GLOBALFOUNDRIES Demonstrates Industry-Leading 112G Technology for Next-Generation Connectivity Solutions

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High bandwidth, low power SerDes IP portfolio enables 'connected intelligence' in data centers and networking applications

Santa Clara, Calif., November 15, 2017 - GLOBALFOUNDRIES today announced it has demonstrated the next generation of 112Gbps SerDes capability. GF's High Speed SerDes (HSS) solutions include best-in-class architecture for 112G to 56G, 30G and 16G SerDes IPs to enable connectivity for cloud computing, hyperscale data center, and networking applications.

"GF's demonstration of 112Gbps SerDes architecture establishes the capability of running extremely high, next-generation interconnect technology that can deliver long-reach capabilities to data center and enterprise applications," said Mike Cadigan, senior vice president of global sales and business development at GF. "As a result, our customers will soon have access to design best-in-class ASIC solutions to meet the explosive bandwidth growth in data center and networking applications as the industry transitions to a new era of connected intelligence."

The 112G SerDes is designed in GF's high-performance ASIC FX-14™ technology, and is capable of supporting several multi-level signaling schemes while targeting 25dB+ insertion loss interconnects. Flexibility has been built into the 112G SerDes platform in order to analyze the efficacy of a variety of higher level encoding schemes such as Forward Error Correction.

The learning from this effort is being used to develop GF's 112G SerDes IPs in FX-7™ technology and leverages the foundry's leading-edge 7nm FinFET technology platform, 7LP, to enable high-speed connectivity and low-power solutions as well as optical variants, for current and future leading-edge networking, compute and storage applications.

Customers are presently designing advanced ASIC solutions in the 14LPP and 7LP process technologies using the 56Gbps and other FX-14 SerDes cores. GF has demonstrated its ability to deliver a true long-reach SerDes solution by delivering a 56Gbps PAM4 signal on the company's 14nm FinFET process and is shipping development boards in customer channels. Enabling 112G communication solutions will allow customers to double chip bandwidth in next generation products.

To learn more about GF's high-performance ASIC solutions, go to www.globalfoundries.com/ASICs.

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 globalfoundries.com.

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