

(20)

JMP BX

$$\begin{aligned} PA &= DS * 10h + BX \\ &= 1000 * 10 + 2000 \\ &= 10000 + 2000 = 12000h \end{aligned}$$

$$IP = 2010h$$

$$\begin{aligned} PA \text{ of ins} &= CS * 10h + IP \\ &= 3000 * 10 + 2010 \\ &= 30000 + 2010 \\ &= 32010h \end{aligned}$$

(17)

$$\begin{aligned} a) \quad PA &= SS * 10h + [BP + SI + 2000h] \\ &= 2000 * 10h + [2000 + 3000 + 2000] \\ &= 2000 * 10h + 607000 \\ &= 27000h \end{aligned}$$

$$b) \quad 7856h$$

(18)

MOV BX, [BP + SI]

Q1M

$$PA = SS * 10h + [BP + SI]$$

$$= 2000 \times 10 + [0500 + 0100]$$

$$= 20000 + 0600$$

$$= 20600h$$

Data: 7856h

L2ME ←

(19)

$$PA = DS * 10h + [SI + 1000h]$$

$$= 1000 \times 10 + (2000 + 1000)$$

$$= 10000 + 3000$$

$$= 13000h$$

IP = ~~ABCD~~ 3412h

Physical address of JMP [SI + 1000h]

$$= CS * 10h + IP$$

$$= 3000 * 10 + ~~ABCD~~ 3412$$

$$= 30000 + 12 ~~ABCD~~ 3412$$

$$= 30012 ~~3AB12h~~ 33412h$$