

TOWER SEMICONDUCTOR LTD

Form 6-K

August 26, 2014

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month August 2014 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 August 26, 2014, the registrant announces qualifying an Additional Factory to Support its
Rapidly Growing Customers' Demand for RF Front-End Modules

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 26, 2014

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

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz Qualifies an Additional Factory to Support its Rapidly Growing Customers' Demand for RF Front-End Modules

Market research firm, Mobile Experts forecasts RF front-end component market size to reach \$8.9B in 2014, rising rapidly to over \$13B in 2018

MIGDAL HAEMEK, Israel, August 26, 2014 – TowerJazz (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader, announced today that it has qualified Migdal HaEmek (Fab 2) capacity for RF SOI switch and bulk CMOS controller process platforms to augment its existing factory in Newport Beach, CA and support the growing demand for RF front-end modules. The move has more than doubled the company's total wafer capacity for these technologies while providing flexible dual sourcing capability to its customers. To date, over 30 products have been taped out to Migdal HaEmek and initial wafer production has begun. The product pipeline remains strong and is now feeding both of these factories. The R&D effort has also been expanded with an R&D team established at each site to take advantage of local talent accelerating the roadmap and ensuring TowerJazz continues to provide its customers a technology advantage in addition to increased supply flexibility.

TowerJazz's SOI technology (CS18) offers industry leading insertion loss, isolation and harmonics necessary to support current and future generations of RF products. CS18 together with its CMOS controller technology (CA18) also offer enabling features such as dense digital libraries, MIM capacitors, inductors, multiple resistors, eFuse, and best in class process design kits (PDKs) to ensure first-time success.

Mobile Experts, a market research firm for mobile communications, forecasts the RF front-end component market size to reach \$8.9 billion in 2014, rising rapidly to over \$13 billion in 2018. Rapid proliferation of smartphones along with increasing RF data paths per phone is primarily driving this exceptional market growth. TowerJazz's high performance RFCMOS (both bulk and SOI) and SiGe BiCMOS technologies are ideally suited to benefit from this global trend.

“Seemingly insatiable demand for RF silicon content in smartphones and Internet of Things (IoT) enabled devices is fueling the demand for our RF technologies and we are excited to meet this growing demand by opening an additional factory to this product line,” said Dr. Marco Racanelli, Sr. VP & GM of TowerJazz's RF/High Performance Analog Business Group. “We continue to invest heavily in R&D efforts. Having established a second RF R&D team in Migdal HaEmek allows us to provide leap frog technology platforms in accelerated time lines. The qualification of an additional site for wafer production has not only doubled our manufacturing capacity, but also added regional diversity for customer assurance and business continuity planning. Two site development and manufacturing also enables quick and seamless production ramp of the locally developed platforms.”

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its fully owned U.S. subsidiary Jazz Semiconductor, Inc. operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits, offering a broad range of customizable process technologies including: SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management (BCD & 700V), and MEMS. TowerJazz also provides a world-class design enablement platform for a quick and accurate design cycle as well as Transfer Optimization and development Process Services (TOPS) to IDMs and fabless companies that need to expand capacity.

To provide multi-fab sourcing and extended capacity for its customers, TowerJazz operates two manufacturing facilities in Israel (150mm & 200mm), one in the U.S. (200mm) and three additional facilities in Japan (two 200mm and one 300mm) through TowerJazz Panasonic Semiconductor Co. (TPSCo), established with Panasonic Corporation of which TowerJazz has the majority holding. Through TPSCo, TowerJazz provides leading edge 45nm CMOS, 65nm RF CMOS and 65nm 1.12um pixel technologies. 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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