

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of July 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  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 23, 2006, the Registrant announced that Tower will hold its quarterly conference call to discuss second quarter and six months 2006 results, 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 23, 2006

By: /s/ Nati Somekh Gilboa

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Nati Somekh Gilboa  
Corporate Secretary

July 17, 2006

TOWER SEMICONDUCTOR LTD. SECOND QUARTER AND SIX MONTHS 2006 EARNINGS CONFERENCE  
CALL

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Monday July 17, 6:00 am ET

MIGDAL HAEMEK, Israel, July 17 /PRNewswire-FirstCall/ - Tower Semiconductor Ltd. (Nasdaq: TSEM; TASE: TSEM), a pure-play independent specialty foundry, will hold its quarterly conference call to discuss second quarter and six months 2006 results on Wednesday, July 26, 2006, at 11:00 a.m. Eastern Time, 10:00 a.m. Central, 9:00 a.m. Mountain, 8:00 am Pacific and 18:00 Israel Time.

Tower Semiconductor will issue the second quarter and six months 2006 earnings release on Wednesday, July 26, 2006 during pre-market hours.

This call is being webcast by Thomson/CCBN and can be accessed at Tower Semiconductor's web site at <http://www.towersemi.com> or you can call in the U.S. and in Israel to participate in the conference by calling a domestic number.

1-866-744-5399 (U.S. Toll-Free)  
03-918-0609 (Israel)  
972-3-918-0609 (International)

The teleconference will be available for replay for 90 days at:  
<http://www.companyboardroom.com>.

The webcast is also being distributed through the Thomson StreetEvents Network to both institutional and individual investors. Individual investors can listen to the call at <http://www.earnings.com>, Thomson/CCBN's individual investor portal, powered by StreetEvents. Institutional investors can access the call via Thomson's password-protected event management site, StreetEvents (<http://www.streetevents.com>).

#### About Tower Semiconductor

Tower Semiconductor Ltd. is a pure-play specialty wafer foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.13 microns; it also provides complementary manufacturing 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 microns and can produce up to 16,000 150mm wafers per month. Fab 2 features 0.18-micron and below process technologies, including foundry-standard technology. Fab 2 has current capacity of up to 15,000 200mm wafers per month.