



NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

TowerJazz to Present at 12th European APCM Conference April 16-18, 2012

Novel Run to Run Controller in photolithography area improves process tolerances, enhancing product quality

MIGDAL HAEMEK, Israel, and NEWPORT BEACH, Calif., April 10, 2012 – [TowerJazz](http://TowerJazz.com), the global specialty foundry leader, today announced a paper presentation on a new “Run to Run Controller Replacement in Photolithography Area” at the 12th European APCM (Advanced Process Control and Manufacturing) Conference in Grenoble, France being held April 16-18, 2012. Anna Strulovich, Fab 2 Staff Photo Engineer, will present the paper following the implementation of this novel controller in TowerJazz Fab 2 facility to improve process tolerances thereby enhancing product quality.

Run-to-run (R2R) control is part of the advanced process control (APC) technology. R2R control is cutting-edge technology that allows modification of a product recipe between machine "runs," thereby minimizing process drift, shift, and variability - and with them, costs. Its effectiveness has been demonstrated in a variety of processes, such as vapor phase epitaxy, lithography, and chemical mechanical planarization. TowerJazz has developed several R2R controllers based on in-house application and recently purchased a new AMAT E3 R2R platform to expand and leverage the R2R controlled processes across the production area.

“TowerJazz is a pioneer in APC system design and we provide a large variation of capabilities in the photolithography area in our Fab 2 in Israel. We are pleased to present our new R2R controller, a novel design which is the best in class. The R2R controller allows TowerJazz Fab 2 to enhance quality and operational performance, thereby allowing us to continue providing excellent support to our customers,” said Nabil Alali, TowerJazz Fab 2 Manager. “The new E3 R2R controller was tailored and improved to meet Fab 2 needs. The system we developed is state of the art in the 8” fab arena, demonstrating our innovative initiatives and strengthening TowerJazz’s position as the global specialty foundry leader.”

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About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), its fully owned U.S. subsidiary Jazz Semiconductor Ltd., and its fully owned Japanese subsidiary TowerJazz Japan, Ltd., operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits with geometries ranging from 1.0 to 0.13-micron, offering 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 CMOS and MEMS capabilities. TowerJazz also offers a world-class design enablement platform that complements its sophisticated technology and enables a quick and accurate design cycle. In addition, TowerJazz provides (TOPS) Technology Optimization Process Services to IDMs as well as fabless companies that need to expand capacity, or progress from an R&D line to a production line. To provide multi-fab sourcing, TowerJazz maintains two manufacturing facilities in Israel, one in the U.S., and one in Japan 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 TowerJazz'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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