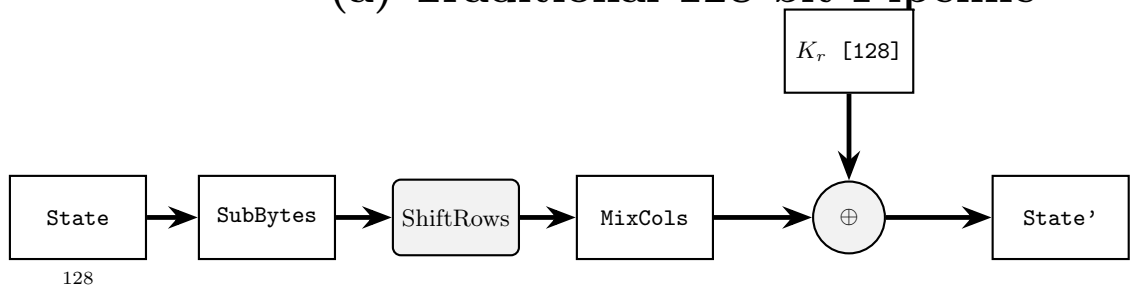
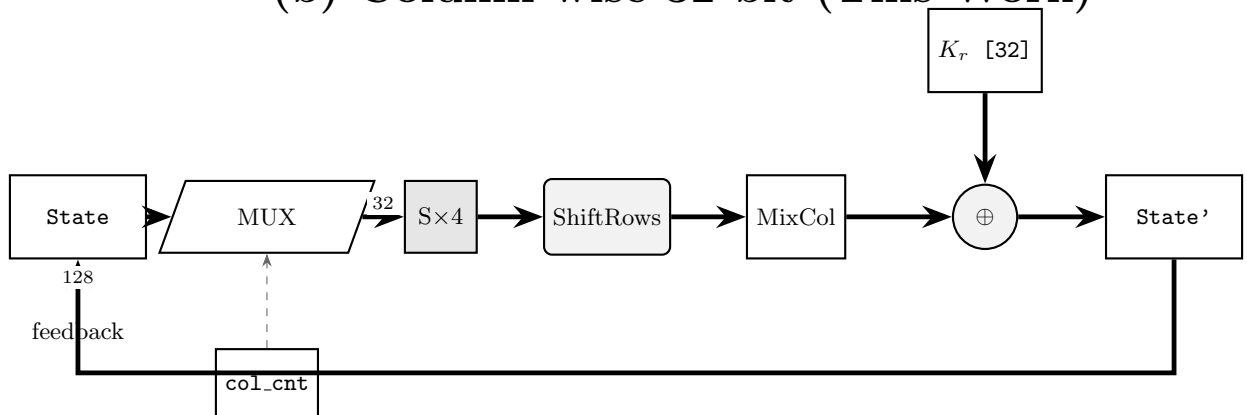


(a) Traditional 128-bit Pipeline



High area, 1 cycle/round

(b) Column-wise 32-bit (This Work)



Low area, 4 cycles/round