FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of August 2008 (No. 2)

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 August 13, 2008, Tower Semiconductor & Jazz Technologies Announce Merger on Track for Closing in September 2008. Attached please find 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: August 13, 2008

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa Corporate Secretary

Tower Semiconductor & Jazz Technologies Announce Merger on Track for Closing in September 2008

Jazz Technologies Stockholders to Vote September 17, 2008

Registration Statement Declared Effective by the SEC

MIGDAL HA'EMEK, Israel & NEWPORT BEACH, California (August 13, 2008) – Tower Semiconductor, Ltd. (Nasdaq: TSEM, TASE: TSEM), an independent specialty foundry, and Jazz Technologies (AMEX:JAZ), a leader in Analog-Intensive Mixed Signal (AIMS) foundry solutions, today announced that their previously announced proposed merger is progressing toward timely closing, currently expected in September 2008.

Tower's registration statement on Form F-4, containing information relating to its proposed merger with Jazz, was declared effective by the Securities and Exchange Commission, clearing the way for a Jazz stockholder vote on the merger. Jazz has set September 17, 2008 as the date for the special meeting of its stockholders to vote on the proposal to approve and adopt the Agreement and Plan of Merger and Reorganization with Tower Semiconductor, to be followed by the closing of the merger. Jazz expects to mail to its stockholders this week the special meeting proxy statement contained in Tower's registration statement.

The merger is subject to customary closing conditions, including the approval of majority of Jazz's common stock outstanding as of the close of business on August 8, 2008.

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

About Jazz Technologies and Jazz Semiconductor:

Jazz Technologies(TM) (AMEX: JAZ) is the parent company of Jazz Semiconductor, Inc., a leading independent wafer foundry focused on Analog-Intensive Mixed-Signal (AIMS) process technologies. The company's broad product portfolio includes digital CMOS and specialty technologies, such as RF CMOS, Analog CMOS, Silicon and SiGe BiCMOS, SiGe C-BiCMOS, Power CMOS and High Voltage CMOS. These technologies are designed for customers who seek to produce analog and mixed-signal semiconductor devices that are smaller and more highly integrated, power-efficient, feature-rich and cost-effective than those produced using standard process technologies. Jazz customers target the wireless and high-speed wireline communications, consumer electronics, automotive and industrial end markets. Jazz's executive offices and its U.S. wafer fabrication facilities are located in Newport Beach, CA. Jazz Semiconductor also has engineering and manufacturing support in Shanghai, China. For more information, please visit http://www.jazztechnologies.com and http://www.jazztechnologies.com.

Safe Harbor Regarding Forward Looking Statements

This press release contains forward-looking statements within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including statements concerning the timing of the proposed merger of Tower with Jazz. These statements are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements. The potential risks and uncertainties include, among others, the possibility that the merger does not close or that the closing may be delayed, that the companies may be required to modify the terms of the transaction to achieve regulatory approval or for other reasons, that prior to or after the closing of the merger, the businesses of the companies may suffer due to uncertainty, as well as other risks applicable to both Tower's and Jazz's business described in the reports filed by Tower and Jazz with the Securities and Exchange Commission (the "SEC") and, in the case of Tower, the Israel Securities Authority. These filings identify and address other important factors that could cause Tower's and Jazz's respective financial and operational results to differ materially from those contained in the forward-looking statements will transpire or occur, or if any of them do so, what impact they will have on the results of operations or financial condition of Tower or Jazz. Tower and Jazz are providing this information as of the date of this press release and neither Tower nor Jazz undertakes any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

Additional Information about the Proposed Merger and Where to Find It

In connection with the proposed merger, Tower has filed with the SEC a Registration Statement on Form F-4 (File No. 333-151919) (the "Form F-4") that contains a Proxy Statement/Prospectus and related materials and Jazz expects to mail to its stockholders the final Proxy Statement/Prospectus containing information about Tower, Jazz and the proposed merger. INVESTORS AND SECURITY HOLDERS ARE URGED TO READ THE PROXY STATEMENT/PROSPECTUS AND THE OTHER RELEVANT MATERIALS, CAREFULLY AND IN THEIR ENTIRETY, BECAUSE THEY CONTAIN IMPORTANT INFORMATION ABOUT TOWER, JAZZ AND THE PROPOSED MERGER. Investors and security holders may obtain free copies of the Form F-4, the Proxy Statement/Prospectus and other relevant materials and documents filed by Tower or Jazz with the SEC through the web site maintained by the SEC at www.sec.gov. In addition, investors and security holders may obtain free copies of the documents relating to the proposed merger filed with the SEC by Tower by directing a request by mail to Tower Semiconductor Ltd, P.O. BOX 619, Migdal Haemek, Israel 23105, Attn: Investor Relations or by telephone at +972-4-6506936. Investors and security holders may obtain free copies of the documents relating to the proposed merger filed with the SEC by Jazz by directing a request by mail to Jazz Technologies, Inc., 4321 Jamboree Road, Newport Beach, California 92660, Attn: Investor Relations or by telephone at +1 415 445-3236.

Tower, Jazz and their respective executive officers and directors, under SEC rules, may be deemed to be participants in the solicitation of proxies from the stockholders of Jazz in connection with the proposed merger. Investors and security holders may obtain information regarding the special interests of these executive officers and directors in the proposed merger by reading the Proxy Statement/Prospectus filed with the SEC. Additional information regarding Tower's executive officers and directors is included in Tower's Form 20-F for the year ended December 31, 2007, which was filed with the SEC on June 18, 2008. Additional information regarding the executive officers and directors of Jazz is included in Jazz's Proxy Statement for its 2008 Annual Meeting of Stockholders, which was filed with the SEC on April 7, 2008. These documents are available free of charge at the SEC's web site at www.sec.gov and are also available free of charge from Investor Relations at Tower and Jazz by contacting Tower and Jazz as described above.

Investors and Press Contact:

<u>For Tower Semiconductor:</u> Shelton Group Ryan Bright, (972) 239-5119 ext. 159 <u>rbright@sheltongroup.com</u> Tower Semiconductor Limor Asif, + 972-4-650 6936 Limoras@towersemi.com <u>For Jazz Technologies:</u> Jazz Technologies, Inc Linda Rothemund, (415) 445-3236