TOWER SEMICONDUCTOR LTD Form 6-K March 16, 2016

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month March 2016 No. 1

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 x Form 40-F o

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 o No x

On March 16, 2016 the Registrant Announces they Participates at APEC 2016, Showcases Expansion of Power Technology Offering in Automotive Market

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 16, 2016 By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate

Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz Participates at APEC 2016, Showcases Expansion of Power Technology Offering in Automotive Market

Automotive semiconductor growth forecast to be at 9.4% CAGR between 2012 and 2017; Main market drivers are electronic content and applications growth in vehicles

MIGDAL HAEMEK, Israel and TONAMI, Japan, March 16, 2016 – TowerJazz, the global specialty foundry leader, announced today it will participate at APEC (the Applied Power Electronics Conference) on March 21-23, 2016 in Long Beach, Calif. (booth #1521) and will provide presentations to showcase its power technology offering in the automotive market. APEC is the premier power management conference attended by semiconductor companies from around the world. The forum provides TowerJazz with a platform to educate its customers and potential customers on the latest advances and developments in its power technology.

TowerJazz will be highlighting an expansion of its 60V 0.18-micron power platform for automotive applications. Through TowerJazz Panasonic Semiconductor Co. (TPSCo), the company has a long history of more than 20 years of automotive semiconductor manufacturing. With TowerJazz's 0.18-micron power management technology qualified in TPSCo's Japan fab, the company has two manufacturing sites for power technology available to its customers. TowerJazz supports grade 0 and grade 1 AEC-Q100 qualification requirements. Further expansion in automotive markets will continue in the 60V BCD 0.18-micron technology and will include future development of its power SOI technology allowing operation up to 200V. Currently, TowerJazz is participating in the Japanese and North American automotive markets with production in Israel.

Automotive semiconductor growth is forecasted to be at 9.4% CAGR between 2012 and 2017 by WSTS and PwC. Besides the vehicle unit growth, the main market drivers for automotive semiconductor growth are electronics content and applications growth in vehicles.

"TowerJazz is well positioned in the growing automotive semiconductor market with its power technology offering in two manufacturing sites to serve customers with needs for high quality and dual sourcing. We are focused on expanding our power technology offering for the automotive market by continuing developments such as an SOI technology that will maintain high-quality while operating in rugged environments such as those found in automotive and other markets," said Dr. Marco Racanelli, Senior Vice President and General Manager of Power, RF/HPA and Aerospace & Defense Business Units.

TowerJazz is exhibiting at APEC in booth #1521 and will provide presentations in its booth on March 21, 2016 at 6:30pm and March 22, 2016 at 2:00pm. Attendees who participate in these presentations will receive a prize giveaway after each event. For more information on TowerJazz's power management platform, please contact: Marijana.Vukicevic@towerjazz.com.

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 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 the businesses of Tower, Jazz, and/or Maxim is included under the heading "Risk Factors" in (i) 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, (ii) Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC, and (iii) Maxim's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC. These forward-looking statements speak only as of the date hereof. Tower, Jazz, and Maxim do not intend to update, and expressly disclaim any obligation to update; the information contained in this release except as may be required by law.

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