GLOBALFOUNDRIES and Catena Partner to Provide Next-Generation RF Connectivity Solutions for Growing Wireless Markets

September 3, 2015

Catena Wi-Fi and Bluetooth RF technologies available on GLOBALFOUNDRIES 28nm Super Low Power Process technology

EuMW 2015, Paris, France, September 3: GF, a leading provider of advanced semiconductor manufacturing technology, today announced it has partnered with Catena, a leader in Radio Frequency (RF) Communication IPs for connectivity, to offer complete Wi-Fi® and Bluetooth® solutions for System-on-Chip (SoC) designers targeting mobile, Internet-of-Things (IoT), RF connectivity markets.

Today, designers need an optimized, highly integrated wireless connectivity solution to satisfy the ever-increasing low-power and cost requirements of mobile platforms, wearables and other IoT devices. GF market-leading 28nm Super Low Power (SLP) technology with integrated RF, combined with Catena's silicon-proven RF IPs offer a power- efficient, cost-optimized solution that provides on-chip features that can be easily integrated into customer applications.

"We are delighted to partner with GF for the development of Catena´s next generation connectivity solutions," says Mats Carlsson, Director for Business Development at Catena. "This partnership gives Catena access to advanced technology nodes supporting our comprehensive technology roadmap for Wi-Fi and BT connectivity. A close cooperation with leading foundries such as GF together with the latest innovations from Catena offers our customers new levels of product performance, reliability and scalability, and it enables us to push the envelope of integrated RF Front-End innovation. The validation results of Catena´s first 28nm-SLP silicon for RF applications correlate well with simulations."

"Catena's IP skills and competencies in wireless RF mixed signal technologies, coupled with GF RF solution enables us to further strengthen our leadership in wireless connectivity and connected devices," said Peter Rabbeni, director of RF product marketing and business development at GF. "With customer silicon content increasing with each new generation of smartphone the demand for these chips is rapidly increasing. Partnering with Catena enables us to expand our expertise and capabilities and provide radio power solutions for highly integrated mobile applications."

Based on GF's 28nm-SLP technology with HKMG, the process technology includes a comprehensive set of design capabilities enabling chip designers to integrate critical RF SoC functionality into their products. The technology is designed for the next generation of connected devices that require low standby power and long battery life integrated with RF/wireless functionality. The technology is enabled with key RF features, including core and I/O (1.5V/1.8V) transistor RF models along with 5V LDMOS devices, which simplifies RF SoC design.

Catena's Connectivity RF IP portfolio includes optimized, very low power Bluetooth Smart radio, Bluetooth Smart Ready radio, Wi-Fi (802.11a/b/g/n/ac 1x1, 2x2 and 4x4 MIMO) radios and combo Bluetooth / Wi-Fi radio. The radio IPs are available/under development at GF 28nm-SLP technology, and may be ported to alternatives based on customer requirements. Solutions for GNSS/FM broadcast systems are also found in the offerings of Catena.

GF's 28nm-SLP technology is the first in the industry to provide design enablement support optimized to meet low power and cost requirements of integrated RF SoCs. The technology utilizes the companies' production-proven, 28nm-SLP silicon-validated design flows, which include a complete set of libraries, compilers, and complex IP.

About Catena

Since its establishment in 1986, Catena is recognized as the partner of choice for global IC makers in designing wireless connectivity and sensor electronics system solutions created by world-class RF, signal processing and system architecture experts. Catena is providing full custom IC developments as well as complete System IP for various applications, enabling its customer's fast time to market. The developments are mainly one chip solutions including RF, Analog, Mixed Signal, Digital Signal Processing, Embedded Cores, Embedded Software and tooling. For further information please visit www.catena.nl.

About GF

GF is the world's first full-service semiconductor foundry with a truly global footprint. Launched in March 2009, the company has quickly achieved scale as one of the largest foundries in the world, providing a unique combination of advanced technology and manufacturing to more than 250 customers. With operations in Singapore, Germany and the United States, GF is the only foundry that offers the flexibility and security of manufacturing centers spanning three continents. The company's 300mm fabs and 200mm fabs provide the full range of process technologies from mainstream to the leading edge. This global manufacturing footprint is supported by major facilities for research, development and design enablement located near hubs of semiconductor activity in the United States, Europe and Asia. GF is owned by the Mubadala Development Company. For more information, visit http://www.globalfoundries.com.

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