



## GLOBALFOUNDRIES Announces Availability of Embedded MRAM on Leading 22FDX® FD-SOI Platform

September 20, 2017

*Advanced embedded non-volatile memory solution delivers 'connected intelligence' by expanding SoC capabilities on the 22nm process node*

**Santa Clara, Calif., September 20, 2017** -- GLOBALFOUNDRIES today announced the availability of its scalable, embedded magnetoresistive non-volatile memory (eMRAM) technology on the company's 22nm FD-SOI (22FDX®) platform. As the industry's most advanced embedded memory solution, GF's 22FDX eMRAM provides high performance and superior reliability for broad applications in consumer and industrial controllers, data centers, Internet of Things (IoT), and automotive.

As recently [demonstrated](#), GF's 22FDX eMRAM features the ability to retain data through 260°C solder reflow, while maintaining an industry-leading eMRAM bitcell size that retains data for more than 10 years at 125°C, enabling the technology to be used for general purpose, industrial, and automotive microcontroller units (MCUs). The power efficiency of FDX™ and eMRAM, coupled with the available RF connectivity and mmWave IP, makes 22FDX an ideal platform for battery-powered IoT and autonomous vehicle radar system-on-chips (SoCs).

"Customers are seeking to expand their product capabilities as an increasing number of applications require a high-performance, non-volatile memory solution," said Dave Eggleston, vice president of Embedded Memory at GF. "We are excited to release 22FDX eMRAM, a high reliability embedded memory technology that provides system designers with the versatility to build greater functionality into their MCUs and SoCs, while enhancing performance and power efficiency."

The high reliability and superior scalability of GF's eMRAM makes it a cost effective option at advanced process nodes for multiple markets. Moreover, the versatility of GF's eMRAM enables fast write performance and high endurance, allowing it to be used for both code storage and working memory. The availability of GF's 22FDX eMRAM is a result of the company's multi-year partnership with Everspin Technologies. The partnership has already demonstrated and sampled 1Gb DDR MRAM chips, and productized 256Mb DDR MRAM chips, products which are available exclusively from Everspin.

Process design kits for 22FDX eMRAM and RF solutions are available now. Customer prototyping of 22FDX eMRAM on multi-project wafers (MPWs) is on track for the first quarter of 2018, with risk production planned by the end of 2018. Custom eMRAM design services are available today from GF and our design partners, including eMRAM macros ranging from 2Mb to 32Mb, featuring easy design-in eFlash and SRAM interface options.

Customers interested in learning more about GF's 22FDX eMRAM solution, contact your GLOBALFOUNDRIES sales representative or go to [www.globalfoundries.com](http://www.globalfoundries.com).

### ABOUT GF

GLOBALFOUNDRIES is a leading full-service semiconductor foundry providing a unique combination of design, development, and fabrication services to some of the world's most inspired technology companies. With a global manufacturing footprint spanning three continents, GLOBALFOUNDRIES makes possible the technologies and systems that transform industries and give customers the power to shape their markets. GLOBALFOUNDRIES is owned by Mubadala Investment Company. For more information, visit <http://www.globalfoundries.com>.

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