

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of November 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

On November 03, 2009, the registrant announces Major Achievements in First Year of Merger with Jazz, Launch New Brand and Website.

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: November 03, 2009

By: /s/ Nati Somekh Gilboa

Nati Somekh Gilboa
Corporate Secretary

Tower and Jazz Semiconductor Announce Major Achievements in First Year of Merger, Launch New Brand and Website

Companies re-brand as TowerJazz creating "One Company, Twice as Strong"

Will host customers and business partners at annual technology conference on November 5, 2009

MIGDAL HAEMEK, Israel, and NEWPORT BEACH, Calif., November 3, 2009 – Tower Semiconductor, Ltd. (NASDAQ: TSEM, TASE: TSEM), and its U.S. subsidiary, Jazz Semiconductor today announced major milestones achieved in the first year of the merger as well as the re-branding as TowerJazz through its "One Company, Twice as Strong" campaign. The achievements and integrated roadmaps will be presented at the Company's annual technology conference this week at its Newport Beach facility on November 5, 2009 where the new brand and website will be formally launched. To register for the conference, please visit www.towerjazz.com.

In the past year, TowerJazz has positioned itself to become the global specialty foundry leader, executing on significant opportunities targeting high growth and high margin markets, with a stronger financial base. The Company achieved the upper end of its Q3 revenue guidance, achieving a record \$79.6 million, representing a growth of 286% (3.86x) over the past four years (Q3 2009 vs. Q3 2005), becoming the fastest growing foundry. TowerJazz was also the only foundry to achieve year over year growth in 2009 (Q3/Q3), accomplished during one of the biggest downturns in the semiconductor industry's history.

Since the closing of the merger, the Company has announced close to 20 new customer engagements including the largest revenue potential customer partnership in its history; a collaboration with Intersil to co-develop a high-performance power management platform for the manufacture of leading-edge power ICs. These wins are based upon TowerJazz's complementary and integrated process offerings, providing the broadest and most customizable technologies of any other specialty foundry along with proven design enablement capabilities, unrivaled in the industry.

In addition, due to its integrated complementary technologies and minimal customer overlap, TowerJazz has doubled its customer base and become more diversified. Cross-sales opportunities have already resulted in 10 new design wins and many additional new projects are in the funnel of the Company's fabs with a potential for annual revenues of >\$100M.

TowerJazz has realized >\$80M in sustainable annual cost reductions enabling more cost-efficient manufacturing and value-added solutions. The Company's foundry capacity has increased globally by more than 50% to 750K wafers per year with three fully owned fabs in the U.S. and Israel and ownership interest in a facility in China. The achievements of the TowerJazz merger were appreciated by Wall Street, as evidenced by several equity investments completed in light of the increased confidence in its long-term strategic plans and growth.

"I am very pleased with the results of our first year as a combined company. I am impressed with the ability of the dedicated employees in both locations to achieve the excellent results cited above, among others, during a time that presented the semiconductor and foundry industry in particular, with severe economic challenges. We are well positioned to be the leading global specialty foundry," said Russell Ellwanger, CEO of TowerJazz. "As the fastest growing foundry over the past several years, we are equipped to maintain this steady growth and feel it is important at this time to roll out our new branding theme. The combined strengths which are now fully integrated into 'TowerJazz' have been realized by our customers, shareholders and suppliers. We are very excited about the next chapter in our business growth."

The new brand consists of the name, TowerJazz and is united with an updated graphic look as published on the Company's newly combined website under the URL www.towerjazz.com. The re-branding will be formally launched at the Company's annual technology conference and is intended to strengthen the message of a strong unified company to all of its stakeholders including employees, partners, customers, investors, suppliers, and other market participants.

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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