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GlobalFoundries® and Microchip Announce Microchip's 28-nm SuperFlash® Embedded Flash Memory Solution in Production

Widely deployed Non-Volatile Memory (NVM) solution is optimized for microcontrollers (MCUs), smart cards and IoT chips

CHANDLER, Ariz. and MALTA, N.Y., Sept. 27, 2023 (GLOBE NEWSWIRE) -- GlobalFoundries (GF®) (**Nasdaq: GFS**) and Microchip Technology **(Nasdaq: MCHP)**, via Microchip's **Silicon Storage Technology® (SST®)** subsidiary, today announces the immediate release to production of the SST ESF3 third-generation embedded SuperFlash technology NVM solution in the GF 28SLPe foundry process.

GF has established a new industry benchmark for implementing SST's widely deployed ESF3 SuperFlash technology. This implementation delivers the following capabilities and benefits:

- Lowest cost 28-nm HKMG ESF3 solution with only 10 masks added, including true 5V IO CMOS devices
- Highly competitive SST ESF3 bit cell size of less than 0.05 micron squared
- Operating temperature rating of −40°C to 125°C
- Sub-25 nanosecond (ns) read access times, 10-microsecond program times and four millisecond erase times
- Endurance exceeding 100,000 program/erase cycles
- No impact to design flows using GF 28SLPe platform-qualified IP (EG flow)
- Immediate availability of off-the-shelf macros from four megabits (Mb) to 32 Mb
- Access to custom macro design support from SST or GF

Use cases for embedded flash are exploding with the drive for increased intelligence at the edge. Embedded memory for secure code storage, over-the-air-updates and enhanced functionality is on the rise in a wide range of applications in home and industrial IoT as well as smart mobile devices. Innovative platforms are required to meet these needs.

"GF is proud to partner with SST to develop, qualify and release to production this impressive embedded NVM solution on our robust 28SLPe platform," said Mike Hogan, chief business unit officer at GF. "GF's customers are finding this combination of high performance, excellent reliability, IP availability and cost effectiveness to be ideal for advanced MCUs, complex smart cards and IoT chips for consumer and industrial products."

"SST and GF have partnered closely over the last decade to integrate and productize SST's industry-standard ESF1 and ESF3 embedded Flash technologies into GF's 130-nm BCD,

55-nm, 40-nm, and now 28-nm foundry platforms," added Mark Reiten, vice president of SST, Microchip's licensing business unit. "We are excited by the leadership position GF is establishing for the broadest offering of embedded NVM solutions and expect our close partnership to deliver additional breakthroughs over the coming decade."

SST is exhibiting its embedded Flash technology in the IP partner area during today's GF GTS Summit in Munich.

Customers interested in GF's ESF1 and ESF3 platform solutions should access the GF website located at **www.gf.com/technology-platforms** and contact the company for more information at **www.gf.com/about-us/contact-us**.

Customers interested in SST's ESF1, ESF3 or **SuperFlash® technology memBrain™ neuromorphic memory solution** IP offerings should contact **info@sst.com** or the appropriate regional contact listed on the **SST website**.

Resources

- PR Image: **www.flickr.com/photos/microchiptechnology/53199400497/sizes/l/**

Cautionary Statement
The statements in this release relating to GF establishing a new industry benchmark for implementing SST's widely deployed ESF3 SuperFlash technology, and that GF is establishing the broadest offering of embedded NVM solutions, along with expecting Microchip's close partnership with GF to deliver additional breakthroughs over the coming decade, are forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

About Silicon Storage Technology (SST)
Microchip Technology's SST subsidiary is a leading provider of embedded flash technology. SST develops, designs, licenses and markets a diversified range of proprietary and patented SuperFlash memory technology solutions for the consumer, industrial, automotive and Internet of Things (IoT) markets. SST was founded in 1989, went public in 1995 and was acquired by Microchip in April 2010. SST is now a wholly owned subsidiary of Microchip and is headquartered in San Jose, Calif. For more information, visit the SST website at **www.sst.com**.

About Microchip Technology
Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions**.** Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 125,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **www.microchip.com**.

About GF
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**.

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