FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of March 2010 No. 3

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 March 02, 2010, the registrant announces Agreement with IC Design Education Center (IDEC) in Korea.

This Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

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: March 02, 2010

By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa Title: Corporate Secretary

TowerJazz Announces Agreement with IC Design Education Center (IDEC) in Korea

Enables Korean universities access to a broad range of technologies through multi-project wafer shuttles from foundry's Israeli-based facility

Agreement underscores Company's specialty technology leadership position and powerful customer momentum in Korea

MIGDAL HAEMEK, Israel, and DAEJEON, Korea, March 2, 2010 – TowerJazz, the global specialty foundry leader, today announced a agreement with Korea's IC Design Education Center (IDEC) to accelerate the country's specialty IC design expertise. Under the terms of the agreement, IDEC will provide Korean universities with access to a broad range of specialty process technologies from TowerJazz's MH fab through discounted multi-project wafer (MPW) shuttles. The agreement underscores TowerJazz's highly appreciated industry innovation, technology leadership, and growing customer momentum in Korea which includes engagements with C&S Technology, Cesign, Dongwoon, SemiHow, and others.

A cooperation ceremony was held in Korea on February 18, 2010 by IDEC and TowerJazz CEO, Russell Ellwanger with several professors from various leading universities. IDEC, established in 1995 with support from the Ministry of Commerce, Industry & Energy and major semiconductor companies, promotes projects for the purpose of national competitiveness by educating highly qualified design experts through support in Korean universities.

"Chip production in an academic environment can be challenging, but the MPW program offered by IDEC gives students the opportunity for actual design experience which is essential to their progress and future careers. By gaining access to the Company's world leading specialty technologies and interactions with their renowned technical staff, we can enable the students to accumulate abundant design experience and we can nurture highly qualified IC designers," said Dr. Chong-Min Kyung, IDEC Executive Director. "We are very pleased to work with TowerJazz to further advance Korea's academic R&D achievements."

Russell Ellwanger, TowerJazz CEO, explained the following, "Korea is a thriving region for technical and manufacturing innovation and will remain a center for future technological advancements. We feel that our collaboration with IDEC will be advantageous for the students by providing them practical and challenging experiences at an early stage in their career training and we will, as well, be extending the cooperation to include internships in our design center in Netanya, Israel to the top Ph.D. students of the several leading universities. We have been encouraged by the wide acceptance of our technical excellence and differentiation as measured by the continued and rising number of customer engagements in Korea, in which we are targeting several hundreds of millions of revenue over the coming years. This program is our way of early partnering with the next generation of Korean technical leadership. This, in turn, will have long term benefits to the students/universities, Korean industry, TowerJazz and overall Korean/Israeli relations."

About IDEC

IDEC has educated design experts in the non-memory IC field since it was established in 1995. IDEC has driven projects including providing foundry MPW services, distributing CAD tools for free or at a low cost, and holding lectures by the Korean government and Samsung Electronics, Hynix Semiconductor, Magnachip Semiconductor and Dongbu HiTek. These efforts led to the construction of an infrastructure to educate IC designers which is the basis to proceed to the IC industry as highly skilled experts.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: <u>TSEM</u>, TASE: TSEM), the global specialty foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide world-class customer service, TowerJazz maintains two manufacturing facilities in Israel and one in the U.S. with additional capacity available in China through manufacturing partnerships. For more information, please visit <u>www.towerjazz.com</u>.

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 Tower and/or Jazz'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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