TowerJazz Begins Mass Production of a new Integrated SiGe-Based "Front-End Module on a Chip" RF Platform Tailored to Meet the Challenges of the Internet of Things

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Enables power amplifiers, low noise amplifiers and switches on a single chip

TowerJazz to participate at the International Microwave Symposium (IMS) in San Francisco, CA on May 22-27, 2016

MIGDAL HAEMEK, Israel, and NEWPORT BEACH, Calif., May 17, 2016 (GLOBE NEWSWIRE) -- TowerJazz, the global specialty foundry leader, today announced volume production of a new RF technology capable of integrating a wireless front-end module (FEM) on a single chip, tailored to meet the challenges of Internet of Things (IoT) applications. Analysts estimate that the number of IoT connected devices will grow at a 15-20% growth rate annually, reaching up to 30 billion units by 2020. McKinsey Global Institute recently estimated that IoT could generate up to $11 trillion in global value by 2025.

The TowerJazz process enables integration of power amplifiers (PAs), switches, and low noise amplifiers as well as CMOS digital and power control on a single die. TowerJazz is delivering this product today for smartphones, tablets and wearables, and this technology also meets the more universal requirements of IoT applications by providing cost, power, performance, and form factor benefits vs. competing solutions.

As an example, TowerJazz has partnered with industry leader, Skyworks Solutions, Inc., an innovator of high performance analog semiconductors connecting people, places and things, to deliver a first of its kind integrated wireless FEM using this technology. "We are pleased that our long partnership with TowerJazz on SiGe BiCMOS for PA based products is now in volume production for key customers of Skyworks Solutions," said Bill Vaillancourt, GM/VP Skyworks Connectivity Solutions.

TowerJazz's new RF technology includes a 0.18um SiGe PA device with best in class silicon-based performance, a low Ron-Coff switch device, a SiGe low noise amplifier device, 5V CMOS for power control, 0.18um CMOS for integrating MIPI or other digital content as well as thick Cu metal layers for low-loss inductors and matching components. By offering all active components typically required for a wireless FEM, this technology enables a new family of products that can integrate multiple communication standards (WiFi, Bluetooth, 802.15.4 or NFC) that form the backbone of the IoT fabric today onto the same chip.

"This new technology complements our existing suite of SiGe PA and RF SOI switch technology offerings and provides customers new architectural options by enabling the combination of these elements on a single die while offering best in class silicon-based PA performance," said Marco Racanelli, Sr. VP and GM of RF/High Performance Analog and US Aerospace & Defense Business Groups, and Newport Beach Site Manager, TowerJazz.

TowerJazz will exhibit and demonstrate its advanced process technologies for specialty IC manufacturing in booth #1532 at IMS2016, the premier conference in the RF and microwave industry. Please visit the company website for more information on TowerJazz's RF and high performance analog technology offerings.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its fully owned U.S. subsidiaries Jazz Semiconductor, Inc. and TowerJazz Texas Inc., operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits, offering a broad range of customizable process technologies including: SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management (BCD and 700V), and MEMS. TowerJazz also provides a world-class design enablement platform for a quick and accurate design cycle as well as Transfer Optimization and development Process Services (TOPS) to IDMs and fabless companies that need to expand capacity.

To provide multi-fab sourcing and extended capacity for its customers, TowerJazz operates two manufacturing facilities in Israel (150mm and 200mm), two in the U.S. (200mm) and three additional facilities in Japan (two 200mm and one 300mm) through **TowerJazz Panasonic Semiconductor Co. (TPSCo),** established with Panasonic Corporation of which TowerJazz has the majority holding. Through TPSCo, TowerJazz provides leading edge 45nm CMOS, 65nm RF CMOS and 65nm 1.12um pixel technologies, including the most advanced image sensor technologies. For more information, please visit www.towerjazz.com or www.tpsemico.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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