FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of December 2007 No. 2

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 [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 December 17, 2007, the Registrant announced that it will present at the 10th Annual Needham Growth Conference. 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: December 17, 2007 By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa Corporate Secretary

TOWER SEMICONDUCTOR TO PRESENT AT THE 10TH ANNUAL NEEDHAM GROWTH CONFERENCE

MIGDAL HAEMEK, Israel, December 17, 2007 - Tower Semiconductor Ltd. (NASDAQ: TSEM; TASE: TSEM), an independent specialty foundry, today announced that Mr. Russell Ellwanger, Chief Executive Officer, will present at the Tenth Annual Needham & Company, LLC Growth Conference in New York City at the New York Palace Hotel.

Mr. Ellwanger is scheduled to present in the Kennedy I room on Thursday, January 10th 2008, at 8:00 a.m. EST. The presentation will be web cast live, archived for 90 days after the conference and can be accessed from Tower's website (Investors Relations / IR Events) at: http://www.towersemi.com/ or by using the following URL: http://www.wsw.com/webcast/needham21/tsem/

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. Offering 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.

CONTACT:

Tower Semiconductor Noit Levi, +972 4 604 7066 noitle@towersemi.com

or:

Shelton Group Ryan Bright, (214) 315-7601 rbright@sheltongroup.com