

Combinational Logic for Control Signals

- $LD_D = S_3$
- $CL_D = RST$
- $LD_IR = S_1$
- $CL_IR = RST$
- $LD_AC = S_4 \cdot (ADD + SUB)$
- $CL_AC = RST + S_2 \cdot CLEAR$
- $ADDORSUB = S_4 \cdot SUB$
- $R/W = S_4 \cdot STORE$
- $D/PC = [RST + S_4 \cdot (BNZ + STORE)]'$
- $LD_PC = S_4 \cdot BNZ \cdot ZERO$
- $PC_CNT = S_1 + S_4 \cdot [(ADD + SUB) + BNZ \cdot ZERO' + STORE]$
- $CL_PC = RST$
- $MEM_EN = S_1 + S_3 + S_4 \cdot STORE$