TOWER SEMICONDUCTOR LTD
Form 6-K
March 20, 2017

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month March 2017 No.3

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 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 March 20 2017, the Registrant Announce H5: a Leading 300GHz SiGe Technology Optimized for 400GbE Communications

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 20, 2017 By: /s/ Nati Somekh
Name: Nati Somekh
Title: Corporate Secretary

NEWS ANNOUNCEMENT FOR IMMEDIATE RELEASE

TowerJazz Announces H5: a Leading 300GHz SiGe Technology Optimized for 400GbE Communications

TowerJazz augments its Advanced SiGe Terabit Platform and announces initial 400GbE design wins with Broadcom addressing next-generation data communications in networks and data centers

MIGDAL HA'EMEK, Israel and NEWPORT BEACH, Calif., March 20, 2017— TowerJazz, the global specialty foundry leader, today announced availability of H5; a leading 300GHz SiGe process optimized for 400Gbps optical communications (or 400GbE) which promise to quadruple the capacity of even the fastest links deployed today at 100Gbps, carrying the world's internet data traffic through networks and in data centers. Wireline data traffic is increasing dramatically, and TowerJazz addresses this growing market through a family of customized advanced foundry silicon-germanium (SiGe) BiCMOS technologies, including its highest performance process to date, H5. In this process, enhancements include increased device Ft and Gm as well as other "proprietary features" to address the 400GbE product space.

Customers can quickly migrate existing products to H5 as layouts are virtually identical to prior generations of technology. H5 can help reduce power consumption in lower data-rate products or boost data rates to address newer standards. TowerJazz works closely with its customers and tailors its roadmaps to meet their next-generation needs. As such, TowerJazz has worked with leaders in the market to optimize technology for the 400GbE era and already has key design wins in this space, such as Broadcom, a leading designer, developer and global supplier of a broad range of digital and analog semiconductor connectivity solutions.

"TowerJazz's SiGe technology has enabled us to successfully deliver high performing optical ICs across multiple market segments and applications, including 400GbE data center interconnects," said Dr. Faouzi Chaahoub, Senior Director of Fiber Optic Products Division at Broadcom Limited.

"We strongly value our collaboration with Broadcom in this market and continue to invest aggressively in high-speed SiGe to support all of our customers' next-generation requirements," said Dr. Marco Racanelli, Sr. Vice President and General Manager of RF & High Performance Analog Business Unit, TowerJazz. "SiGe has become the technology of choice for front-end components in high-speed data communications, a market that continues to promise new and exciting opportunities for TowerJazz and our customers."

SiGe Terabit Platform – HX, H2, H3, H4, H5

The TowerJazz SiGe Terabit Platform includes advanced CMOS, together with low-noise, high-speed, and high power SiGe devices and unique patented features that enable best-in-class performance for the most demanding ICs in high-speed communication links. These components include, for example, trans-impedance amplifiers (TIAs) on the receive path and laser drivers on the transmit path. The addition of H5 to the SiGe Terabit Platform extends a rich history of process technologies that include HX and H2 (addressing 10 to 28Gbps requirements), H3 with SiGe speeds of 280GHz (addressing requirements up to 100Gbps), and now H4 and H5 with transistor speeds that exceed 300GHz and can reduce power consumption by nearly an order of magnitude.

About TowerJazz
Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its fully owned U.S. subsidiaries Jazz Semiconductor, Inc. and TowerJazz Texas 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 and 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 and 200mm), two 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, including the most advanced image sensor technologies. For more information, please visit www.towerjazz.com or www.tpsemico.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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