

Non-planar Tri-Gate CMOS transistors have been fabricated and simulated to explore transistor design and layout. Full depletion is achieved with relaxed body dimensions over other fully-depleted transistor structures. The corner of the body plays a dominant role in the sub-threshold behavior, greatly affecting both the threshold voltage of the devices, and the sub-threshold characteristics of the full device. Layout is also shown to play an important part in the shape of the optimized Tri-Gate body.