

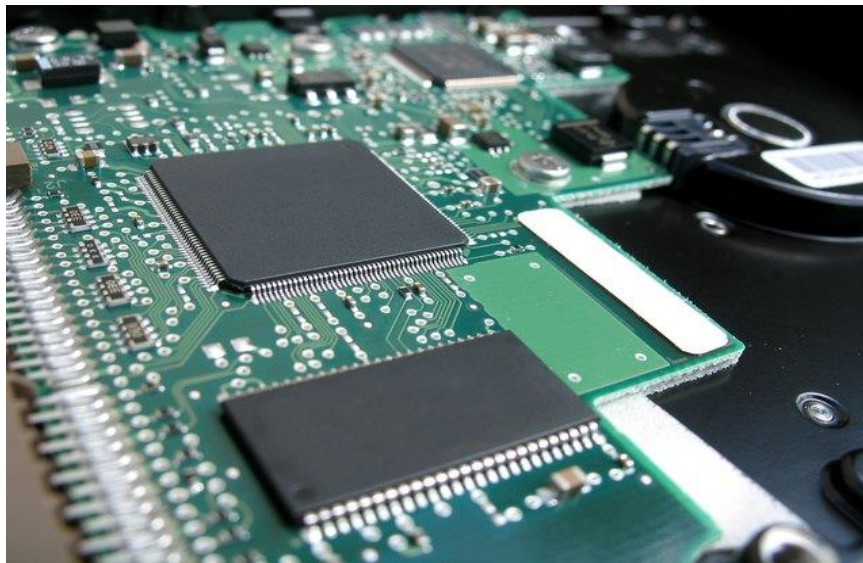


جامعة القادسية
كلية التربية



Lecture 27

Microprocessors



Prepared by:

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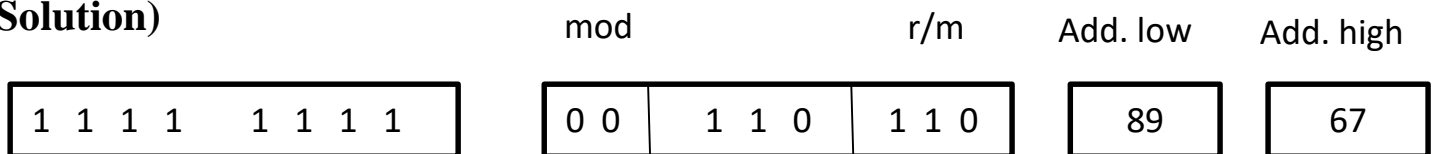
Decoding

Translation from Machine Code to Assembly Language

Ex) Translate these machine code to assembly language:

- FF368967

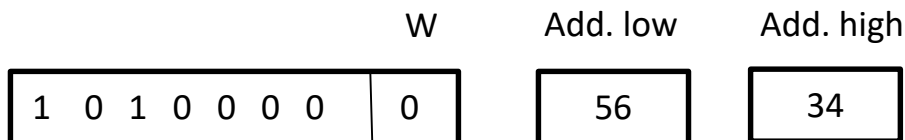
Solution)



PUSH [67 89]

- A05634

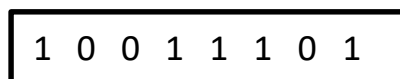
Solution)



MOV AL, [3456H]

- 9D

Solution)

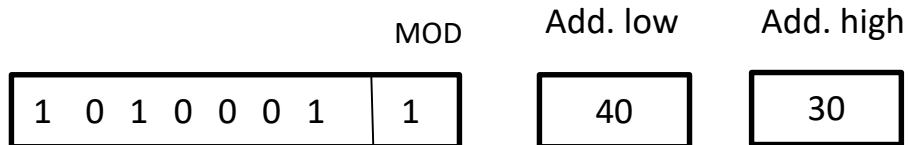


POP F

Microprocessors

- **A34030H**

Solution)



MOV [3040H], AX

- **8E1C**

Solution)



MOV DS, [SI]

- **8F05**

Solution)



POP [DI]

- **53H**

Solution)

Reg.

0 1 0 1 0	0 1 1
-----------	-------

PUSH BX

- **BA5544**

Solution)

w

Reg.

data low

data high

1 0 1 1 1	0 1 0
-----------	-------

56

34

MOV DX, 4455H

- **8A0D**

Solution)

w

MOD

Reg.

r/m

1 0 0 0 1 0 1	0
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0 0	0 0 1	1 0 1
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MOV CL, [DI]

- **06**

Solution)

seg.					
0	0	0	0	0	1
0	0	0	1	1	0

PUSH ES

- **8CD2**

Solution)

								MOD	Seg.	r/m			
1	0	0	0	1	1	1	0	1	1	0	0	1	0

MOV DX, SS

- **58H**

Solution)

Reg.					
0	1	0	1	1	0
0	0	0	0	0	0

POP AX