

TOWER SEMICONDUCTOR LTD

Form 6-K

March 16, 2011

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of March 2011 No. 4

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 o

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 o

No x

On March 16, 2011, the registrant announces CMP Selects TowerJazz's Advanced Power Management and CMOS Image Sensor Processes and PDKs to Meet Growing Customer Demand

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: March 16, 2011

By:

/s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa

Title: Corporate Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

**CMP Selects TowerJazz's Advanced Power Management and CMOS Image
Sensor Processes and PDKs to Meet Growing Customer Demand**

MIGDAL HAEMEK, Israel and NEWPORT BEACH, Calif. March 16, 2011 – TowerJazz, the global specialty foundry leader, today announced that its advanced 0.18 micron power management and CMOS image sensor (CIS) technology and sophisticated process design kits (PDKs) are now available for prototyping to companies, universities and research labs through the services provided by CMP.

Since 1981, CMP, an independent non-profit organization, has helped more than 1000 organizations from 70 countries access affordable commercial foundries by consolidating their designs onto Multi-Project wafers. CMP works with several foundry vendors supporting a range of technologies and has chosen TowerJazz for its excellence in process technology as well as its broad IP portfolio. CMP offers its customers experience with the entire design, layout, verification, and tapeout process, as well as the export guidance.

In power management, TowerJazz offers industry leading scalable Bipolar-CMOS-DMOS (BCD) platforms with state of the art Rds(on) values including non-volatile memory (NVM). TowerJazz also offers a proprietary Y-Flash technology, the leading solution for NVM in the market today due its small cell size, zero mask adder and flexibility to implement various memory sizes. For high end CMOS image sensors, TowerJazz is one of the premier suppliers, well known for its internal pixel development and know-how. TowerJazz supports the customization of pixels per project needs and its superior performance (dark current, low noise and dynamic range) enables a rich offering for various digital imaging applications.

“We are very excited about this partnership with TowerJazz as they help fill a gap in our current process offering, reacting to the demand of many of our customers. The renowned quality of the characterization and the resulting PDKs help to assure first time silicon success,” said Bernard Courtois, Director of CMP.

“We are pleased to be recognized by CMP as a leading provider of both power management and CMOS imaging technologies and to be chosen to meet their customers’ needs for these advanced process platforms and PDKs,” said Dr. Franz Riedlberger, General Manager & Senior Sales Director Europe.“

CMP and TowerJazz will exhibit at the 2011 Design Automation and Test in Europe (DATE) conference in Grenoble, France March 14-18 and expert staff will be on hand to answer questions about these process technologies.

About CMP

CMP is a broker in ICs and MEMS for prototyping and low volume production. Circuits are fabricated for Universities, Research Laboratories and Industrial Companies. Advanced industrial technologies are available in CMOS, BiCMOS, SiGe BiCMOS, High Voltage, FDSOI down to 20nm, pHEMT GaAs, and MEMS etc. CMP distributes and supports several CAD software tools for both Industrial Companies and Universities. Since 1981, more than 1000 institutions from 70 countries have been served, more than 6000 projects have been prototyped through 700 runs, and 60 different technologies have been interfaced. For more information, visit: <http://cmp.imag.fr>

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.

Safe Harbor Regarding Forward-Looking Statements

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. A complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect Tower and/or Jazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-3, F-4 and 6-K, as were filed with the Securities and Exchange Commission (the "SEC") and the Israel Securities Authority and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC, respectively. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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