

Jawaban :

Diberikan :

- Memory utama = 4 GB = 2^{32} B
- Cache = 1 MB = 2^{20} Byte
- ~~Blk~~ Block size = 16 Byte = 2^4
- Metode : Direct Mapping

a. Word / offset (W):

Digunakan untuk menunjuk
dalam satu block

$$\text{Block} = 16 \text{ Byte} = 2^4 \rightarrow$$

$$W = 4 \text{ bit}$$

b. Slot / cache line (L):

$$\begin{aligned} \text{Jumlah line dalam cache} &= \\ &= 2^{20} / 2^4 = 2^{16} \text{ line} \end{aligned}$$

$$\rightarrow L = 16 \text{ bit}$$

c. TAG (T):

$$\text{Total address} = 4 \text{ GB} = 2^{32}$$

$$\text{TAG} = \text{Total bit} - \text{Line}$$