

# Mic-1 Microarchitecture

ALU Status signal: N and Z

ALU output is negative  
MS bit of ALU output is 1

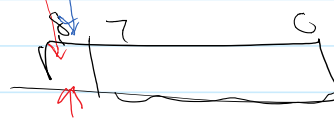
ALU output is zero  
All bits of ALU output are zeros

Microprogram Control-flow: if JAMPN - flow control decisions.

JMPN: if N is true set MPC MS bit = 1

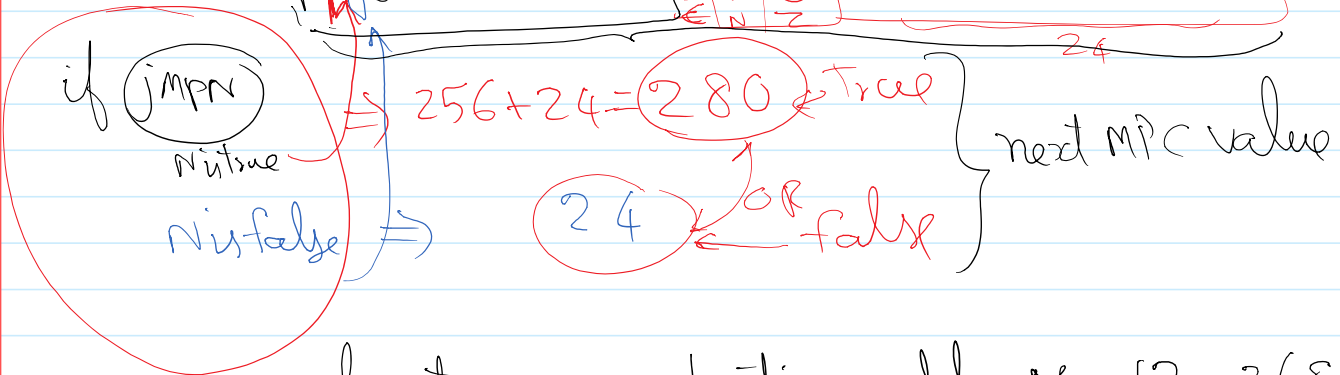
JMPZ: if Z is true set MPC MS bit = 1

MPC: Micro Program Counter



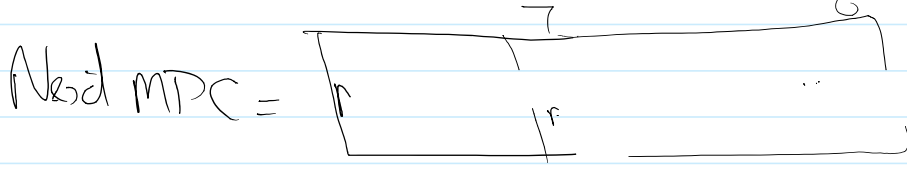
if JMPN Microinstruction 280

MPC = <sup>current</sup> 24 Microinstruction 24



Complimentary Microinstruction address: 12, 268

40, 296  
100, 356



$$MPC[8] \leftarrow (JMPN \text{ AND } N) + (JMPZ \text{ AND } Z) +$$

original address[8]

MPC [7..0] ←

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