

TowerJazz Qualifies 0.13 um SiGe Process at Its Israeli Fab

MIGDAL HAEMEK, Israel - (BUSINESS WIRE) - TowerJazz, the global specialty foundry leader, today announced its 0.13um SiGe technology (SBL13) has been successfully transferred to its Migdal Haemek (MH), Israel fab from its Newport Beach, CA facility. The company has completed the internal qualification of a heavily analog 0.13um SiGe flow adding a copper (Cu) backend in MH. The technology is targeted at the >\$1B combined wireless RF and digital TV tuner markets where higher performance, lower cost and higher digital integration are required. TowerJazz has won SBL13 customers that are now taking advantage of the Cu back-end offered in the Israeli facility and expects volume to ramp in Israel in the first half of 2012.

TowerJazz's SBL13 process is well-suited for WLAN transceivers, cell phone transceivers, and TV tuners. By combining SiGe bipolar performance with a mature 130nm CMOS copper backend, it enables high performance RF with more integrated digital logic. It also allows the design of complex baseband and demodulator functions at less than one-half the die size of a 0.18um process. A 100GHz SiGe bipolar device enables integration of low-noise and low-power RF and a high voltage SiGe device enables integration of power amplifiers and drivers.

The SBL13 process includes three NPN transistors with 40GHz, 74GHz and 100GHz Ft as well as high density passive elements such as high-density MIM capacitors and 3um thick copper inductors. 130nm CMOS with copper metallization achieves digital logic densities of up to 200K gates/mm² to result in higher performance and more highly integrated RF products.

"We are excited about the successful transfer of our 0.13um SiGe technology to our Migdal Haemek fab and the addition of a copper back-end. This helps extend our leadership in SiGe technology and provides a unique multi-fab SiGe sourcing capability for our customers," said Dr. Marco Racanelli, Senior VP and General Manager, RF and High Performance Analog Business Group, TowerJazz. "Providing a 0.13 SiGe process with a Cu backend is important for applications that require high levels of integration and our customers are very pleased with the rapid deployment of this platform."

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