
FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of February 2010 No. 1

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 S

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 S

On February 1, 2010, the registrant announces Fourth Quarter and Fiscal Year 2009 Financial Results Conference Call.

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: February 1, 2010

By: /s/ Nati Somekh Gilboa
Name: Nati Somekh Gilboa
Title: Corporate Secretary

Tower Semiconductor Announces Fourth Quarter and Fiscal Year 2009 Financial Results Conference Call

Migdal Haemek, Israel – February 1, 2010 - Tower Semiconductor (NASDAQ: TSEM, TASE: TSEM), an independent specialty foundry, will hold a conference call to discuss its fourth quarter and fiscal year 2009 financial results, first quarter 2010 guidance and fiscal year 2010 business outlook on Wednesday, February 24, 2010, at 10:00 a.m. Eastern Time (09:00 a.m. Central, 08:00 a.m. Mountain, 07:00 a.m. Pacific and 17:00 Israel Time). Tower Semiconductor will issue the fourth quarter and fiscal year 2009 earnings release on Wednesday, February 24, 2010.

This call will be webcast by Thomson/CCBN and can be accessed on TowerJazz's Website at www.towerjazz.com, or can also be accessed in the U.S. and in Israel by calling a domestic number:

1-888-407-2553	(U.S. Toll-Free)
03-918-0609	(Israel)
+972-3-918-0609	(International)

The webcast is also being distributed through the Thomson Street Events Network to both institutional and individual investors. Individual investors can listen to the call at 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 (www.streetevents.com).

The teleconference will be available for replay for 90 days.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide world-class customer service, TowerJazz maintains two manufacturing facilities in Israel and one in the U.S. with additional capacity available in China through manufacturing partnerships. For more information, please visit www.towerjazz.com.

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