FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of April 2011 No. 1

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 S

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 S

On April 04, 2011, the registrant announces it expected to nearly double production capacity with proposed acquisition of Micron Technology wafer manufacturing plant in Japan

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 04, 2011 By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa Title: Corporate Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz Expected to Nearly Double Production Capacity with Proposed Acquisition of Micron Technology Wafer Manufacturing Plant in Japan

8-inch Fab to Support TowerJazz's Target to Achieve \$1 Billion Yearly Revenue

MIGDAL HAEMEK, Israel and BOISE, Idaho, April 4, 2011 – TowerJazz, the global specialty foundry leader, announced today it has signed a non-binding term sheet contemplating its purchase of Micron Technology's fabrication facility in Nishiwaki City, Hyogo, Japan. The proposed purchase would nearly double TowerJazz's current internal manufacturing capacity, cost-effectively increasing production by 60,000 wafers per month. The availability of additional capacity needed to serve the growing demands of its expanding blue chip customer base, combined with the additional business potential in Japan, is expected to help position TowerJazz to achieve its expressed \$1 billion annual revenue run rate by 2014.

As part of the proposed acquisition, the companies anticipate that they will sign a supply agreement for TowerJazz to manufacture products for Micron in the Japan facility for approximately the next three years. The facility can support geometries down to 95nm and can also be used to manufacture other products using TowerJazz process technologies. TowerJazz plans to quickly qualify its core power management platforms to serve the substantial growth demand from its Korean customers and then build high end RF capabilities. Increased manufacturing scale and expanded addressable market would further support TowerJazz's strategy to extend its position as the number one specialty foundry worldwide. The acquisition would be the most recent in a series of achievements TowerJazz has accomplished, including its goal of exceeding half a billion dollars in annual sales.

The total value of the proposed transaction, including assumed liabilities, is anticipated to approximate \$140 million, of which \$40 million would be paid in cash, approximately 20 million of Tower ordinary shares would be issued to Micron Technology or its Japanese subsidiary and the remainder is assumed long-term retirement liabilities that would be payable incrementally upon employee retirements. The parties are currently negotiating definitive agreements for the proposed transaction.

"Previously, I've had many detailed interactions with the Micron R&D and operational groups when I held a position with a semiconductor equipment manufacturer," said Russell Ellwanger, TowerJazz Chief Executive Officer. "Micron's culture of innovation, efficiency and absolute integrity is best-in-class, and I am confident that the acquisition of an operation that has grown through the Micron culture will be greatly accretive to TowerJazz. We are excited with the opportunity to enter into a multi-year supply agreement with Micron and see this as the first step in a long-term partnership. The acquisition of a fab in Japan would be a strategic move by TowerJazz to enter the Japanese market and strengthen our presence in the Asia-Pacific region through local, high quality manufacturing capabilities and, in addition, would provide us with needed, large scale incremental capacity."

"This proposed transaction would provide a long-term bridge toward a successful future for the Nishiwaki site," said Steve Appleton, Micron Chairman and CEO. "Russell and his team have demonstrated an ability to grow the company and achieve positive financial results for shareholders. We look forward to being both a shareholder and working with them in this endeavor and beyond."

About Micron Technology

Micron Technology, Inc., is one of the world's leading providers of advanced semiconductor solutions. Through its worldwide operations, Micron manufactures and markets a full range of DRAM, NAND and NOR flash memory, as well as other innovative memory technologies, packaging solutions and semiconductor systems for use in leading-edge computing, consumer, networking, embedded and mobile products. Micron's common stock is traded on the NASDAQ under the MU symbol. To learn more about Micron Technology, Inc., visit www.micron.com.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, 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 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 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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