TOWER SEMICONDUCTOR LTD Form 6-K July 19, 2016

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month July 2016 No. 4

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 orm 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 July 19, 2016, the Registrant and Audio Pixels Announce Agreement for Volume Production of Groundbreaking, High Performance MEMS-based Loudspeaker Chip

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: July 19, 2016 By:/s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary

NEWS ANNOUNCEMENT FOR IMMEDIATE RELEASE

Audio Pixels and TowerJazz Announce Agreement for Volume Production of Groundbreaking, High Performance MEMS-

based Loudspeaker Chip

Enables new device applications to exceed sound performance and design demands of world's consumer electronics, industrial and

medical device manufacturers

MIGDAL HAEMEK, Israel, July 19, 2016 — <u>Audio Pixels Ltd.</u>, the global leader in the digital transition of loudspeakers, announced today that it has chosen <u>TowerJazz</u>, the global specialty foundry leader, for the mass production of its first generation high performance MEMS-based loudspeaker chip. The silicon chip loudspeaker is expected to introduce an entirely new generation of groundbreaking device applications that exceed the sound performance specifications and design demands of the world's consumer electronics, industrial and medical device manufacturers.

TowerJazz was chosen as a manufacturing partner for Audio Pixels due to its superior MEMS technology, including particle free deep silicon etch technology and thick films with controlled low stress. TowerJazz is an ideal partner for this project due to its ability to move quickly from development to mass production while providing strong project support and insight from its vast experience in servicing large consumer electronics customers.

"TowerJazz has a dedicated team with the proven technology and design enablement capabilities to meet our advanced process requirements for high performance, quality and technological support for our revolutionary product," says Shay Kaplan, Audio Pixels Chief Scientist. "In addition, their demonstrated commitment to provide expansive capacity and multi-fab sourcing makes TowerJazz an ideal partner to augment our future mass production requirements."

Audio Pixels has taken sound reproduction down an evolutionary path similar to transition display technologies which have moved from large and bulky analog tube-based monitors to the slim digital flat panel hi-resolution displays of today. The company has developed a technological platform that generates sound waves directly from a digital audio stream using micro-electromechanical structures rather than conventional loudspeaker elements. The underlying Digital Sound Reconstruction (DSR) techniques allow for the production of a chip based audio loudspeaker that is smaller, thinner, clearer sounding, more power-efficient and far more compatible in meeting the demands of modern electronic manufacturing and devices. Audio Pixels is focused on producing a single type of MEMS-based silicon chip that can be used either as a standalone micro-speaker or cascaded in any multiples in order to achieve virtually any loudspeaker application.

TowerJazz provides world-class "Foundry MEMS Enablement" solutions which combine rapid implementation and ramp-up high volume production of both 150mm and 200mm MEMS manufacturing capabilities. "Audio Pixels' MEMS-based loudspeaker is expected to have a significant impact on the multitude of industries and applications that currently consume billions of analog loudspeakers," says Nachi Vofsy, Director of R&D at TowerJazz. "We are extremely pleased to be Audio Pixels' foundry of choice for MEMS manufacturing to address these vast market opportunities."

About Audio Pixels Ltd.

Audio Pixels Limited, founded in 2006, is a wholly owned subsidiary of Audio Pixels Holdings Limited, listed in Australia under the stock code of AKP (ADR's on NASDAQ International under the code ADPXY). Backed by exceptional multidisciplinary scientific research, design, and production capabilities, Audio Pixels has become a world leader in digital loudspeaker technologies. Audio Pixels' patented technologies employ entirely new techniques

to generate sound waves directly from a digital audio stream using micro-electromechanical structures (MEMS). Its revolutionary technological platform for reproducing sound enables the production of an entirely new generation of speakers that will exceed the performance specifications and design demands of the world's top consumer electronics manufacturers. For more information, visit www.audiopixels.com.au/.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its fully owned U.S. subsidiaries Jazz Semiconductor, Inc. and TowerJazz Texas 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), two 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, including the most advanced image sensor technologies. For more information, please visit www.towerjazz.com or <a href

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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