



TowerJazz Announces Availability of Highest Speed Foundry SiGe Technology

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260GHz Speed and Low Power Consumption Addresses the Booming High-Speed Communications Market Fueled by the Explosion in Video Internet Traffic

MIGDAL HAEMEK, Israel & NEWPORT BEACH, Calif., Apr 26, 2011 (BUSINESS WIRE) --

[TowerJazz](#), the global specialty foundry leader, today announced the availability of [SBC18H3](#), the industry's highest speed foundry SiGe technology. The technology addresses next-generation needs for high-speed interfaces in communication protocols such as Thunderbolt, optical fiber, and high-data rate wireless by improving performance while reducing noise and power consumption of key building blocks. SBC18H3 also targets applications such as automotive collision avoidance systems, millimeter-wave radar and GHz imaging.

SBC18H3 is TowerJazz's third generation 0.18um SiGe technology and offers transistors with 240GHz Ft and 260GHz Fmax in a cost-effective and analog-friendly 0.18um node. The technology is built on the same mature integration platform used for the prior two TowerJazz SiGe processes now in high-volume production (SBC18H2 at 200GHz and SBC18HX at 155GHz). IP of high-speed components such as TIAs, Laser Drivers, SerDes, CDRs from H2 and HX can be readily ported to the new H3 process since they are all in the same 0.18um node, allowing them to benefit from improved performance as well as reduced power consumption and noise.

Power consumption is dramatically reduced with H3 where, for example, a 77GHz amplifier can be made to consume three times less DC power than was possible with older technology. At the same time, noise is improved to levels that far exceed those of prior SiGe technology and are superior to numbers typically reported for more expensive III-V material systems (minimum noise figure at 20GHz is measured at less than 1dB and at 40GHz at only 2dB). This can be important in many communication systems but particularly in wireless applications, improving sensitivity of GPS systems, for example.

SBC18H3 process design Kits (PDKs) include mm-wave components important for high speed designs such as a transmission-line toolbox, p-i-n diodes for RF switching, and support for small size MIM capacitors. TowerJazz offers a monthly MPW for quick and cost-effective prototyping of designs, and leading customers have already built initial SBC18H3 prototype designs through this MPW service.

"SBC18H3 extends our leadership position in providing the highest speed SiGe foundry services," said Dr. Marco Racanelli, Senior Vice President and General Manager, RF and High Performance Analog Business Group. "The process extends the high-end of our overall portfolio of SiGe technology that currently spans from the 0.35um to the 0.13um node and is available in two of our 8-inch factories for flexibility of supply and capacity."

TowerJazz is exhibiting at ChipEx 2011 on May 4 at the Hilton Hotel Convention Center in Tel Aviv, Israel (booth #22), as well as the Global Semiconductor Association (GSA) and International Semiconductor Forum on May 11-12, 2011 (booth # 17), at the Hotel Bayerischer Hof in Munich, Germany. For more information, please contact Melinda Jarrell, TowerJazz Corporate Marketing at 949-435-8181 or melinda.jarrell@towerjazz.com.

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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