TOWER SEMICONDUCTOR LTD

Form 6-K January 29, 2014

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of January 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 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 January 29, 2014, the registrant announced TowerJazz Awarded Five-Year Multi-Million Dollar Foundry Improvement and Sustainability Program in Partnership with US Air Force. Attached please find the press release.

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: January 29, 2014 By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

TowerJazz Awarded Five-Year Multi-Million Dollar Foundry Improvement and Sustainability Program in Partnership with US Air Force

Technology Investment Agreement focused on support of Air Force's Large Die ROIC Program and continued improvements for TowerJazz's US facility

NEWPORT BEACH, Calif., – January 29, 2014 – TowerJazz has announced the award and program kick-off of a Technology Investment Agreement (TIA) with the United States Air Force/Air Force Research Laboratory (USAF/AFRL) of the Wright-Paterson Air Force Base. The Defense Production Act Title III program is a five-year multi-million dollar Large Format Read Out Integrated Circuit (ROIC) Foundry Improvement and Sustainability program focused on continued technology and manufacturing leadership and improvements for TowerJazz's Newport Beach, CA wafer fabrication facility in support of TowerJazz's overall aerospace and defense offering and customers. TowerJazz is a leading manufacturer of state-of-the art ROICs which are key elements in many commercial and military detectors, sensors, and imaging systems spanning air, land, sea and space. This award will enhance TowerJazz's ability to support production requirements of increasingly complex future ROIC designs.

TowerJazz continues to expand CMOS production for ROICs used in imaging arrays in both un-cooled and cooled applications in support of increased demand spanning 0.5-micron to 0.18-micron technology nodes. The five year program with the Title III Office will focus on the most advanced 0.18-micron CMOS process based large-die, stitched ROICs. In the 0.18-micron node, TowerJazz is making available to its ROIC customers its 1.8V/3.3V or 1.8V/5V dual gate oxide processes in a variety of substrate options such as bulk, epi and thick film SOI and with a wide range of desirable mixed-signal features from its commercial technology including high density linear MIM capacitors, precision resistors with triple well isolation and bipolar elements. TowerJazz also provides cryogenic models for its devices ensuring a high degree of confidence in the first time success of cooled ROIC designs.

TowerJazz operates a full on-shore facility with ITAR mask suppliers continuing a tradition started over 20 years ago when this facility was the primary semiconductor manufacturing site for Rockwell International. In addition to supporting the manufacture of ITAR designs, TowerJazz is now also able to offer Trusted Solutions through Jazz Semiconductor Trusted Foundry.

"TowerJazz is extremely excited to have this opportunity to partner with Wright-Patterson AFB in support of the Air Force's Large Die ROIC foundry improvement and sustainability program. This program will leverage past and ongoing accomplishments at TowerJazz in support of on-shore fabrication critical to our National Defense and assist in enabling the next generation of essential Aerospace and Defense applications," said Mike Scott, Director, USA Aerospace and Defense Division, TowerJazz.

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) Transfer Optimization and development 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.

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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