
FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month August 2018 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 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 21, 2018, the Registrant Announces Participation at ECOC
in Rome, Italy Showcasing its SiGe and Silicon Photonic Process Solutions
for 100 to 400Gb/s Optical Data Links

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 21, 2018

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary



The Global Specialty Foundry Leader

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz to Showcase SiGe and Silicon Photonic Process Solutions for 100 to 400Gb/s Optical Data Links at ECOC in Rome, Italy

Opportunity to meet key TowerJazz technical experts and learn what technology will shape the future of high speed optical links

MIGDAL HAEMEK, Israel, August 21, 2018 – TowerJazz, the global specialty foundry leader, today announced its participation at the 44th European Conference on Optical Communication (ECOC) being held in Rome, Italy on September 23-27, 2018. The Company will showcase its advanced SiGe (Silicon Germanium) process, with speeds in excess of 300GHz, and its newest production SiPho (Silicon Photonics) process built into data center high-speed optical data links.

TowerJazz has a significant foundry share of the 100Gb/s transceiver market served by its SiGe Terabit Platform and will showcase even higher SiGe transistor speeds and patented features appropriate for 200 and 400Gb/s communication ICs such as transimpedance amplifiers (TIAs), laser and modulator drivers, and clock and data recovery circuits.

TowerJazz's SiPho production platform enables high bandwidth photo diodes, together with waveguides and modulators, with a roadmap to allow InP components on the same die and permit a high-level of optical integration for next-generation data center optical links. An open design kit is available to all customers and supported by prototyping and shuttle runs.

To set up a meeting or see a demo with TowerJazz technical experts at the TowerJazz ECOC booth (#569), or for more information, please [click here](#) or inquire at: info@towerjazz.com.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its subsidiaries operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures next-generation integrated circuits (ICs) in growing markets such as consumer, industrial, automotive, medical and aerospace and defense. TowerJazz's advanced technology is comprised of a broad range of customizable process platforms such as: SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management (BCD and 700V), and MEMS. TowerJazz also provides world-class design enablement 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 facilities in Japan (two 200mm and one 300mm). 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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