

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of September 2005

TOWER SEMICONDUCTOR LTD.
(Translation of registrant's name into English)

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 September 19, 2005, the Registrant announced that SanDisk relies on Tower Semiconductor for manufacturing critical parts on its first U3-enabled USB flash drive. 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: September 20, 2005

By: /S/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

SANDISK RELIES ON TOWER SEMICONDUCTOR FOR MANUFACTURING CRITICAL
PARTS ON ITS FIRST U3-ENABLED USB FLASH DRIVE

Memory Controller Secures Distribution of Programs
and Personal Preference Content

MIGDAL HAEMEK, ISRAEL - September 19, 2005 - Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty foundry, today announced that SanDisk(R) Corporation (NASDAQ: SNDK) has Tower manufacturing the memory controller for its family of U3-enabled USB flash drives. This new product family is an addition to the array of flash storage products SanDisk has chosen to manufacture at Tower. The drives are produced on Tower's 0.18-micron technology platform.

SanDisk and Tower have been closely cooperating to bring this device to market, enabling smart drive computing applications.

"U3 applications are specifically targeted to the market segment of more than 80 million USB flash drives a year," said Wes Brewer, SanDisk's vice president of consumer product marketing. "Our tight cooperation with Tower, from the early design stages, was instrumental in the development of this new family of advanced products. Tower also provides the reliable quality and capacity to achieve our goals."

"Our wafer fab is set to meet SanDisk's ever increasing technical requirements for their storage devices, which enable the use of portable software and personal preference applications for a wide range of users," said Dr. Itzhak Edrei, senior vice president product lines at Tower. "We are happy to be chosen for the added values we bring SanDisk, our long term customer and partner."

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 <http://www.towersemi.com/>.

SAFE HARBOR

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