

TOWER SEMICONDUCTOR LTD

Form 6-K

April 03, 2014

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month April 2014 No. 2

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 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 April 3, 2014, the registrant announced Crocus Technology and TowerJazz qualify CTSX magnetic sensors; volume manufacturing launched

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: April 3, 2014

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

Crocus Technology and TowerJazz qualify CTSX magnetic sensors; volume manufacturing launched

Selected customers will be able to sample Crocus' family of CTSX magnetic sensors that enable high-performance low-cost solutions for multiple consumer and industrial applications

GRENOBLE, France, and MIGDAL HAEMEK, Israel, April 3, 2014 - Crocus Technology, a leading developer of magnetically enhanced semiconductor technologies and TowerJazz, the global specialty foundry leader, today announce that Crocus' CTSX magnetic field sensor family has completed qualification. The CTSX magnetic sensor product family includes CTSX100, 200 and 300 series. They are based on Crocus' proprietary Magnetic Logic Unit™ (MLU) technology and are ready for shipping to selected customers.

TowerJazz, Crocus' strategic manufacturing partner, qualified the sensor products on its 130nm CMOS process. TowerJazz will fabricate the CTSX product family and offer the new highly-advanced developed sensors to its customers.

Crocus developed the CTSX magnetic sensors to respond to market demand for high sensitivity and low-cost solutions in multiple applications.

“The magnetic sensor market is expected to surpass USD 2 billion by 2015. Crocus' introduction of the CTSX magnetic sensor product family targeting a wide range of market segments is a further example of the strength and far-reaching capabilities of our MLU technology that spans security, embedded memory applications and now sensors,” said LJ. Ristic, VP and general manager of the Sensor Business Unit at Crocus Technology. “No other MRAM technology can address multiple markets the way the Crocus' MLU technology does.”

The CTSX product family offers several important advantages; including proprietary differential programming, high sensitivity, high linearity, excellent frequency response and low power. These are key drivers for enabling high performance and low cost solutions. The CTSX product family is suitable for switching, current sensing, position sensing, as well as rotation and speed sensing; addressing the needs of multiple market segments. These markets cover consumer, industrial and process control, energy and transportation segments. In addition, the CTSX magnetic sensor family provides highly reliable performance over a wide temperature range up to 250 degrees Celsius, unmatched by competing products. This makes them a frontrunner for automotive applications.

“TowerJazz's qualification of Crocus' new CMOS based magnetic sensors will enable us to offer highly-advanced and competitive embedded-solutions to multiple customers in various markets, such as consumer electronics, industrial and automotive among others,” said Zmira Shternfeld-Lavie, VP of TOPS Business Unit and R&D Process Engineering. “We are excited about bringing this technology to volume production this year and pioneering multiple embedded magnetic sensors solutions for the foundry marketplace.”

The CTSX magnetic sensor product family includes multiple architectures, which are based on Crocus' Magnetic Logic Unit™ (MLU), a disruptive CMOS-based rugged magnetic technology. This enables Crocus' magnetic sensors to exhibit several orders of magnitude of higher sensitivity. Benefits to customers come in the form of low power, a robust design and high temperature performance.

About Crocus Technology

Crocus Technology is a leading developer of magnetically enhanced semiconductor technologies for mobile security, embedded microcontrollers, harsh environment electronics and magnetic sensors. Crocus has pioneered Magnetic

Logic Unit™ (MLU), a disruptive CMOS-based rugged magnetic technology. MLU offers important advantages in high speed, security and robust performance at lower cost for its broadening portfolio of embedded products and non-volatile memory blocks. It licenses its MLU architecture to TowerJazz and other foundries for integration in production processes. Crocus is gearing up to market standalone, tamper-resistant MLU-based microcontrollers it is developing with IBM. These fast read and write small footprint MLU products enhance the performance and security of chips for smart cards, mobile phones and data servers. Crocus has begun shipping to selected customers its magnetic sensor products that bring high sensitivity, low-noise, low-cost and high temperature performance (250 degrees Celsius) for consumer and industrial applications.

Founded in 2004, Crocus is led by a senior management team with high-level industry experience forged in Motorola, AMD, Intel, Texas Instruments and Gemalto. It has US operations in Santa Clara, California, and offices in Grenoble and Rousset, France. It jointly owns Crocus Nano Electronics, a Russian-based advanced magnetic semiconductor manufacturing facility, with investment firm Rusnano. For more information: <http://www.crocus-technology.com>

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), its fully owned U.S. subsidiary Jazz Semiconductor Inc., and its fully owned Japanese subsidiary TowerJazz Japan, Ltd., 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, RFCMOS, CMOS Image Sensor, Power Management (BCD), and MEMS capabilities. TowerJazz also provides a world-class design enablement platform that enables a quick and accurate design cycle. In addition, TowerJazz provides (TOPS) Technology Optimization Process Services to IDMs and fabless companies that need to expand capacity. TowerJazz offers multi-fab sourcing with two manufacturing facilities in Israel, one in the U.S., and one in Japan. For more information, please visit www.towerjazz.com.

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Crocus Technology

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