**HARDWARE  OF  A  COMPUTER  SYSTEM**

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# 1. Introduction

Computer hardware refers to the physical components that make up a computer system. These include devices you can physically touch, such as the monitor, keyboard, and motherboard. Hardware works in conjunction with software to perform essential computing tasks.

# 2. Components of Computer Hardware

## 2.1 Input Devices

Input devices are used to enter data and instructions into a computer. Common input devices include:  
- Keyboard: Used to input text and commands.  
- Mouse: A pointing device that allows users to interact with graphical interfaces.  
- Scanner: Converts physical documents into digital form.  
- Microphone: Captures audio input.

## 2.2 Output Devices

Output devices present processed data to the user. Common output devices include:  
- Monitor: Displays text, images, and videos.  
- Printer: Produces hard copies of documents and images.  
- Speakers: Output sound and audio signals.

## 2.3 Storage Devices

Storage devices are used to save data permanently or temporarily. Examples include:  
- Hard Disk Drive (HDD): Magnetic storage for large data volumes.  
- Solid-State Drive (SSD): Faster and more reliable storage than HDDs.  
- Optical Discs (CD/DVD): Used for multimedia storage.  
- USB Flash Drives: Portable and convenient storage devices.

## 2.4 Central Processing Unit (CPU)

The CPU is the brain of the computer. It performs calculations and executes instructions. The CPU consists of three main components:  
- Arithmetic Logic Unit (ALU): Handles arithmetic and logical operations.  
- Control Unit (CU): Directs operations and controls data flow.  
- Registers: Small storage units that hold instructions and data temporarily.

## 2.5 Memory Units

Memory is a crucial component of computer hardware, used to store data and instructions temporarily or permanently. Types of memory include:  
- Primary Memory (RAM and ROM): Used for immediate data processing.  
- Secondary Memory: Includes hard drives and optical discs.  
- Cache Memory: High-speed memory for frequently accessed data.

# 3. Conclusion

In conclusion, computer hardware is the backbone of any computing system. Understanding its components helps users make informed decisions about system performance, upgrades, and maintenance. A well-balanced hardware configuration ensures optimal computing efficiency.