

TOWER SEMICONDUCTOR LTD

Form 6-K

October 26, 2011

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of October 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 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 October 26, 2011, the registrant announces Participation at EDS Fair in Japan to Introduce its World-Class Design Enablement Technology.

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: October 26, 2011

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

TowerJazz Announces Participation at EDS Fair in Japan to Introduce its World-Class Design Enablement Technology

Also announces its new high side 700V PDK offering to complement its unrivaled power management platform

NISHIWAKI, Japan, October 26, 2011 – TowerJazz, the global specialty foundry leader, today announced it will participate at the Electronic Design and Solution (EDS) Fair in Yokohoma, Japan November 16-18, 2011 to introduce its world-class design enablement technology to the Japanese market, and for the first time, its 700V power management PDK offering. TowerJazz's presence at the EDS Fair marks its initial business venture in Japan since its acquisition of Micron's fab in Nishiwaki. TowerJazz will emphasize to Japanese fabless companies and IDMs the local availability of its pure play foundry offerings and capabilities for the most comprehensive process design kit (PDK) coverage. At the EDS Fair, TowerJazz will provide seminars and a demo to offer attendees hands-on experience with its PDKs and an opportunity to meet the TowerJazz Japan design enablement staff in person (booth F-36).

“At the EDS Fair, we are introducing our new high side 700V PDK offering, developed to enhance our leading power management platform to address the rapidly emerging, energy saving LED lighting market,” said Ori Galzur, Vice President of Design Center and PDK Development at TowerJazz. “Combined with our already released 700V process offering, we enable customers to achieve the desired small die size for LED lighting in an advanced and cost-effective power platform. Our unrivaled power management specialty process and leading design kits deliver the industry's most complete 700V foundry offering to target the vast majority of the forecasted \$25 billion power management IC market in 2014.”

TowerJazz offers customers a complete design enablement platform that complements its sophisticated technology and enables a quick and accurate design cycle to enable first-time working silicon and fast time-to-market. This platform includes silicon verified and highly scalable device models and robust physical design tools for up front design optimization. TowerJazz's powerful and efficient tools enable unprecedented accuracy in device models and its unparalleled customer support at every stage of the design flow ensures confidence in designs at near zero risk.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader, its fully owned U.S. subsidiary Jazz Semiconductor, Inc. and its fully owned Japanese subsidiary TowerJazz Japan, LTD, 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 multi-fab sourcing, TowerJazz maintains two manufacturing facilities in Israel, one in the U.S., and one in Japan 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 TowerJazz'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.

