

SU 18

Datapath for R-Format and Load/Store Instructions

sub	A	B	C
34	4	8	3

$$I_{31} \dots I_{26}$$

01000

0001

00100

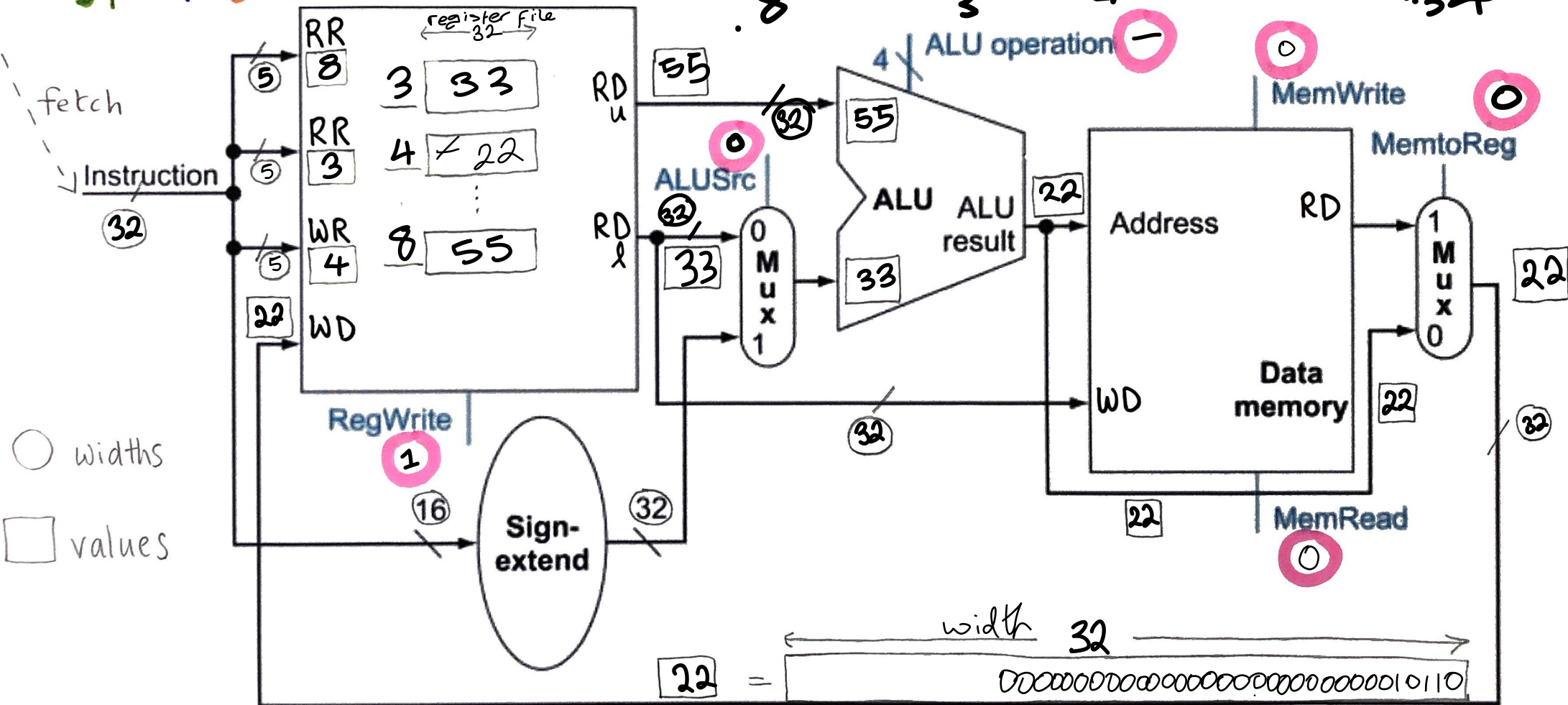
100010

8

3

4

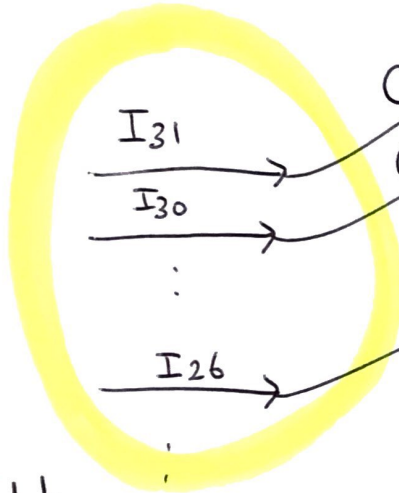
34


$$A ::= !B \quad \text{---} \quad !C$$

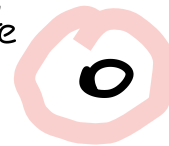
B 55 C 33

opcode (field)

$I[31-26]$



Mem write



RegWrite



"send out control signals"

Decoding

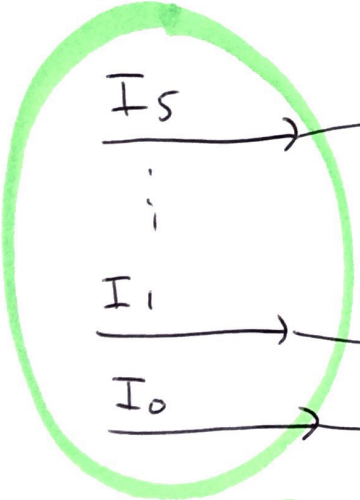
"get hardware ready for execution"

ALUop

Instruction Bus

$I = I[31-0]$

Fetch



Control Bus



"set ALU for correct operation"

34

function field

$I[5-0]$