TOWER SEMICONDUCTOR LTD
Form 6-K
February 20, 2007

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of February No. 2007

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 [X] 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 [X]

On February 20, 2007, the registrant announces Tower Semiconductor Begins Production of CopperGate's Next Generation HomePNA Product, 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: February 20, 2007

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

TOWER SEMICONDUCTOR BEGINS PRODUCTION OF COPPERGATE'S
NEXT GENERATION HOMEPNA PRODUCT

THE NEW PRODUCT IMPLEMENTS THE IMPROVED STANDARD
FOR HOME NETWORKING VIA PHONE AND COAX WIRES

MIGDAL HAEMEK, Israel - February 20, 2007 - Tower Semiconductor, Ltd. (NASDAQ: TSEM; TASE: TSEM), a pure-play independent specialty wafer foundry, and CopperGate Communications Ltd. announced today the production start of CopperGate's newest home networking modem controller. The new device implements the HomePNA 3.1 and ITU G.9954 standards, which will bring higher performance and superior quality to home networking using existing wires. The new CopperGate's new product is implemented using Tower's Fab2 0.18-micron process. Design and manufacturing services for the product are provided by Open-Silicon, a leading third party ASIC house.

"With Tower's state-of-the-art manufacturing process and effective technical support, we were able to implement this challenging and complex networking product in record time, while attaining excellent performance numbers," said Gabi Hilevitz, CEO of CopperGate. "We are very happy with the mode of cooperation from Tower and look forward to a long-term business relationship."

Recent worldwide design wins awarded to HomePNA 3.1 and CopperGate are a testament to the technology's ability to meet market needs and translate into a potential of multi-million installations using the new product.

"Making sure our customers meet their time-to-market window is critical to Open-Silicon" said Dr. Shafy Eltoukhy, Vice President of Manufacturing Operations for Open-Silicon. "The level of commitment to service that Tower provides will help ensure that CopperGate achieves their market goals."

"We are pleased to provide CopperGate with a cost-effective and high-performance manufacturing solution using our advanced 0.18-micron process and the specialized features that facilitate the required networking product functionality," said Dani Ashkenazi, general manager of the Core CMOS product line at Tower. "We take pride in supporting technology forward customers such as CopperGate, with effective technology know-how and support."

ABOUT COPPERGATE

CopperGate Communications develops chipsets designed to revolutionize home networking and networked entertainment. CopperGate is the leading provider of standards-based technology for distributing high speed IP data throughout the home over existing wires. CopperGate works with the world's leading system manufacturers to deliver the only products that operate over both phone lines and coax cables to conveniently connect equipment to broadband services throughout the home. CopperGate's products are being deployed today by leading service providers as key components for their triple play deployment solutions. Founded in 2000, CopperGate is headquartered in Tel Aviv, Israel, with offices in Newark, California, Taiwan and Tokyo. For more information, please visit www.copper-gate.com.

ABOUT TOWER SEMICONDUCTOR LTD.

Tower Semiconductor Ltd. is a pure-play independent specialty 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 & RF-CMOS, and CMOS image-sensor technologies. To provide world-class customer service, the company maintains two manufacturing facilities, each with standard and specialized process technology processes: Fab 1 ranging from 1.0 to 0.35 and Fab 2 featuring 0.18 and 0.13-micron. 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 Form 20-F, Forms F-1, F-3 and 6-K, as were filed with the Securities and Exchange Commission and the Israel Securities Authority. We do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

TOWER CONTACTS:

Tower Semiconductor USA
Michael Axelrod, 408-330-6871
pr@towersemi.com

or

Shelton Group
Melissa Conger, (972) 239-5119 ext. 137
mconger@sheltongroup.com