

TOWER SEMICONDUCTOR LTD

Form 6-K

March 10, 2011

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FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of March 2011 No. 3

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  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

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On March 10, 2011, the registrant announces TowerJazz Demonstrates advanced design enablement offerings at DATE 2011

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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: March 10, 2011

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

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz Demonstrates Advanced Design Enablement Offerings at DATE 2011

Focused on power management and RF/high performance analog technologies

MIGDAL HAEMEK, Israel and NEWPORT BEACH, Calif., March 10, 2011 – TowerJazz, the global specialty foundry leader, announced it will demonstrate its advanced design enablement offerings focused on its power management and RF/HPA (high performance analog) process technologies at the 2011 Design Automation and Test in Europe (DATE) conference. TowerJazz has qualified design flows for its analog/mixed-signal 180nm power management process with several electronic design automation (EDA) vendors including: Agilent Technologies, Cadence Design Systems, Synopsys, Magma Design Automation, Mentor Graphics, and Tanner EDA. TowerJazz will be providing demonstrations with all of these vendors at DATE on March 15-17, 2011 in Grenoble, France. In addition, experts will be available to discuss TowerJazz's process technology and roadmaps.

TowerJazz provides design kits, IPs and dedicated design services that enable its customers with a quick and accurate design cycle and the best chance for first-time working silicon. TowerJazz has focused its latest design enablement efforts in the emerging power management (PM) area as well as the RF/HPA areas to provide design enablement platforms that complement its advanced technologies. These include custom and unique design tools such as X-Sigma, PCM based modeling, inductor and transmission line synthesis tools that help customers reduce design time and cost.

Specifically, TowerJazz has introduced new technology initiatives to an existing power market that have been widely accepted by its customers. Beyond supporting all the devices of the basic, isolated, and 700V PM platforms, the PDK includes add-ons such as thick top Cu (3.3um) metal for high currents and an add-on layer for 15% Rdson reduction which helps reduce die cost. The designer can also choose between a single gate (5V) and a dual gate (1.8V/5V) option, based on the digital content of the design. This enables the customer to choose whichever option they prefer, functionality vs. cost. TowerJazz also enabled many power IPs including 5V only standard cell, its unique patented NVM solution called Y-Flash, and IO libraries with Si proven ESD.

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Recently, TowerJazz announced the release of its 0.18um power management EPI platform design kit. The kit is an extension of its successful TS18PM platform which includes the industry's only scalable Rds(on) versus breakdown voltage LDMOS which enables 10-40% smaller die sizes and faster design cycle times. Another benefit is that it meets the strong noise isolation required by today's leading power management products.

TowerJazz has also expanded its offering in the RF/HPA product line by enabling an industry leading 250GHz modular platform, allowing existing SiGe BiCMOS customers to re-use their IP and migrate existing designs to lower power or higher-speed versions, or to design new products leveraging the high-speed of a SiGe bipolar device. In addition, TowerJazz released a PDK for a low cost version of its 0.18um SiGe BiCMOS process (SBL18), a Transmission-line-toolbox, Cadence IC6.1 and Agilent ADS versions of the SBC18 PDK. These are enabling its customers to design new products at reduced design time and cost.

A new 0.13um SiGe BiCMOS (TSBL13) PDK is now available with Cu back-end, enabling a 0.13um SiGe NPN to be integrated with RF CMOS functions. This offering is further enriched via the development of several meaningful IP blocks. Finally, TowerJazz licensed Kilopass' One-Time Programmable Non-Volatile Memory (OTP NVM) and ARM's Low Power Libraries, among others, for its 0.13 SiGe BiCMOS and 0.13um RF CMOS platforms.

"We have the infrastructure to enable our customers the best technology coupled with modular design kits, proven reference flows, custom design and porting tools that provide unmatched flexibility in choosing their EDA & IP vendors," said Ori Galzur, Vice President of Design Center and PDK Development. "Additionally, our wide variety of IPs enables our customers to concentrate on their design core and enjoy a clean and easy IP integration."

TowerJazz will be exhibiting at DATE (booth 13) and demonstrating its reference flows with EDA vendors: Agilent, Cadence, Synopsys, Magma, Mentor Graphics, and Tanner EDA.

#### About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide world-class customer service, TowerJazz maintains two manufacturing facilities in Israel and one in the U.S. with additional capacity available in China through manufacturing partnerships. For more information, please visit [www.towerjazz.com](http://www.towerjazz.com).

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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 Tower and/or Jazz'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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