CARRY SELECT ADDER ARCHITECTURE
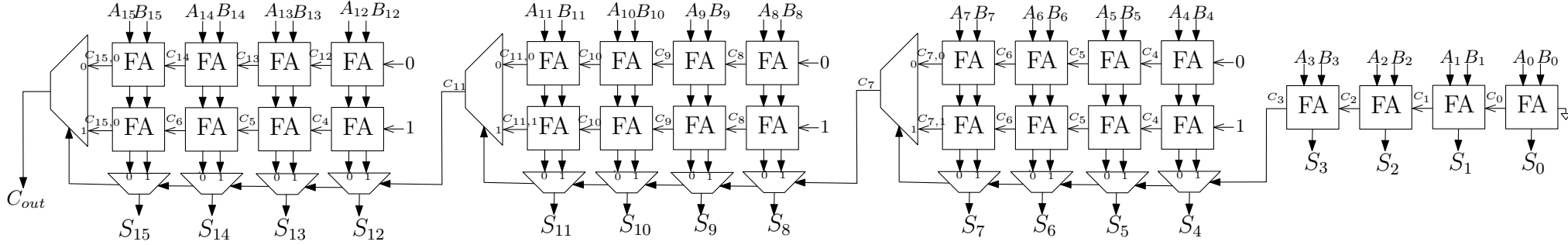

16-bit Carry Select Adder Delay (Block Size = 4):

$$T_{SUM} = T_{4-bit-RCA-CARRY} + 3 * T_{2:1-MUX}$$

$$T_{CARRY} = T_{4-bit-RCA-CARRY} + 3 * T_{2:1-MUX}$$

N-bit Carry Select Adder Delay With Block Size 'M':

$$\boxed{T_{SUM} = T_{M-bit-RCA-CARRY} + (\tfrac{N}{M} - 1) * T_{2:1-MUX}}$$

$$\boxed{T_{CARRY} = T_{M-bit-RCA-CARRY} + (\tfrac{N}{M} - 1) * T_{2:1-MUX}}$$