

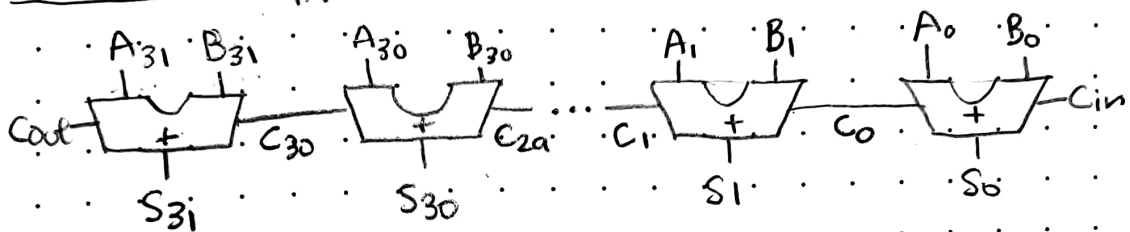
# Comp Arch (HW4-2)

## Full Adder

$$S = A \oplus B \oplus C$$

$$Cout = AB + ACin + BCin$$

## 32-Bit Ripple-Carry Adder



... carries[0] ← carries[0]

## 32-wide 32:1 MUX

$\log_2(32)$  selects = 5 selects

1 → 4:1 → 8:1 → 16:1 → 32:1

