TOWER SEMICONDUCTOR LTD
Form 6-K
December 23, 2015

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month December 2015 No. 4

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 December 23, 2015 the Registrant Announces New Interoperable Process Design Kit for Keysight Technologies ADS on TPSCo's Advanced 65nm RF CMOS Platform

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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: December 23, 2015

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

NEWS ANNOUNCEMENT FOR IMMEDIATE RELEASE

TowerJazz Announces New Interoperable Process Design Kit for Keysight Technologies ADS on TPSCo's Advanced 65nm
RF CMOS Platform

Targets WiFi, Tx/Rx, cell phone, tuner, and automotive radar markets, allows mutual customers to improve design efficiency and realize first time to market

MIGDAL HAEMEK, Israel and UOZU CITY, TOYAMA, Japan, December 23, 2015 – TowerJazz, the global specialty foundry leader, today announced that TowerJazz Panasonic Semiconductor Co. (TPSCo), working with Keysight Technologies, has developed an Advanced Design System (ADS) interoperable PDK (process design kit), as well as a calibrated Momentum module deck on TPSCo's advanced 65nm RF CMOS platform to allow mutual customers to improve design efficiency and realize first time to market. The new interoperable PDK targets various applications such as WiFi, Transmitters/Receivers (Tx/Rx), cell phones, tuners, and automotive radar, among others.

The new ADS interoperable PDK allows designers to edit their designs in both ADS and Cadence Virtuoso using a single database without any interference. It greatly improves design efficiency and enables designers to maintain what they consider to be the "best of breed" tool for their design environment. Also, the well-calibrated Momentum deck has been added to this TPSCo's Advanced RFCMOS platform to run a very accurate electromagnetic simulation to validate overall performance. TPSCo and Keysight customers will have access to LNA reference designs to demonstrate the ADS interoperable PDK.

"By providing the new interoperable PDK, we can offer our customers a unified environment that supports both the Virtuoso and ADS platforms," said Tomoyuki Sasaki, Chief Technology Officer, TPSCo. "The first interoperable PDKs will be available for our 65nm RF CMOS platform, which is widely used for cellular and WiFi antenna switches in mobile phones, as well as automotive radar and many other applications. Further collaborations with Keysight for the RF design environment will include a mmWave technology platform that we have developed at TPSCo."

"TPSCo customers can now access Keysight EEsof EDA ADS dedicated RF design flow tools based on a standard Virtuoso PDK," said Volker Blaschke, Silicon RFIC product marketing manager, Keysight EEsof EDA. "The new interoperability feature facilitates the design process by using a single design data library for ADS and Virtuoso, removing redundancy of having to keep the design across the two EDA environments in sync. By including the Momentum substrate with the interoperable ADS PDK, the designer can perform an EM co-simulation on a layout, partitioned between circuit Spice models and interconnect structures for EM simulation. The combination of the interoperable PDK and validated EM substrate file unlocks the full potential of an RF-aware design process that reduces time-to-market by enabling silicon accurate designs."

For more information on the Silicon RFIC Interoperability available in Keysight ADS, please visit http://www.keysight.com/find/eesof-rfic-design.

About TowerJazz Panasonic Semiconductor Co.
TowerJazz Panasonic Semiconductor Co., Ltd. (TPSCo) was established by Panasonic Corporation (NASDAQ ADS: PCRFY, TYO: 6752), 51% of which was acquired by Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and 49% of which is now held by Panasonic Semiconductor Solutions Co., Ltd. TPSCo has three manufacturing facilities in Hokuriku, Japan which have been producing large scale integrated circuits for over 30 years. Areas of process technology focus include: high dynamic range image sensors (CIS and CCD), integrated power devices (BCD,

SOI, and LDMOS) and high frequency silicon RFCMOS. With over 120 qualified silicon process flows on 200mm and 300mm wafers from super micron to 45nm as well as internal back end processing, assembly and test services, TPSCo provides both IDMs and fabless companies with unparalleled semiconductor manufacturing quality and technology, including in-house turnkey services. For more information, please visit https://www.tpsemico.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. For more information, please visit www.towerjazz.com.

To provide multi-fab sourcing and extended capacity for its customers, TowerJazz operates two manufacturing facilities in Israel (150mm and 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, including the most advanced image sensor technologies. For more information, please visit 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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