GlobalFoundries announces customer availability of UX platform technologies for intelligent edge, connectivity and Physical AI applications

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Newest feature-rich CMOS platform family combines ultra-low power connectivity, sensing and mixed-signal innovation with cost-efficient manufacturing for next-generation edge devices

SANTA CLARA, Calif., Sept. 02, 2026 (GLOBE NEWSWIRE) -- Today at its annual GF Technology Summit (GTS) in North America, GlobalFoundries (Nasdaq: GFS) (GF) announced process design kit (PDK) availability for its UX platform family, two new feature-rich CMOS technologies purpose-built for next-generation intelligent edge devices and advanced sensing systems. First introduced on stage at GTS last year, the UX family includes 40nm (40UX) and 22nm (22UX) technologies, providing customers with a scalable roadmap for ultra-low power microcontrollers, wireless connectivity devices, sensor interfaces, imaging systems and edge AI applications. Built on proven technology modules and supported by GF's design ecosystem and global manufacturing footprint, UX technologies help customers accelerate development of AI devices and intelligent systems while balancing performance, power, cost and supply requirements.

As intelligence moves from the cloud into billions of connected devices, designers need semiconductor technologies that combine precise sensing, always-on connectivity and energy-efficient processing within tight power and form factor constraints. The UX family expands GF's portfolio of differentiated technologies for Physical AI, giving customers a scalable path for solutions enabling connected microcontrollers (MCUs), highly integrated sensing and mixed-signal systems. 40UX brings proven, cost-efficient integration to MCUs and always-on-edge devices, while 22UX provides a higher level of analog, sensing, and mixed-signal performance for more complex intelligent systems.

The 40UX platform is optimized for secure, smart and connected microcontrollers and systems-on-a-chip (SoCs) serving wearable, IoT and wireless connectivity applications. Based on GF's high-volume 40nm platform with high-endurance eFlash technology that has shipped more than one million wafers to date, 40UX combines ultra-low leakage transistors and SRAM, low-noise analog capabilities, integrated embedded flash with built-in self-test functionality and advanced RF enablement to support long battery life, high reliability and compact form factors. The platform is particularly well suited for Bluetooth Low Energy (BLE) devices, wireless connectivity products, low-noise sensor interfaces and other power-sensitive edge applications.

The 40UX platform is set to ramp to volume production at GF's Singapore site by 2027, with future production planned through its site in Malta, New York. The technology's roadmap includes optimizations embedded processing, including high-voltage and noise enablement, Automotive Grade 1 qualification and enhanced embedded non-volatile memory options.

For applications that require higher levels of analog integration and sensing performance, the 22UX platform delivers an analog-optimized 22nm solution for edge AI, imaging and mixed-signal systems. The platform combines ultra-low power operation with low-noise analog devices, improved device matching, wafer-scale Random Telegraph Signal (RTS) noise characterization, bonding-ready wafers for advanced 3D integration and a roadmap for ultra-low leakage, analog compute-in-memory and embedded memory capabilities. The platform is ideally suited for stacked CMOS image sensor readout ICs with a 1/f flicker noise and low-noise 3.3V analog FET for precise measurement. The platform's improved device matching and higher voltage headroom make it an optimal choice for cost-optimized mixed-signal SoCs, sensor interfaces and power sensitive edge devices that require superior analog performance.

The 22UX platform integrates analog-optimized features including ultra-low power capabilities for exceptional energy-efficiency and third generation fill cells for faster product-level block/module integration. The platform is industry-compatible, offering easy porting from other bulk CMOS platforms, and was developed using high-volume proven modules and GF's successful 28nm technology that has shipped over one million wafers to date. 22UX will be manufactured at GF's advanced manufacturing facility in Dresden, Germany with a roadmap to reach multi-site production through GF's global footprint.

"Intelligence is moving into more of the devices people and businesses rely on every day, creating new demands for power efficiency, precise sensing, connectivity and cost-effective integration," said Ed Kaste, senior vice president of GF's CMOS business. "Our new UX platform family gives customers a scalable path to develop differentiated products for the intelligent edge, backed by proven technology and GF's global manufacturing capabilities. By expanding our feature-rich CMOS portfolio with 40UX and 22UX, we are helping customers bring the next generation of connected and Physical AI systems to market."

Both platforms are available for customer engagement and prototyping through GF's GlobalShuttle™ multi-project wafer program with quarterly shuttles scheduled through 2027.

About GF
GlobalFoundries (GF) is a leading manufacturer of essential semiconductors the world relies on to live, work and connect. We innovate and partner with customers to deliver more power-efficient, high-performance products for the automotive, smart mobile

devices, internet of things, communications infrastructure and other high-growth markets. With our global manufacturing footprint spanning the U.S., Europe, and Asia, GF is a trusted and reliable source for customers around the world. Every day, our talented global team delivers results with an unyielding focus on security, longevity, and sustainability. For more information, visit www.gf.com.

Forward-looking information
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