

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of August 2006

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  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

On August 2, 2006, the Registrant announced expansion of 0.13-micron manufacturing capacity with purchase commitment By SanDisk Corporation, attached hereto is a copy of the press release.

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: August 2, 2006

By: /s/ Nati Somekh Gilboa

-----  
Nati Somekh Gilboa  
Corporate Secretary

TOWER SEMICONDUCTOR ANNOUNCES EXPANSION OF 0.13-MICRON  
MANUFACTURING CAPACITY WITH PURCHASE COMMITMENT BY  
SANDISK CORPORATION

UPON SUCH EXPANSION, SANDISK HAS COMMITTED TO PURCHASES OF 0.13 MICRON WAFERS  
FROM TOWER IN 2007 AND 2008

MIGDAL HAEMEK, ISRAEL - August 2, 2006 - Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty foundry, today announced that it has signed an MOU (Memorandum Of Understanding) with SanDisk(R) Corporation (NASDAQ: SNDK) to invest in the expansion of its 0.13 micron logic wafer capacity. Furthermore, SanDisk committed to purchase, upon such expansion, volume production quantities of 0.13 micron wafers during 2007 and 2008 and will have right of first refusal on the use of this extra capacity in 2009. These transactions are subject to required approvals of the parties.

"SanDisk continues to execute on an aggressive technology roadmap which has moved a large volume of our controller products to 0.13-micron technology," said Dr. Randhir Thakur, Executive Vice President of Technology and Worldwide Operations, SanDisk Corporation. "We have a long standing business relationship with Tower, based upon Tower's best of class responsiveness to our business needs through design services, process know-how and operational flexibility. We are pleased to work with Tower to help secure supply of our controllers in the 0.13-micron process. "

"Being the world wide leader in flash storage card products, it is a great vote of confidence from SanDisk to both help finance the 0.13-micron capacity expansion and to commit to the consumption of it. We have begun manufacturing our first SanDisk products in this advanced node and have achieved quite reasonable die yields", said Russell Ellwanger, Tower CEO. "We are thrilled to have entered into an agreement with SanDisk which ensures the continuation of our long-term partnership."

#### ABOUT TOWER SEMICONDUCTOR LTD.

Tower Semiconductor Ltd. is a pure-play independent wafer foundry established in 1993. The company manufactures integrated circuits with geometries ranging from 1.0 to 0.13 micron; it also provides complementary technical services and design support. In addition to digital CMOS process technology, Tower offers advanced non-volatile memory solutions, mixed-signal and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities: Fab 1 has process technologies from 1.0 to 0.35 micron and can produce up to 16,000 150mm wafers per month. Fab 2 features 0.18-micron and below standard and specialized process technologies, and has the current capacity of up to 15,000 200mm wafers per month. Tower's Web site is located at [www.towersemi.com](http://www.towersemi.com).

#### ABOUT SANDISK CORPORATION

SanDisk is the original inventor of flash storage cards and is the world's largest supplier of flash data storage card products using its patented, high-density flash memory and controller technology. SanDisk is headquartered in Milpitas, CA and has operations worldwide with more than half its sales outside the U.S. SanDisk's web site is located at [www.sandisk.com](http://www.sandisk.com)

#### SAFE HARBOR

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 our business is included under the heading "Risk Factors" in our most recent Annual Report on Forms 20-F, F-1, F-3 and 6-K, as were filed with the Securities and Exchange Commission and the Israel Securities Authority, and in SanDisk's filings with the Securities and Exchange Commission, including its most recent Annual Report on Form 10-K and quarterly report on Form 10-Q. We do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

#### CONTACTS:

Tower Semiconductor USA:  
Michael Axelrod, +1 408 330 6871  
[pr@towersemi.com](mailto:pr@towersemi.com)