FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of June 2008

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 O

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 O No X

On June 23, 2008, the Registrant announced Tower Semiconductor Chosen as Strategic Supplier for a Select Portfolio of CMOS Products by ON Semiconductor 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: June 23, 2008

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa Corporate Secretary

Tower Semiconductor Chosen as Strategic Supplier for a Select Portfolio of CMOS Products by ON Semiconductor

Companies launch a multi-year and potentially multi-million dollar collaboration project

MIGDAL HA'EMEK, Israel (June 23, 2008) — Tower Semiconductor, Ltd. (Nasdaq: TSEM, TASE: TSEM), an independent specialty foundry, today announced that ON Semiconductor (Nasdaq: ONNN), a leading supplier of high performance energy efficient silicon solutions, has selected Tower Semiconductor as strategic supplier to co-develop and manufacture multiple lines of products and technologies. This decision further demonstrates the tight and long-term working relationships between the two companies.

The multi-year, and potentially multi-million dollar collaboration project is aimed at a variety of Automotive, Computing, Consumer and Communications end markets.

Tower and ON Semiconductor are to jointly develop new, best in class, manufacturing technology platforms, leveraging each company's core expertise to achieve a highly competitive, cost-effective product offering. These products are to be manufactured in Tower's Fab1 facility.

"With its high-quality engineering support and manufacturing capabilities, Tower is an ideal supplier for ON Semiconductor to partner with, and we view this partnership as a natural extension of our manufacturing capabilities," said John Nelson, ON Semiconductor's Chief Operating Officer. "We are committed to expanding our collaboration, while improving our position in the market place, through Tower's manufacturing capacity and innovative developments aimed at giving us a competitive edge."

"We are pleased to be recognized by ON Semiconductor for our excellent engineering services and expanded manufacturing capacity provided to its most valued business units," said Dr. Itzhak Edrei, Executive senior vice president for worldwide product lines and sales at Tower Semiconductor, Ltd. "This added layer of collaboration between both companies should significantly increase our manufacturing volume of ON Semiconductor products."

About ON Semiconductor:

With its global logistics network and strong product portfolio, ON Semiconductor (Nasdaq: ONNN) is a leading supplier of high performance energy efficient silicon solutions to customers in the power supply, automotive, communication, computer, consumer, medical, industrial, mobile phone, and military/aerospace markets. The company's broad portfolio includes power, analog, DSP, mixed-signal, advance logic, clock management and standard component devices. Global corporate headquarters are located in Phoenix, Arizona. The company operates a network of manufacturing facilities, sales offices and design centers in key markets throughout North America, Europe, and the Asia Pacific regions. For more information, visit http://www.onsemi.com.

About Tower Semiconductor Ltd.:

Tower Semiconductor Ltd. (Nasdaq: TSEM, TASE: TSEM) is an independent specialty foundry that delivers customized solutions in a variety of advanced CMOS technologies, including digital CMOS, mixed-signal and RF (radio frequency) CMOS, CMOS image sensors, power management devices, and embedded non-volatile memory solutions. Tower's customer orientation is complemented by its uncompromising attention to quality and service. Its specialized processes and engineering expertise provides highly flexible, customized manufacturing solutions to fulfill the increasing variety of customer needs worldwide. Boasting two world-class manufacturing facilities with standard and specialized process technologies ranging from 1.0- to 0.13-micron, Tower Semiconductor provides exceptional design support and technical services to help customers sustain long-term, reliable product performance, while delivering on-time and on-budget results. More information can be found 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.

Press Contact:

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