FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of November 2011 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 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 November 17, 2011, the registrant announces Signing MOU for Process	Transfers and projects in India and Brazil,
Targeting India's Emerging Semiconductor Market	

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: November 17, 2011 By: /s/ Nati Somekh Gilboa

Name: Nati Somekh

Gilboa

Title: Corporate

Secretary

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz Signs MOU for Process Transfers and Projects in India and Brazil, Targeting India's Emerging Semiconductor Market

TowerJazz to supply manufacturing know-how, project management and technical support; its partner to supply intellectual property licenses and training

MIGDAL HAEMEK Israel, November 17, 2011 – TowerJazz, the global specialty foundry leader, announced today it has signed a non-exclusive MOU with a European entity to seek process transfer opportunities and projects in India and Brazil. TowerJazz will supply training, manufacturing know-how, project management and technical support and its partner will supply the intellectual property licenses, supporting services and training.

TowerJazz envisions the Indian and the Brazilian semiconductor market to be among the highest growth potential markets in the world, and decided to join efforts with a world leader in nanoelectronics research to collaborate in the field of technology transfer to support this growing trend. Both India and Brazil are emerging as promising markets in the semiconductor industry. It is estimated that India will be at hundreds of billions of dollars total semiconductor market by 2020.

TowerJazz and its European partner share over 15 years of collaboration in various process transfer activities and transactions and have derived impressive results. The companies have the capabilities to collaborate on all technology nodes from 1um to 32nm including MEMS. Together, they will target Indian and Brazilian fabless companies and IDMs with India and Brazil as their end markets.

"We are extremely pleased with this continued alliance with our European partner to bring together the competencies of both companies to engage in project transfer opportunities in growing markets as India and Brazil. With our TOPS business unit (Transfer Optimization Process Services), we are well equipped for such activities and look forward to winning many more successful projects," said Dr. Itzhak Edrei, President of TowerJazz.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), its fully owned U.S. subsidiary Jazz Semiconductor Ltd., 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 with geometries ranging from 1.0 to 0.13-micron, offering 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 CMOS and MEMS capabilities. TowerJazz also offers a world-class design enablement platform that complements its sophisticated technology and enables a quick and accurate design cycle. In addition, TowerJazz provides (TOPS) Technology Optimization Process Services to IDMs as well as fabless companies that need to expand capacity, or progress from an R&D line to a production line. To provide multi-fab sourcing, TowerJazz maintains two manufacturing facilities in Israel, one in the U.S., and one in Japan 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 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.

For TowerJazz:

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