TOWER SEMICONDUCTOR LTD
Form 6-K
September 27, 2017

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month Sept 2017 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 September 27 2017, the Registrant Announce TowerJazz and Crocus Expand Presence in Magnetic Sensors Market through Successful Licensing of Crocus' IP and Volume Manufacturing by TowerJazz

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 27, 2017 By: /s/ Nati Somekh
Name: Nati Somekh
Title: Corporate Secretary

NEWS ANNOUNCEMENT FOR IMMEDIATE RELEASE

TowerJazz and Crocus Expand Presence in Magnetic Sensors Market through Successful Licensing of Crocus' IP and Volume Manufacturing by TowerJazz

Crocus TMR sensors offer important advantages for multiple applications in IoT, consumer, automotive, industrial and
medical sectors

MIGDAL HAEMEK, Israel and SANTA CLARA, Calif., September 27, 2017 TowerJazz, the global specialty foundry leader, and Crocus, a leading developer of TMR magnetic sensor technology and embedded MRAM, today announce volume manufacturing of Crocus TMR (Tunnel MagnetoResistance) sensors, using TowerJazz's 0.13um CMOS process with a dedicated magnetic module in the Cu BEOL. With Crocus' magnetic process, know-how and IP, and TowerJazz's process technology and integration expertise, Crocus has successfully licensed the TMR technology to an automotive Tier 1 customer, bringing increased business to both companies.

According to a 2016 MarketsandMarkets report, the overall magnetic field sensors market was valued at USD $2.25 billion in 2015 and is expected to reach S4.16 billion by 2022, at a CAGR of 8.87% between 2016 and 2022. The growth of this market is driven by the rising demand for MEMS-based sensors across industry verticals, surge in the automotive industry, increasing demand for high-quality sensing devices, and continuous growth in consumer electronics applications.

Magnetic transducers which sense magnetic field strength are widely used in modern industry and electronics to measure current, position, motion, direction, and other physical parameters. Crocus' TMR technology is a CMOS-based, robust technology capable of offering important advantages in sensitivity, performance, power consumption, size and full integration with CMOS to create monolithic single die ICs. Benefits to customers come in the form of low power, a robust design and high temperature performance. Crocus TMR solutions are ideally suited for many applications ranging from IoT to consumer, medical, automotive and industrial equipment.

"We selected TowerJazz because of their high flexibility and capabilities to adapt their TS13 platform to incorporate our TMR technology which includes magnetic materials that are typically not used in CMOS. TowerJazz's vast manufacturing expertise is enabling us to successfully fulfill the needs of several market sectors combined with increased performance required in next-generation sensors. TowerJazz has been our development partner for many years and together we have achieved technology maturity leading to expanded business and successful licensing of Crocus IP," said Michel Desbard, Crocus CEO.

"As the demand for IoT applications in our daily life is ever-increasing, there is an even greater need for intelligent sensing, low power and improved performance. Crocus' successful licensing of their IP, along with TowerJazz's manufacturing capability and know-how, enables us to deliver highly-advanced and competitive embedded-solutions to multiple customers in various markets. Through our partnership with Crocus, we are broadening our presence in the sensors' market, complementing our MEMS and image sensing programs," said Zmira Shternfeld-Lavie, VP of TOPS BU and R&D Process Engineering."

Crocus's TMR magnetic sensor is expected to displace existing sensor technologies in many applications. Crocus' TMR magnetic sensor product family includes multiple architectures which are based on its Magnetic Logic Unit™ (MLU™), a disruptive CMOS-based rugged magnetic technology.

About Crocus Technology

Crocus Technology develops and supplies magnetics sensors and embedded memory solutions based on its patented TMR-based sensor technology, Magnetic Logic Unit™ (MLU™). Crocus' magnetic sensors bring significant advantages to the industrial and consumer electronic applications requiring high sensitivity, stable temperature performance, low power and low cost. MLU also enables high speed, lower power, and endurance to embedded memory solutions aimed at consumer electronics. Crocus in headquartered in Santa Clara, California, and has offices in Grenoble, France. For more information, please visit http://www.crocus-technology.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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