

**FORM 6-K**

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

For the month of June 2009 No. 1

**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  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

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On June 10, 2009, the registrant announces Jazz Semiconductor Achieves ISO/TS 16949 Automotive Quality Management System Certification.

This Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

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**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 10, 2009

By: /s/ Nati Somekh Gilboa

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Nati Somekh Gilboa  
Corporate Secretary

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**Jazz Semiconductor Achieves ISO/TS 16949 Automotive Quality  
Management System Certification**

**NEWPORT BEACH, Calif. June 10, 2009** – Jazz Semiconductor<sup>®</sup>, a Tower Group Company (NASDAQ: TSEM, TASE: TSEM), and the leader in Analog-Intensive Mixed-Signal (AIMS) foundry solutions, announced its ISO/TS 16949 certification, the highest international quality standard for the automotive industry. This represents a critical milestone in the company's strategic roadmap and has paved the way for increased presence in the automotive market. Furthermore, it demonstrates their commitment to meeting the most stringent standards for manufacturing processes and work procedures, resulting in the highest quality semiconductor products in the industry.

“With this certification, all of Tower/Jazz facilities are now working under the same high standards of qualification. Tower also attained the Quality Automotive certification, and both companies have already achieved other world-class quality standards such as Environmental Management, Health & Safety, and Information Security,” said Don Cerney, Vice President, Worldwide Quality and Reliability, Tower Semiconductor. “Compliance with these leading industry systems standards is testimony to our dedication to maintaining and continuously improving quality and performance which benefits all of our partners and customers.”

The ISO/TS 16949 Certification, coupled with customer-specific mandates, defines the quality-system and global-registration requirements for the international automotive supply chain. In addition, this certification eliminates the need for multiple automotive-supplier quality certifications in the U.S. and Europe.

In order to achieve this certification, Jazz demonstrated stringent procedures, strong leadership and solid infrastructure as well as excellence in the areas of: customer satisfaction, process improvement and product development. This was assessed by BSI Management Systems (BSI), a globally accredited third-party certification body.

For more information on Jazz and Tower's process offerings and design enablement solutions for the automotive and other industries, please visit [www.jazzsemi.com](http://www.jazzsemi.com) or [www.towersemi.com](http://www.towersemi.com).

**About ISO/TS 16949**

The ISO/TS 16949 standard is a technical specification defining quality system requirements for the design and development, production, installation and servicing of automotive-related products. The standard encourages the use of a process approach that is aimed at improving process efficiency and is designed to achieve the highest levels of product quality, productivity, competitiveness, and continual improvement.

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ISO/TS 16949 was jointly developed by the International Automotive Task Force (IATF) members and approved by the International Organization for Standardization (ISO). IATF members include leading automotive manufacturers and their trade associations. This standard, together with any customer-specific requirements, defines the quality system requirements used in the automotive supply chain.

ISO/TS 16949 is based on ISO 9001:2000, but it includes a number of additional specific quality requirements.

**About Tower Semiconductor, Ltd. and Jazz Semiconductor, Inc.**

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) is a pure-play independent specialty wafer foundry and its fully owned U.S. subsidiary Jazz Semiconductor, Inc., is a leader in Analog-Intensive Mixed-Signal (AIMS) foundry solutions. Tower and Jazz manufacture integrated circuits with geometries ranging from 1.0 to 0.13-micron and provide complementary technical services and design support. In addition to digital CMOS process technology, Tower offers advanced mixed-signal and RF CMOS, Power Management, CMOS image-sensor, non-volatile memory technologies and Flash MTP and OTP solutions. Jazz's comprehensive process portfolio of modular AIMS technologies includes RFCMOS, Analog CMOS, Silicon and SiGe BiCMOS, SiGe C-BiCMOS, MEMS, Power CMOS and High Voltage CMOS. To provide world-class customer service, Tower maintains two manufacturing facilities in Israel; Jazz maintains a fab in the U.S. and additional manufacturing capacity is available in China through partnerships with ASMC and HHNEC. For more information, please visit [www.towersemi.com](http://www.towersemi.com) and [www.jazzsemi.com](http://www.jazzsemi.com).

**Safe Harbor Regarding Forward-Looking Statements**

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 Tower's and Jazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-3, F-4 and 6-K, as were filed with the Securities and Exchange Commission (the "SEC") and the Israel Securities Authority and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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