GLOBALFOUNDRIES Surpasses $2 Billion in Design Win Revenue on 22FDX® Technology

July 9, 2018

With 50 client designs and growing, 22FDX proves its value as a cost-effective solution for power-sensitive applications

Santa Clara, Calif., July 9, 2018 – GLOBALFOUNDRIES today announced that the company's 22nm FD-SOI (22FDX®) technology has delivered more than two billion dollars of client design win revenue. With more than 50 total client designs, 22FDX is proving to be the industry's leading platform for power-optimized chips across a broad range of high-growth applications such as automotive, 5G connectivity and the Internet of Things (IoT).

For clients who need significant reductions in power and die size relative to a traditional bulk CMOS process, 22FDX offers the industry's lowest operating voltage, delivering up to 500MHz frequencies at only 0.4 volts. The technology also delivers efficient single-chip integration of RF, transceiver, baseband, processor, and power management components, providing an unparalleled combination of high performance RF and mmWave functionality with low-power, high density logic for devices that require long-lasting battery life, increased processing capability, and connectivity.

"At Synaptics, as we expand upon our industry-leading mobile and PC businesses to include delivering new and innovative products that address the booming IoT market, we require the best available technologies to enable us to deliver top-notch solutions including voice and multimedia processing capabilities for our customers," said Rick Bergman, President and CEO at Synaptics. "GF's 22FDX technology delivers a potent mix of low static and dynamic power along with excellent performance to give us a great platform for our world-class products."

"The cost of entry for leading processes can be prohibitive to some emerging and startup chip companies," said Patrick Moorhead, founder and president, Moor Insights & Strategy. "GF's 22FDX is designed to be an enabling technology that is demonstrating that it is optimal for cost-sensitive, battery-powered devices such as mobile, IoT, automotive, RF connectivity and other growth markets."

"We're only just beginning," said GF CEO Tom Caulfield. "We have found a way to separate ourselves from the pack by emphasizing our differentiated FD-SOI roadmap and client-focused offerings that are poised to enable connected intelligence. We will continue to build on our momentum and look for ways to expand our reach to address the evolving needs of the industry."

According to a recent VLSI Research Survey, FD-SOI technology is gaining significant traction in the industry. GF's roadmap strategy is resonating with the industry and designers are embracing FD-SOI as a complementary technology to FinFET, with FD-SOI designed for specific application spaces, such as IoT, where power consumption is important and the product life is relatively short.

GF is leading this transition with 22FDX, while preparing to deliver a next-generation 12FDX™ technology that will provide a full node scaling benefit and improved power efficiency for a new generation of applications, from edge-node artificial intelligence and AR/VR to 5G networking and advanced driving assistance (ADAS). 22FDX is in early production, with yields and performance matching client expectations.

Supporting Quotes

"Our goal has always been to provide more secure, connected experiences for drivers. Combining our leadership in radar technology with GF's 22FDX automotive-qualified process, we are able to deliver a cost-effective, high performance, low power solution that opens new opportunities for car manufacturers to provide better experiences for drivers around the world."
Kobi Marenko, CEO at Arbe Robotics

"GF's 22FDX technology is perfectly positioned to support the explosive growth of low-power, battery-operated IoT devices. Ask Radio Systems and its parent Singularity AIX Incorporated are developing several proprietary radio IPs and a Convolutional Neural Network core designed around IoT and AI applications, focused on low power and low leakage. The opportunities that are available to exploit additional in-design flexibility, turn down the power and leakage with 22FDX are unparalleled, and you just don't get that kind of opportunity from bulk CMOS."
Anup Savla, Founder and CEO at Ask Radio/Singularity AIX

"The automotive industry realizes that assisted driving solutions require more camera information besides Radar and Lidar, integrating information from multiple cameras. The resulting DreamChip multi-core vision processor platform, based on the 22FDX process is providing European auto makers and Tier 1 automotive component suppliers with a platform from which they can create custom derivatives with a massively reduced time to market."
Jens Benndorf, CEO at Dream Chip Technologies GmbH

"InnoPhase technology enables extremely low power IoT connectivity solutions as well as frequency agile software definable

radios for a variety of applications. Our technology strongly utilizes digital techniques in the radio domain, embracing process technology node migration. We see GF's 22nm FDX offering well aligned with our performance and business needs. It enables us to further reduce our power consumption, as well as add features and increase performance while maintaining a workable cost structure. Our products demand the digital performance/power/density and complete analog/RF feature set that 22nm FDX provides."
Claudio Anzil, Vice President of Engineering and Operations at InnoPhase

“With 22FDX, the value proposition for us is the potential power and area savings, two key metrics for our highly optimized LTE NB-IoT and CAT-M chipsets. In addition, leveraging the growing ecosystems of IP available in the 22FDX process helps to accelerate time to market.”
Peter Wong, CEO at Riot Micro

“As our customers increasingly demand more from their mobile experiences, our partnership with GF on its 22FDX technology is critical to differentiate ourselves in the competitive market and deliver powerful and efficient mobile SoCs.”
Min Li, CEO at Rockchip

"22FDX offers the industry an unparalleled solution with its analog/RF integration, body-biasing adaptability, and eMRAM. We are ready to support GF’s design wins and mass market demand through delivering mature FD-SOI substrates across our global manufacturing sites."
Paul Boudre, CEO at Soitec

“As a pioneer and key supplier of FD-SOI technology, ST has long recognized its importance and role in the palette of process-technology options and we value the cooperation we have with GlobalFoundries in making their 22FDX available to our partners.”
Joël Hartmann, Executive Vice President, Digital Front-End Manufacturing and Technology,STMicroelectronics

“With the proliferation of connected devices for smart cities, homes, and industrial applications, network providers need single-chip solutions that support either NB-IoT or LTE-M. Integrated and superior RF with digital PA on GF’s 22FDX platform, coupled with our energy efficient and programmable ZSPnano for baseband and protocol stack, is enabling a dual-mode solution that will better meet the needs of IoT and emerging AIoT (AI of Things) industries.”
Wayne Dai, Chairman, President and CEO at VeriSilicon

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 clients the power to shape their markets. GLOBALFOUNDRIES is owned by Mubadala Investment Company. For more information, visit http://www.globalfoundries.com.

Contact:

Erica McGill
GLOBALFOUNDRIES
(518) 795-5240
+1-781-591-0354
erica.mcgill@globalfoundries.com