

MORE COMPUTER BASICS

Definitions

- ◎ CPU:
 - Central Processing Unit
 - Brains of the computer
 - All of the processing goes on through the CPU
- ◎ RAM
 - Random Access Memory
 - Like the short term memory on the computer
 - Only VOLITILE INFORMATION CAN BE STORED HERE
- ◎ ROM
 - Read Only Memory
 - Like the Long Term Memory on the computer
 - ONLY NON-VIOLITILE INFORMATION CAN BE STORED HERE

RAM

vs

ROM

- ⦿ Requires a constant form of power to work
- ⦿ Programs that are turned on and running stored here for better efficiency

⦿ **Volatile**

(Elements erased when device is turned off)

- ⦿ Does not require a constant form of power to run
- ⦿ Start up files are found here
- ⦿ Hard drive

⦿ **Non-Volatile**

(Memory that will be saved when turned off)

Definitions Continued:

⦿ Motherboard

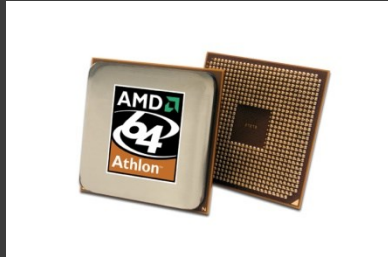
- Heart of the computer
- Main circuit board that connects everything together on the computer

⦿ Hard Disk Drive

- Main storage unit on the computer

The main parts of a computer system that process information.

Processing

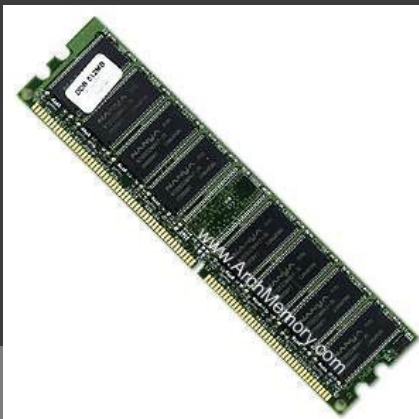
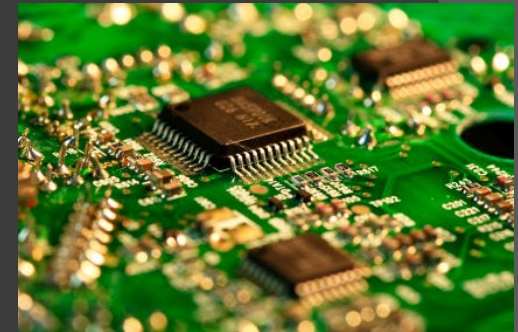


CPU
Central Processing Unit

The CPU is often called the “brains” of the computer.

ROM is permanent internal memory that cannot be changed.

ROM
Read Only Memory



RAM
Random Access Memory

RAM is temporary memory that can be changed.



Memory, what's it all mean?

- ⦿ Bit Smallest Unit of Memory
- ⦿ Byte 8 Bits = Bite
- ⦿ Kilobyte 1000 Bites
- ⦿ Megabyte 1 Million Bites (approx)
- ⦿ Gigabyte 1 Billion Bites (approx)
- ⦿ Terabyte 1 Trillion Bites (approx)

- ⦿ Others: Petabyte, Exabyte, Zettabyte, Yottabyte

Storage Devices

Needed for permanently storing important information such as computer programs, files, and data.

Plastic or metal platters that are coated with oxide and store data magnetically.

Magnetic Storage

Hard Disk
Floppy Disk
Videotape



Optical Storage
CDs
DVDs

A storage medium on which data is recorded and read by two lasers

A small storage device that can be plugged into a USB port.

USB Storage



Hertz

- ⦿ Hertz measures the speed of a CPU
 - Hertz = number of cycles per second
- ⦿ Megahertz
- ⦿ Gigahertz
- ⦿ Terahertz

Input / Output



Scanner
Input



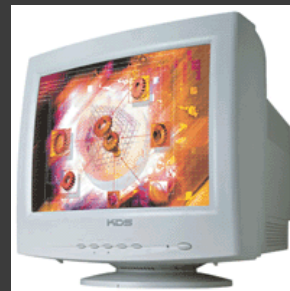
Speakers
Output



Printer
Output



Keyboard
Input



Monitor
Output



Headset
Input/Output



Mouse
Input