FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of March 2013 No. 2

TOWER SEMICONDUCTOR LTD.

(Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 2310502
(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 March 7, 2013, the registrant announced its CEO to Provide Opening Keynote at Global Semiconductor Forum 2013 on March 14 in Shanghai, China.

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 7, 2013 By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz CEO, Russell Ellwanger to Provide Opening Keynote at Global Semiconductor Forum 2013 on March 14 in Shanghai, China

TowerJazz to Offer Advanced RF Design Enablement Workshop at EDICon 2013 on March 12-14 in Beijing, China

NISHIWAKI, Japan, March 7, 2013 – TowerJazz, the global specialty foundry leader, today announced its CEO, Russell Ellwanger will provide the opening keynote at the Global Semiconductor Forum (GSF) 2013 on March 14 at the Pudong Shangri La Hotel in Shanghai, China. Mr. Ellwanger will discuss industry megatrends served through analog technology and how TowerJazz's advanced specialty solutions meet the specific requirements of these growing trends. The opening keynote on March 14, 2013 will take place at 08:00-08:35.

In addition, during March 12-14, 2013 at the Electronic Design Innovation Conference (EDICon) in Beijing, China, TowerJazz's Director of Design Enablement & CAD, Ofer Tamir will lead an interactive workshop to provide a hands-on experience showcasing TowerJazz's industry leading design support services and design enablement tools/capabilities. The workshop will feature Mentor®'s Calibre® PERCTM capability in TowerJazz design kits, TowerJazz's advanced RF models and advanced RF technology.

The Calibre PERC platform enables TowerJazz customers to perform circuit reliability verification for their latest 0.18 micron products going beyond traditional DRC and ERC tools so designers can run highly complex checks that are customized to specific design requirements as they relate to our foundry manufacturing processes.

"We are placing a strong emphasis on business in China as it consumes almost 50% of the world's ICs and internal China fabs can only cover 10% of the need. As will be seen by both Russell's keynote at GSF and Ofer's workshop at EDICon, our advanced specialty technologies and strong design tools will help address the needs of China semiconductor companies and design houses to increase their RF design capabilities, thereby maximizing their IC performance. Our increased presence in China is a further testament to TowerJazz's commitment to meet the growing demands of the APAC region," said Todd Mahlen, Vice President of APAC Sales and Power Business Development.

EDICon attendees can visit TowerJazz at booth #204. For more information, please visit the company website (http://www.towerjazz.com) or the conference websites: http://www.arena-international.com/gsf and http://www.ediconchina.com/.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), its fully owned U.S. subsidiary Jazz Semiconductor Ltd., and its fully owned Japanese subsidiary TowerJazz Japan, Ltd., operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits with geometries ranging from 1.0 to 0.13-micron, offering 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 CMOS and MEMS capabilities. TowerJazz also offers a world-class design enablement platform that complements its sophisticated technology and enables a quick and accurate design cycle. In addition, TowerJazz provides (TOPS) Technology Optimization Process Services to IDMs as well as fabless companies that need to expand capacity, or progress from an R&D line to a production line. 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.

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