



TowerJazz and Anatrix Develop RadHard RF ASIC; Reaches Flight Qualification

July 8, 2015 at 6:30 AM EDT

Anatrix utilized TowerJazz's advanced 0.18-micron SiGe BiCMOS process at its US fab

NEWPORT BEACH, Calif., July 8, 2015 (GLOBE NEWSWIRE) -- [TowerJazz](#), the global specialty foundry leader, and [Anatrix](#), a provider of custom analog, RF and mixed-signal IC solutions, developed a Radiation Hardened (RadHard) by Design RF front end ASIC (application specific integrated circuit) utilizing [TowerJazz's 0.18-micron SiGe BiCMOS](#) (SBC18HA) process through its U.S. Aerospace & Defense business unit in its Newport Beach, CA facility. The new ASIC has produced leading edge RF phase detection with integrated controller functions which has successfully entered flight qualification status.

Anatrix's proprietary RadHard by Design methodology allows its customers to achieve program radiation tolerance specifications without expensive and time consuming overdesign. The Anatrix methodology creates the optimum trade for customers between total ionizing dose, single event effects tolerance and cost.

"TowerJazz technology was critical to the success of this program; its SiGe BiCMOS process allowed Anatrix to achieve outstanding RF performance utilizing SiGe HBT devices while creating a cost effective solution for our space customer by incorporating CMOS based analog and digital control circuitry," said Greg Pauls Ph.D, President of Anatrix.

Anatrix has an extensive silicon verified RadHard by design IP portfolio on TowerJazz's 180nm CMOS and SiGe processes in its Newport Beach, CA facility and is currently extending its development into TowerJazz's 130nm processes.

"Our partnership with Anatrix continues to deliver world class semiconductor solutions to our customer base," said Mike Scott, Director – Aerospace and Defense Business Unit at TowerJazz. "The design expertise of Dr. Pauls and his team very effectively utilize and implement the strengths of our SiGe foundry offerings and the breadth of its features. We look forward to additional successful IP development at the 180nm node as well as our 130nm platform later in 2015."

TowerJazz, through its Newport Beach facility (Jazz Semiconductor), supplies strategic, on-shore foundry services for critical U.S. [Aerospace and Defense](#) (A&D) applications serving the widest range of technologies that may be used by A&D customers for government, military, and defense requirements, including large die ROICs, imagers, MEMS and millimeter wave devices, among others.

TowerJazz's modular 0.18-micron [SiGe BiCMOS](#) platform incorporates high-speed, standard, and high breakdown SiGe bipolar transistors, or SiGe NPNs, for low noise, high switching speeds and better linearity than can be achieved with a typical 0.18-micron CMOS offering, for applications where those features are required. With capacity expansion and new technologies in areas such as high-speed SiGe, Readout Integrated Circuits (7ML and 8ML ROICs), imaging, and MEMS, TowerJazz continues to demonstrate its ongoing commitment to its A&D customers.

"During engineering model phase testing, our customer achieved electrical performance in their system beyond what had been reached previously when using commercially available parts. As a fabless company, this kind of customer feedback gives us confidence we can continue to create world class radiation tolerant designs through our partnership with TowerJazz," added Dr. Pauls.

TowerJazz will be exhibiting (booth #16) at the 2015 IEEE Nuclear and Space Radiation Effects Conference ([NSREC](#)), held on July 13-17 at the Marriott Copley Place, Boston, Massachusetts.

About Anatrix, LLC

Anatrix is a leading provider of analog, RF and mixed-signal IP spanning the consumer electronics, wireless and radiation tolerant market segments. In addition to silicon proven IP, Anatrix develops custom IP giving our customers a competitive edge and cost effective solution. Our radiation hardening by design (RHBD) methodology has been developed for analog and digital functions in both CMOS and SiGe BiCMOS process technologies. Founded in 2005 and privately held, Anatrix is headquartered in Colorado Springs, Colorado with design center in Ladera Ranch, California.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ:TSEM) (TASE:TSEM) and its fully owned U.S. subsidiary Jazz Semiconductor, 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. For more information, please visit www.towerjazz.com.

To provide multi-fab sourcing and extended capacity for its customers, TowerJazz operates two manufacturing facilities in Israel (150mm and 200mm), one 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.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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