TOWER SEMICONDUCTOR LTD Form 6-K September 28, 2010

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of September 2010 No. 4

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 S

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 September 28, 2010 the registrant announces TowerJazz Global Symposium to be held on October 27-28, 2010 in Newport Beach, CA.

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: September 28, 2010 By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa Title: Corporate Secretary

TowerJazz Global Symposium to be held on October 27-28, 2010 in Newport Beach, CA

Fifth Annual Technology Conference Launches "Specialty2011" Marketing Program

Includes keynote by Gartner's Bryan Lewis, EDA partner demos, and technical presentations from semiconductor industry leaders

MIGDAL HAEMEK, Israel, and NEWPORT BEACH, Calif., September 28, 2010 –TowerJazz, the global specialty foundry leader, announced today its fifth annual technology conference, the TowerJazz Global Symposium (TGS) to be held at its Newport Beach, CA facility on October 27-28, 2010. TGS will be comprised of an EDA Partner Day on October 27 and a Customer Day on October 28. This year's conference launches the "Specialty2011" marketing program which illuminates the Company's strategy to "Champion Specialty Solutions" to its expanding worldwide customer base. All participants will have an opportunity to meet with leaders from academia and top executives and technical professionals in the semiconductor industry. To register, please visit: http://www.towerjazz.com/tgs-npb-2010.html.

During this two-day event, attendees will hear updates on the latest trends and tools through visionary keynotes, technology updates and breakout sessions such as "Keys to the Top Five Design Challenges" and "Addressing Performance, Cost and Power Challenges" - then take a tour of the fab line. Keynote speakers include TowerJazz CEO, Russell Ellwanger and Gartner's market analyst, Bryan Lewis. Technology sessions will focus on RF/High Performance Analog, High Voltage and Power Management, CMOS Image Sensors, Mixed-Signal and CMOS, New SiGe solutions, and Design Enablement and Design Services. EDA vendors will present a concise overview of their latest solutions and provide a tutorial of their tools.

The keynote presented by Mr. Ellwanger will focus on the foundry's strength and stability, its industry leadership as well as the specialty solutions driving its explosive growth in 2010 and beyond. Subsequently, Mr. Lewis will provide the expected forecast for overall semiconductor industry growth and the impact the fabless trend has on the industry as well as how Apple's iPad and media tablets are changing the computing landscape.

"We are pleased to provide a comprehensive and synergistic event for our customers and partners, to share updates on our specialty solutions, design enablement capabilities, and our unmatched customer support," said Russell Ellwanger, TowerJazz CEO. "TowerJazz is the only foundry to achieve 2009 vs. 2008 growth and the growth rate has accelerated in 2010, helping position us to be the #1 specialty foundry. As we look to 2011, we are laser-focused on extending our leadership as our customers' champion for specialty solutions."

"This year we have added an EDA partner day where our customers will have a chance to use TowerJazz's PDKs on vendors' workstations, get a hands-on demo and learn how to use their tools in the most efficient ways. We look forward to this unique and interactive experience," said Ori Galzur, Vice President of Design Enablement at TowerJazz. EDA vendor demonstrations will be provided by Agilent, Cadence, Magma, Silvaco, Tanner EDA and Synopsys.

In addition, conference attendees can see the latest from tool and IP providers and post wafer service companies. TGS gold sponsors include: Agilent, Cadence, GSA, Kilopass, Mentor Graphics, Silvaco, Synopsys, and Toppan. Silver sponsors include: Chronicle Technology, FlipChip, GDSI, Magma, Novocell, Photonics, Quik-Pak, SpringSoft. and Tanner EDA. For more information or online registration, please visit: http://www.towerjazz.com/tgs-npb-2010.html.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty

foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide world-class customer service, TowerJazz maintains two manufacturing facilities in Israel and one in the U.S. with additional capacity available in China through manufacturing partnerships. For more information, please visit www.towerjazz.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 and/or 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, respectively. 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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