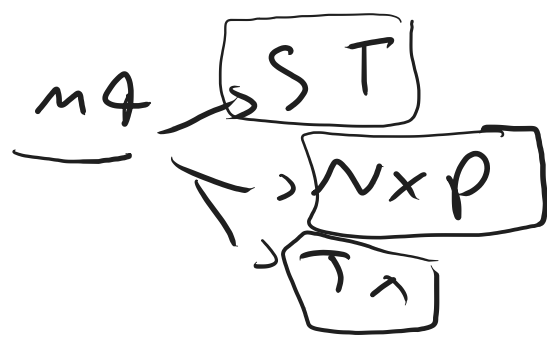


Systick  
system timer

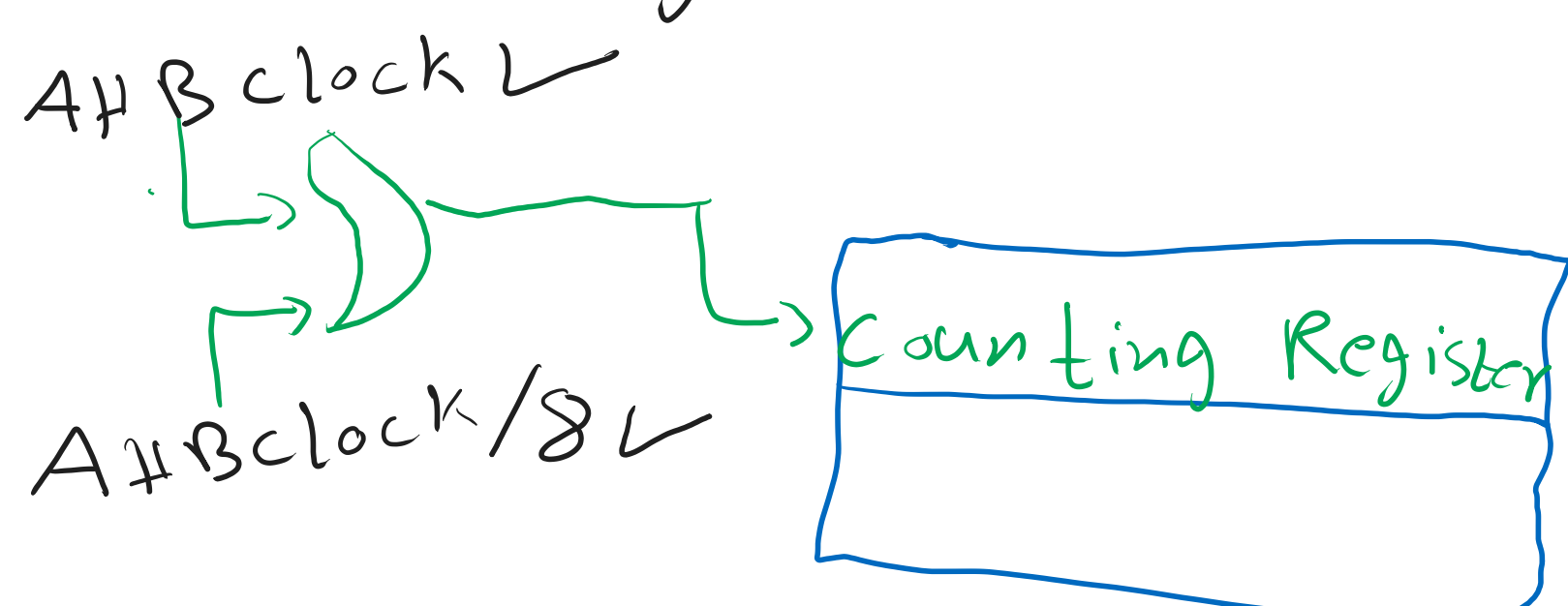


- Core peripheral < Fast access
- < Standard

- 24 bit resolution

$$2^{24} = 16,777,216$$

- Timer mode only.

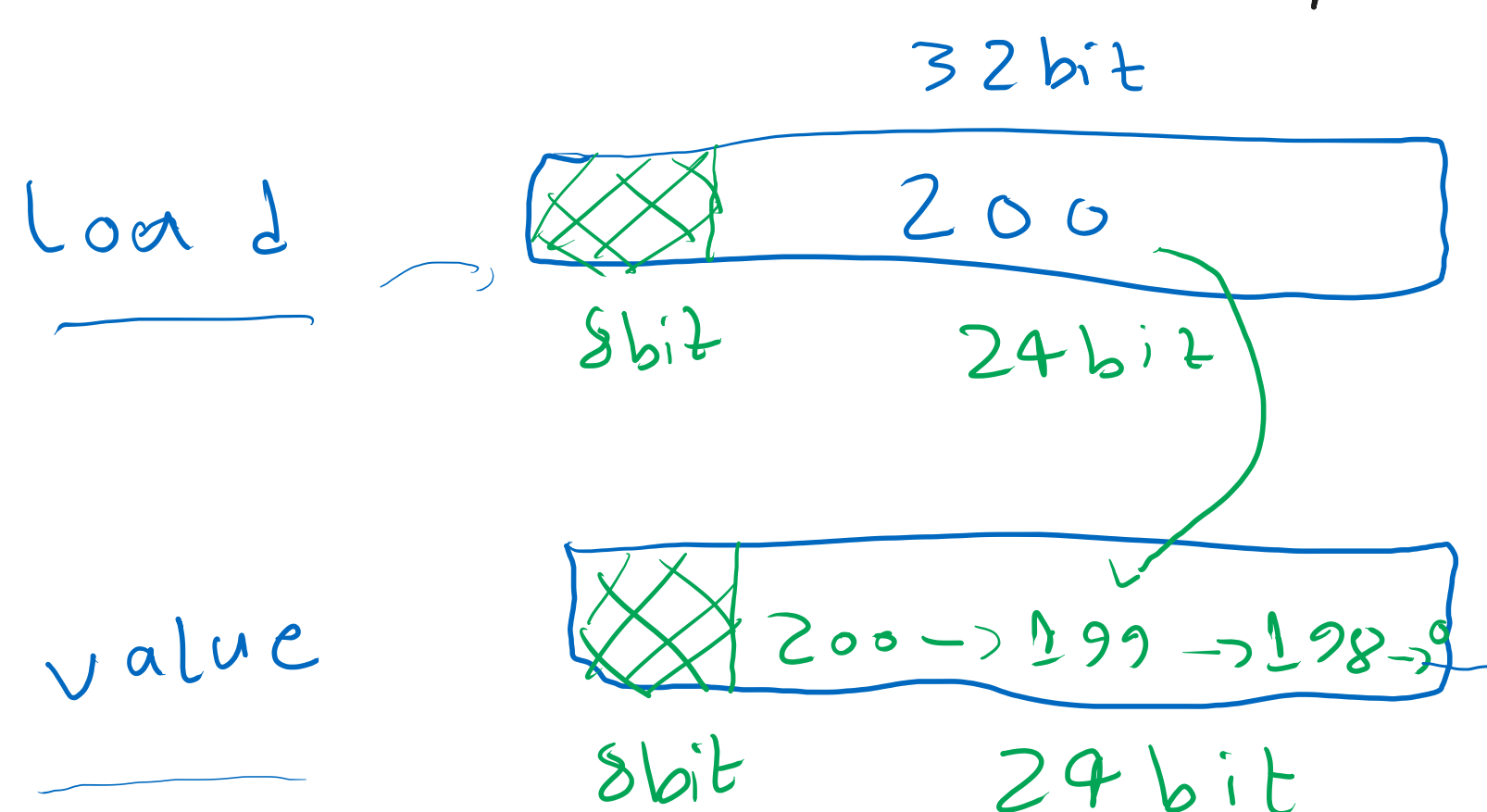


- Count down only. 100 → 99 → 98

- Interrupt on 0 value.



operation concept



Notes

- 1) writing any value to value Register

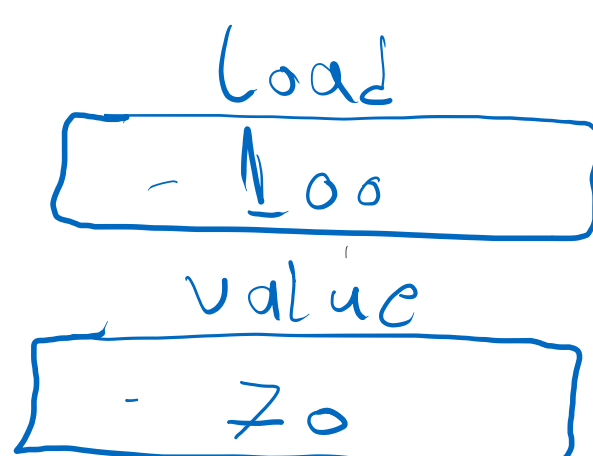
clear it.

- 2) while counting, if you want to change the val.

- ↳ Load new value in load Register
- ↳ Clear value register.

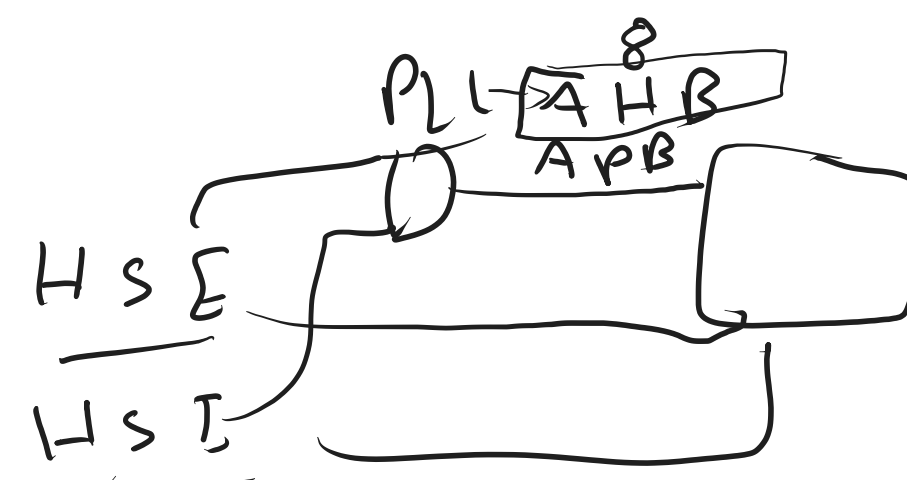
- 3) Get elapsed time

load - value



- 4) Get remaining time

Read value register.



[x] HSE = 8 MHz

AHB without prescaler = 8 MHz

Systick AHB/8 = 1 MHz → 2 MHz

$$\text{Tick Time} = \frac{1}{1 \text{ MHz}} = 1 \text{ } \mu\text{sec}$$

Load = 1000 → 1 m

Load = 1000 000 → 1 sec