Device and testchip measurements show that forward body bias (FBB) can be used effectively to improve performance and reduce complexity of a 130nm dual-$V_T$ technology, reduce leakage power during burn-in and standby, improve circuit delay and robustness, and reduce active power. FBB allows performance advantages of low temperature operation to be realized fully without requiring transistor redesign, and also improves $V_T$ variations, mismatch, and $g_m \times r_o$ product.