**Hardware Components**

**The major hardware components of a computer system are:**

▪ **Input devices**

▪ **Output devices**

▪ **Processor**

▪ **Memory**
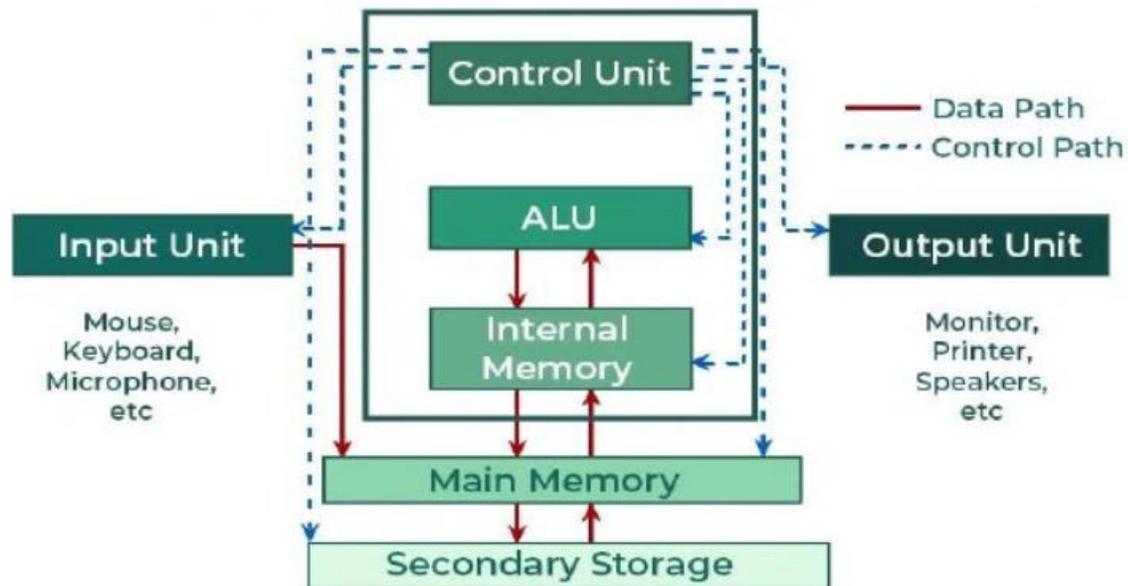


**Memory**

Hardware devices used to store data and information; this memory enables the user to get his data whenever he wants.

CLASSIFICATION OF MEMORY
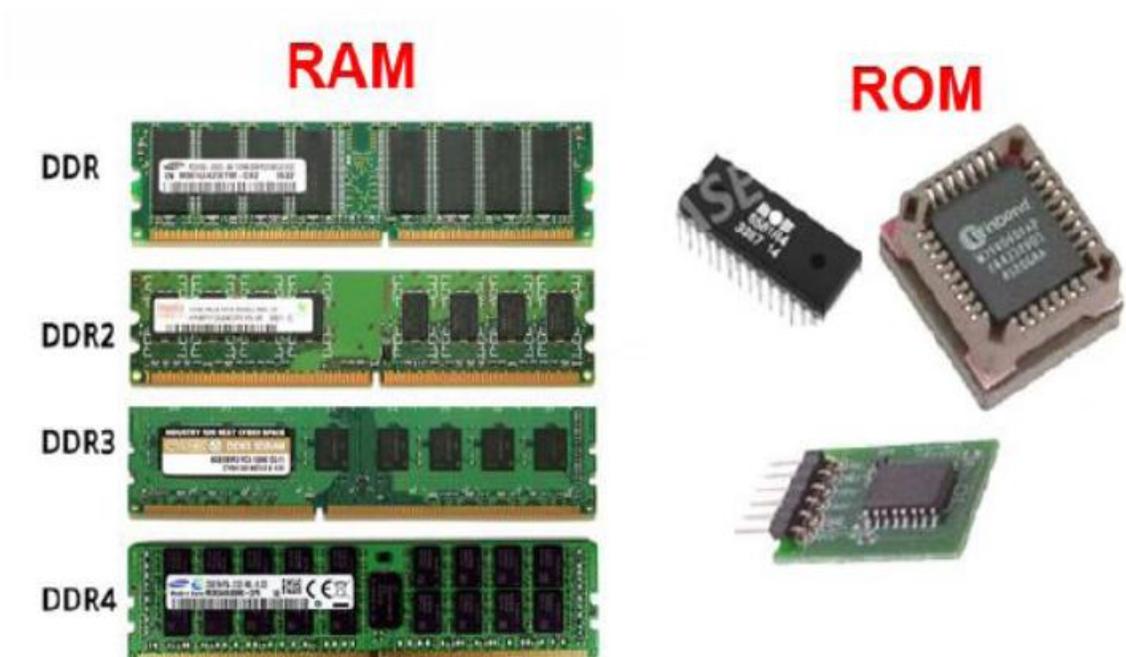
Broadly classified into two:

➢**Primary Memory** (Main Memory).

➢ **Secondary memory** (secondary storage, mass storage).

**Primary Memory**

Primary memory is the memory internal to the computer. i.e., the memory generally placed on the motherboard of the computer.

It can be further divided into **two parts**:

▪ **RAM** (Random Access Memory).

▪ ROM (Read Only Memory).

## Difference between RAM and ROM

| RAM | ROM |
|-----|-----|
| ▪ Random Access memory | ▪ Read Only Memory. Memory used to store the startup instructions i.e., Booting instructions. |
| ▪ Temporary memory | |
| ▪ Volatile Memory i.e. Contents are lost when power is switched Off. | ▪ Permanent Memory. |
| ▪ Read and Write memory | ▪ Non-Volatile memory i.e. contents are not erased when the power is switched off. |
| | ▪ Read only memory. |

**Secondary Memory**

Secondary memory is the memory external to the computer. Also called storage devices, external Storage.

▪ for large storage of data.

▪ for permanent storage of data.

# Parts of a Desktop Computer



**System Fan**

**Floppy**

**Heat Sink**

**Power Supply**

**Hard Drive**

**Optical Drive**

**Motherboard**

**Processors (CPU)**

**RAM Moduels**

## Processor

It is a small chip inside the computer. called the **C**entral **P**rocessing **U**nit (**CPU**). It is the brain of computer.

▪ It does all decisions, calculations.

▪ It executes the instruction contained in software program (process data inside computer).

▪ It determines how fast your computer will run.

▪ It is measured by **MHz** (Mega Hertz).

**CPU Parts**

CPU have three basic parts:

1. **A**rithmetic and **L**ogic **U**nit (**ALU**).

Performs arithmetic operations and logical operations.

2. Control Unit (CU).

It reads and interprets instructions from memory and transforms them into a series of signals to activate other parts of the computer.

3. Registers.

is the part of the computer that holds data and instructions for processing.

Computer Ports



WHAT ARE THE DIFFERENT TYPES OF COMPUTERS?

When most people hear the word computer, they think of a personal computer such as a desktop or laptop.

However, computers come in many shapes and sizes, and they perform many different functions in our daily lives.

When you withdraw cash from an ATM, scan groceries at the store, or use a calculator, you're using a type of computer.