


Component of the CPU

Registers



Component of the CPU

Arithmetic
Logic Unit



Component of the CPU

Control
Unit



**Main memory (RAM)
and the
fetch-decode-execute cycle**

Part 1

**Main memory (RAM)
and the
fetch-decode-execute cycle**

Part 2

**Main memory (RAM)
and the
fetch-decode-execute cycle**

Part 3

- temporary storage spaces for data / instructions



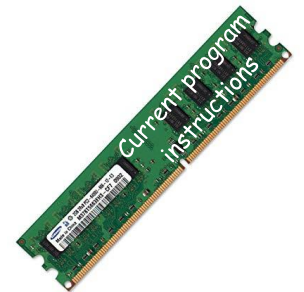
- **Arithmetic Logic Unit**
- performs mathematical calculations and logical operations \downarrow
comparing data, e.g. > and <



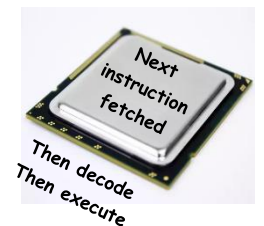
- directs the flow of data / instructions
- coordinates the other parts of the CPU (e.g. ALU, cache and registers)



- Program instructions (for current programs) are in RAM.



- The next instruction is fetched to the processor from RAM
- It is then decoded and executed (by the processor).



- Resultant data may need to be written to RAM.

