A 100nm technology incorporating low-leakage, high-performance, and mixed-signal components is presented. Wells and devices are carefully optimized to allow for minimum mask count. The technology features low-k BEOL, 1.21um^2 SRAM cells. Reliability and leakage data for the highly nitrided gate dielectric, RF performance for ASIC devices with transit frequencies of 155 GHz, and ESD stability values are presented.