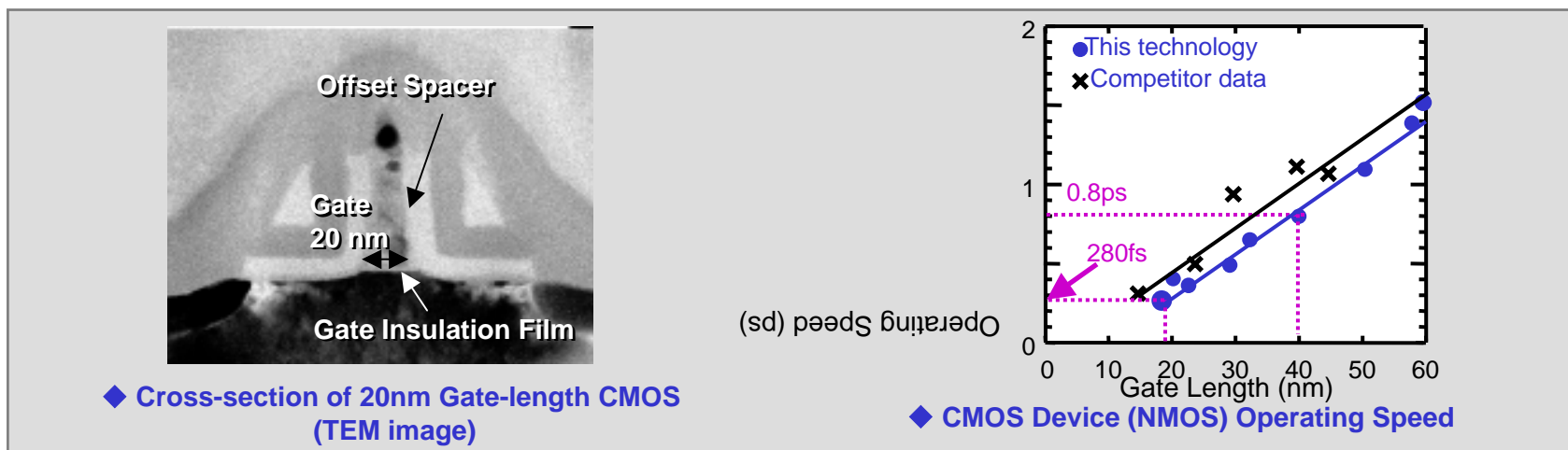


2002/6/11 Release

Development of the world's fastest 20-nm Gate-length CMOS Technology - One-order reduction of leak current with a nitride-based gate insulator -



A 20-nm gate-length CMOS (Complementary Metal Oxide Semiconductor) device technology suitable for high-speed, low power applications was developed. By further scaling of the gate length and the development of a nitride-based gate insulation film, the world's fastest device operation speed was achieved, as well as a reduction in gate leakage current to less than one-tenth of previous levels. This result will contribute as key technology for next-generation high-speed low power CMOS suitable for the expanding mobile equipment market.