

11 | $A_{BUS} = 20 \text{ bit} \rightarrow \text{INDIRIZZI SU } 20 \text{ bit}$

CELLA = 4 byte

MAX MEM. ?

$$2^{20} = 1024 \cdot 1024 = 1048576 \text{ INDIRIZZI}$$

$$\text{MAX MEM} = 4 \text{ BYTE} \cdot 2^{20} = \underline{4 \text{ MB}}$$

13 | $MEM = 4 MB$
 $A_{BUS} = 16 \text{ bit}$

PARALLELISMO \rightarrow DIM. CELLA DELLA MEMORIA

$$MEM = DIM. CELLA \cdot 2^{A_{BUS}}$$

$$\Rightarrow DIM. CELLA = \frac{MEM}{2^{A_{BUS}}} = \frac{4 MB}{2^{16}} = \frac{4 \cdot 2^{20}}{2^6 \cdot \cancel{2^{10}}} = \frac{2^{12}}{2^6} = 2^6 = 64 \text{ BYTE}$$

$$KB = 2^{10}$$

$$MB = 2^{20}$$

$$GB = 2^{30}$$

19 | MEM = 64 KB

$A_{BUS} = 12 \text{ bit}$

$$\text{PARALLELISMO} = \frac{\text{MEM}}{2^{A_{BUS}}} = \frac{2^6 \cdot 2^{10}}{2^{12}} = 2^4 = 16 \text{ BYTE}$$

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$$\text{MEM} = 4\text{MB}$$

$$\text{PARAL.} = 16 \text{ bit}$$

$$A_{\text{BUS}} = ?$$

A_{BUS} SEMPRE IN BIT

$$000 \rightarrow 2^3$$

$$\text{MEM} = \text{PARAL.} \cdot 2^{A_{\text{BUS}}}$$

$$2^{A_{\text{BUS}}} = \frac{\text{MEM}}{\text{PARAL.}} = \frac{4\text{MB}}{16\text{bit}} = \frac{4\text{MB}}{2\text{Byte}} = \frac{2^{22}}{2^1} = 2^{21} = 2\text{MB}$$

$$2^{A_{\text{BUS}}} = 2^{21}$$

$$A_{\text{BUS}} = 21 \text{ bit}$$