GLOBALFOUNDRIES Announces Industry's Most Advanced Automotive-Qualified Production FD-SOI Process Technology

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Manufacturing certification for security, reliability and robustness provides customers with performance and power efficiency for automotive applications

Santa Clara, Calif., May 23, 2018 – GLOBALFOUNDRIES today announced that its 22nm FD-SOI (22FDX®) technology platform has been certified to AEC-Q100 Grade 2 for production. As the industry's most advanced automotive-qualified FD-SOI process technology, GF's 22FDX platform includes a comprehensive set of technology and design enablement capabilities tailored to improve the performance and power efficiency of automotive integrated circuits (ICs) while maintaining adherence to strict automotive safety and quality standards.

With the rapid proliferation of automotive electronics content and regulations on energy efficiency and safety, semiconductor device component quality and reliability are more critical than ever. As a part of the AEC-Q100 certification, devices must successfully withstand reliability stress tests for an extended period of time, over a wide temperature range in order to achieve Grade 2 certification. The qualification of GF's 22FDX process exemplifies the company's commitment to providing high-performance, high-quality technology solutions for the automotive industry.

"FD-SOI has advantages for companies who are looking for real-time trade-offs in power, performance and cost," said Dan Hutcheson, CEO and Chairman of VLSI Research. "GF's automotive-qualified 22FDX technology is exactly what automakers and suppliers need to enable the rapid integration of highly integrated automotive-grade ICs."

"GLOBALFOUNDRIES has more than 10 years of providing automotive solutions to the industry. We have proven our commitment to semiconductor quality and reliability through a range of certifications and audits every year," said Dr. Bami Bastani, senior vice president of business units at GF. "The automotive qualification of our 22FDX technology reaffirms our commitment to expanding our FD-SOI capabilities and portfolio to reach new markets and customers. We now have a proven ability to manufacture our 22FDX technology to meet the rigorous quality and performance requirements of the automotive market."

As a part of the company's AutoPro™ platform, 22FDX allows customers to easily migrate their automotive microcontrollers and ASSPs to a more advanced technology, while leveraging the significant area, performance and energy efficiency benefits over competing technologies. Moreover, the optimized platform offers high performance RF and mmWave capabilities for automotive radar applications and supports implementation of logic, Flash, non-volatile memory (NVM) in MCUs and high voltage devices to meet the unique requirements of in-vehicle ICs.

GF's AutoPro platform consists of a broad portfolio of automotive AEC-Q100 qualified technology solutions, backed by robust services package that comply with rigorous ISO automotive quality standards across GF's fabs in Singapore and, most recently, Fab 1 in Dresden, Germany that achieved ISO-9001/IATF-16949 certification and is now capable of meeting the stringent and evolving needs of the automotive industry.

The 22FDX PDK is available now along with a wide-range of silicon-proven IP. Customers can now start optimizing their chip designs to develop differentiated low power and high performance automotive solutions.

For more information, please visit: globalfoundries.com/market-solutions/automotive.

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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