GlobalFoundries Unveils Power-Efficient Advancements to 22FDX® Platform at Annual Tech Summit

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New Features, Temperature-Resilient Capabilities Meet Growing Demands in IoT and Automotive Industries

MUNICH, Germany, Sept. 27, 2023 (GLOBE NEWSWIRE) -- Today at its annual Technology Summit in Europe, GlobalFoundries (GF) (Nasdaq: GFS) announced advancements to its industry-leading 22FDX® (22nm FD-SOI) platform, introducing a suite of innovative features and enhancements. These enhancements represent a strategic response to the growing demand for better power efficiency and top-tier performance in both IoT and automotive applications.

The new features include ultra-low power memory, designed to operate with exceptional energy efficiency, even in the most power-sensitive environments. Additionally, GF's 22FDX platform introduces advanced temperature-resistant capabilities, which are critical for the auto industry as they ensure the long-term durability, reliability and safety of vehicle electronic systems, particularly in high-heat environments found under the hood and during demanding operations. The technology also offers optimized energy management, allowing for intelligent power consumption and improved battery life in a variety of devices.

In the rapidly expanding network of IoT devices, new features on 22FDX+ offer several advancements, including 0.5pA/cell memories and ultra-low retention leakage flops to minimize power in sleep mode; 0.4V standard cells libraries and memories with 30% lower power savings; and an expanded suite of devices that provide greater than 20% noise performance, up to 70% higher Q-factor, and lower switching loss to reduce analog power and area.

For the automotive industry, GF announced 22FDX+ AutoPro150™. This offering extends the capabilities of 22FDX+ for use in automotive up to 150°C with corner tightened standard cell libraries and optimized SRAM compilers to boost chip performance by 10% or reduce power consumption by up to 20%. Novel SRAM bitcells and compilers that are optimized with reverse body-biasing, a capability only possible in FDSOI technology, can deliver up to 60% leakage reduction at 150°C junction temperature.

"GlobalFoundries is at the forefront of tackling power consumption challenges in IoT and automotive industries, where achieving the lowest power possible is paramount. With our world-class wireless connectivity and our smart and secure chips, we're driving the development of intelligent connected devices that can operate under harsh environments with the best power efficiency. GF is uniquely positioned to empower billions of connected devices to operate efficiently, and we're proud to partner with industry leaders like Nordic Semiconductor to deliver a compact, ultra-low power, high-performance chip with advanced memory, multiprotocol radio and top-tier security features," said Niels Anderskouv, Chief Business Officer at GF.

"Decades of ultra-low-power wireless expertise have come together to form the nRF54 Series," said Svein-Egil Nielsen, CTO and EVP of R&D at Nordic Semiconductor. "We're pleased to partner with GF on this journey. Our first SoC from the fourth generation of Bluetooth LE solutions, the nRF54H20, not only represents a significant milestone for Nordic but also allows Nordic's customers to build end-products far more advanced and efficient than those we see today. This SoC, the inaugural offering in the nRF54 Series, proves ideal for disruptive IoT applications that require high processing power, exceptional energy efficiency, and state-of-the-art security."

About GTS
GF Technology Summit (GTS) 2023 is GF's worldwide, annual series of technology-focused events. GTS brings together leaders from the commercial, business and research worlds to understand the latest technology challenges and opportunities, and partner to create the most innovative applications and solutions.

About GlobalFoundries
GlobalFoundries® (GF®) is one of the world's leading semiconductor manufacturers. GF is redefining innovation and semiconductor manufacturing by developing and delivering feature-rich process technology solutions that provide leadership performance in pervasive high growth markets. GF offers a unique mix of design, development and fabrication services. With a talented and diverse workforce and an at-scale manufacturing footprint spanning the U.S., Europe and Asia, GF is a trusted technology source to its worldwide customers. For more information, visit www.gf.com.

Forward-looking Information
This news release may contain forward-looking statements, which involve risks and uncertainties. Readers are cautioned not to place undue reliance on any of these forward-looking statements. These forward-looking statements speak only as of the date hereof. GF undertakes no obligation to update any of these forward-looking statements to reflect events or circumstances after the date of this news release or to reflect actual outcomes, unless required by law.

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