

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of September 2005 No. 3

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 27, 2005, the Registrant announced that it supplies security device for SanDisk's TrustedFlash(TM) SD-Based Memory Cards. 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 28, 2005

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

TOWER SEMICONDUCTOR SUPPLIES SECURITY DEVICE FOR SANDISK'S
TRUSTEDFLASH(TM) SD-BASED MEMORY CARDS

Features on Controller Provide Security for Content Loading, Commerce and Other
Applications

MIGDAL HAEMEK, ISRAEL-- September 27, 2005-- Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty foundry, today announced that Tower will manufacture a highly secure memory controller for SanDisk(R) Corporation's (NASDAQ: SNDK) new family of TrustedFlash(TM) memory cards.

The controller is manufactured at Tower's Fab2, in 0.18-micron geometry. The memory controller on SanDisk's TrustedFlash products was co-developed with Tower to include advanced security features that allow safe transfer of downloaded content such as music files, movies and games. TrustedFlash cards are intended for use in portable devices such as mobile phones, MP3 players, PDAs, portable games and more.

"The memory controller, pioneered on SanDisk's new secured products, is unprecedented in its security features," said Rafi Nave, vice president and chief technology officer of Tower Semiconductor. "Supporting SanDisk's demanding specifications for product security was a challenge, but Tower's engineering and production teams have again proven their ability to deliver."

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

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 AND 6-K, AS WERE FILED WITH THE SECURITIES AND EXCHANGE COMMISSION AND THE ISRAEL SECURITIES AUTHORITY.

CONTACTS:

Pacifico Inc.
PR Agency Contact
Mary Curtis, +1 408 293 8600
mcurtis@pacifico.com

Tower Semiconductor USA:
Michael Axelrod, +1 408 330 6871
pr@towersemi.com

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