

TOWER SEMICONDUCTOR LTD

Form 6-K

August 03, 2011

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FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of August 2011

No. 2

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  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  F

No  S

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On August 03, 2011, the registrant announces Qualification of 0.13um SiGe Process at its Israeli Fab; Technology Successfully Transferred from its US Facility.

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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: August 03, 2011

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

TowerJazz Qualifies 0.13um SiGe Process at its Israeli Fab; Technology  
Successfully Transferred from its US Facility

Technology targeted at wireless RF and digital TV tuner applications, a combined  
>\$1B market

MIGDAL HAEMEK, Israel, August 3, 2011 –TowerJazz, the global specialty foundry leader, today announced its 0.13um SiGe technology (SBL13) has been successfully transferred to its Migdal Haemek (MH), Israel fab from its Newport Beach, CA facility. The company has completed the internal qualification of a heavily analog 0.13um SiGe flow adding a copper (Cu) backend in MH. The technology is targeted at the >\$1B combined wireless RF and digital TV tuner markets where higher performance, lower cost and higher digital integration are required. TowerJazz has won SBL13 customers that are now taking advantage of the Cu back-end offered in the Israeli facility and expects volume to ramp in Israel in the first half of 2012.

TowerJazz's SBL13 process is well-suited for WLAN transceivers, cell phone transceivers, and TV tuners. By combining SiGe bipolar performance with a mature 130nm CMOS copper backend, it enables high performance RF with more integrated digital logic. It also allows the design of complex baseband and demodulator functions at less than one-half the die size of a 0.18um process. A 100GHz SiGe bipolar device enables integration of low-noise and low-power RF and a high voltage SiGe device enables integration of power amplifiers and drivers.

The SBL13 process includes three NPN transistors with 40GHz, 74GHz and 100GHz Ft as well as high density passive elements such as high-density MIM capacitors and 3um thick copper inductors. 130nm CMOS with copper metallization achieves digital logic densities of up to 200K gates/mm<sup>2</sup> to result in higher performance and more highly integrated RF products.

“We are excited about the successful transfer of our 0.13um SiGe technology to our Migdal Haemek fab and the addition of a copper back-end. This helps extend our leadership in SiGe technology and provides a unique multi-fab SiGe sourcing capability for our customers,” said Dr. Marco Racanelli, Senior VP and General Manager, RF and High Performance Analog Business Group, TowerJazz. “Providing a 0.13 SiGe process with a Cu backend is important for applications that require high levels of integration and our customers are very pleased with the rapid deployment of this platform.”

#### 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, 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](http://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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