 27, 2005

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

TOWER SEMICONDUCTOR ANNOUNCES PROPOSED RIGHTS
DISTRIBUTION

MIGDAL HAEMEK, Israel -- July 27, 2005 -- Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty foundry, announced that it has filed today with the United States Securities and Exchange Commission and the Israel Securities Authority a Registration Statement with respect to a proposed distribution of rights to purchase convertible debentures, following the amendment to the Facility Agreement with its banks that was signed on July 24th.

All of Tower's shareholders as of the record date, yet to be determined, will be offered the opportunity to participate in this \$50 million offering.

Certain of Tower's major shareholders have committed to purchase from Tower \$24.5 million principal amount of convertible debentures. The registration statement covers the distribution of rights to purchase up to the remaining \$25.5 million principal amount of debentures convertible into Tower ordinary shares. If all of the rights described above are exercised, the debentures would be convertible into 45,454,545 ordinary shares, including the ordinary shares that may result from the conversion of debentures that certain of Tower's major shareholders committed to purchase as described above.

The rights will be distributed to Tower's shareholders as of the record date, as well as holders of options to purchase Tower's ordinary shares under eligible share option plans. The terms of the proposed rights distribution and convertible debentures are described in the prospectus included in the registration statement.

The distribution of the rights is anticipated to commence as soon as reasonably practicable after the effective date of the registration statement. The record date for the determination of shareholders and option holders entitled to receive rights in the distribution has not yet been set. The terms of the distribution and the securities offered are subject to change and there is no assurance that the Company will proceed with the distribution.

Copies of the preliminary prospectus for the rights distribution, when available, may be obtained from Tower Semiconductor at PO Box 619, Migdal Haemek, Israel 23105, Attention: Corporate Secretary, telephone: +972 4 650 6109.

A registration statement relating to these securities has been filed with the Securities and Exchange Commission but has not yet become effective. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. The debentures that certain of Tower's major shareholders have committed to purchase and the shares issuable upon their conversion are not covered by the registration statement and will be issued in a transaction exempt from registration. This Press Release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such State.

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 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 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

or

Pacifico Inc.
PR Agency Contact
Mary Curtis, +1 408 293 8600
mcurtis@pacifico.com

or

Fusion IR & Communications
Investor Relations Contact
Sheldon Lutch, +1 212 268 1816
sheldon@fusionir.com