

Energy-Efficient Design in FDSOI

Abstract: This talk presents options for energy-efficient mixed-signal and digital design in FDSOI technologies. Effective generation of body bias and its use to improve efficiency will be presented on the examples of RF and baseband building blocks, temperature sensors, data converters and voltage regulators. The techniques will be presented within a concept of a RISC-V-based SoC, designed to operate in a very wide voltage range utilizing 28nm FDSOI.