

Basic Terminology

ALU - Arithmetic logic unit, the part of a computer that performs all arithmetic and logical computations.

CU – Control Unit

CPU – central processing unit, processor (ALU + CU)

I/O devices – Input / Output devices

(Examples: terminal, monitor, touch screen, mouse, printer, fax, microphone.....)

Types of Memory:

CPU can directly access the **primary memory**:

CPU Registers

RAM - Random-access memory is a form of computer data storage. A **random access memory** device allows data items to be read and written in roughly the same amount of time, regardless its location.

ROM – Read Only Memory

Cache – an intermediary memory between Registers and RAM.

Note: RAM and main memory are interchangeable terms.

CPU Registers, RAM, Cache are **volatile**

ROM is non-volatile – if computer is off, the information is still in.

Volatile: retaining data **only as long** as there is a power supply connected

CPU cannot directly access the secondary memory.

Secondary Memory: magnetic disk, C drive, memory stick, CDs, DVDs etc.

Secondary memory IS NOT volatile.

Computer Architectures

CISC - Complex Instruction Set Computers

RISC – Reduced Instruction Set Computers

MIPS - Microprocessor without Interlocked Pipeline Stages