Exclusive Agreement Targets 180 nm UltraCMOS™ Process as Part of Long-Term SOS Roadmap

Peregrine Semiconductor Corporation, a leading supplier of high-performance RF CMOS integrated circuits (ICs), today announced an exclusive joint development agreement with IBM for the development and manufacture of future generations of Peregrine's patented UltraCMOS™ silicon-on-sapphire (SOS) process technology, the industry's highest-performance radio frequency complementary metal-oxide semiconductor (RF CMOS) process.

When fully qualified, the next-generation UltraCMOS RF ICs will be manufactured by IBM for Peregrine in the jointly-developed 180-nanometer process at IBM's 200mm semiconductor manufacturing facility in Burlington, Vermont.

Peregrine's UltraCMOS technology delivers unmatched levels of RF performance and monolithic integration for high-growth applications such as the RF front-end of mobile phones and multi-mode, multi-band mobile wireless devices; broadband communications including 4G LTE equipment and base stations; mobile DTV/CATV RF signal conditioning; and space satellite systems.

IBM, a global leader in microelectronics, adds Peregrine's UltraCMOS technology to its advanced semiconductor processing capability. This development marks the first commercial use of 200mm (8-inch) wafer processing for silicon-on-sapphire process - a patented variation of silicon-on-insulator (SOI) technology that incorporates an ultra-thin layer of silicon on a highly insulating sapphire substrate - a milestone which will drive the next decade of UltraCMOS engineering.

Migration to 200mm wafers facilitates the evolution of the process to advanced 180nm, 130nm and 90nm nodes. It also provides access to advanced manufacturing toolsets and enables significantly expanded digital integration capability. Further, the agreement with IBM provides, through its world-class Technology Alliance partners, unprecedented levels of manufacturing capacity and a robust supply chain.

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