TOWER SEMICONDUCTOR LTD

Form 6-K September 02, 2014

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month September 2014 No. 1

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.

Yeso Nox

On September 2, 2014, the registrant and Triune Systems Announce Neo-IsoTM Products Ramping to Mass Production

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: September 2, 2014 By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz and Triune Systems Announce Neo-IsoTM Products Ramping to Mass Production

Neo-IsoTM enables HVAC and home automation systems to reduce form factor, increase reliability and reduce cost

Home Automation Market expected to reach \$16.4 billion by 2019, growing at a CAGR of 24.6% from 2014 to 2019

NEWPORT BEACH, Calif. and RICHARDSON, Texas, September 2, 2014 – TowerJazz, the global specialty foundry leader, and Triune Systems LLC, a mixed signal and power management IC provider, today announced that Triune has developed a proprietary isolated power and data technology using the TowerJazz TS18PM process on its state of the art 0.18um based power management platform. This innovative technology is showcased in Triune's Neo-IsoTM products, two isolated load switches currently ramping to volume production; TS13001 and TS13101. According to a report published by Transparency Market Research, the home automation market is expected to reach \$16.4 billion by 2019, growing at a CAGR of 24.6% from 2014 to 2019.

Triune's TS13001 and TS13101 are galvanically isolated load switches that replace mechanical relays in HVAC, home automation, and industrial control systems. The products are low-profile switches with low Rdson, have current limit and fault protection circuitry, and are easily controlled through a simple microcontroller interface. The level of galvanic isolation can be scaled from 100V to 10kV, based on the needs of the system. Device options include both a non-latching TS13001 and latching TS13101 device for replacing most relay applications. These products enable next generation home automation systems that are thin, compact, portable and reliable.

"We developed this unique and innovative isolated technology with TowerJazz because they offered the best process for our needs," said Ross Teggatz, President of Triune Systems. "Our Neo-IsoTM technology further leverages TowerJazz's processes to provide truly unique solutions that can drive exciting and differentiated home automation applications, and we look forward to developing several new products based on this technology."

"Triune has been a strong partner and we are excited to see innovative products such as the Neo-Iso™ isolated load switches introduced on our power management platform," said Dr. Marco Racanelli, Senior Vice President of Power Business Group, TowerJazz. "Working with customers like Triune that push performance and innovation boundaries is what helps us bring to market best-in-class process technology. Our latest 0.18um power management platform combines some of the industry's lowest on-resistance high voltage devices, with 0.18um digital capability and non-volatile memory, serving the consumer, industrial, and automotive markets."

About Triune Systems

Triune Systems (www.triunesystems.com) is a semiconductor company based in Richardson, TX, that specializes in analog and mixed-signal integrated circuit solutions for power management, wireless charging, isolated switching, battery management, energy harvesting and critical function, high-reliability applications. With a focus on innovation and customer support, the company enables its partners in the consumer electronics, solar power, medical products, industrial, automotive and defense industries to provide more energy efficient solutions for a secure and sustainable world. Learn how Triune's differentiated technology can power your next generation products at www.triunesystems.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), 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. 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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