



Session 2

Introduction to Computer Hardware: Computer Hardware

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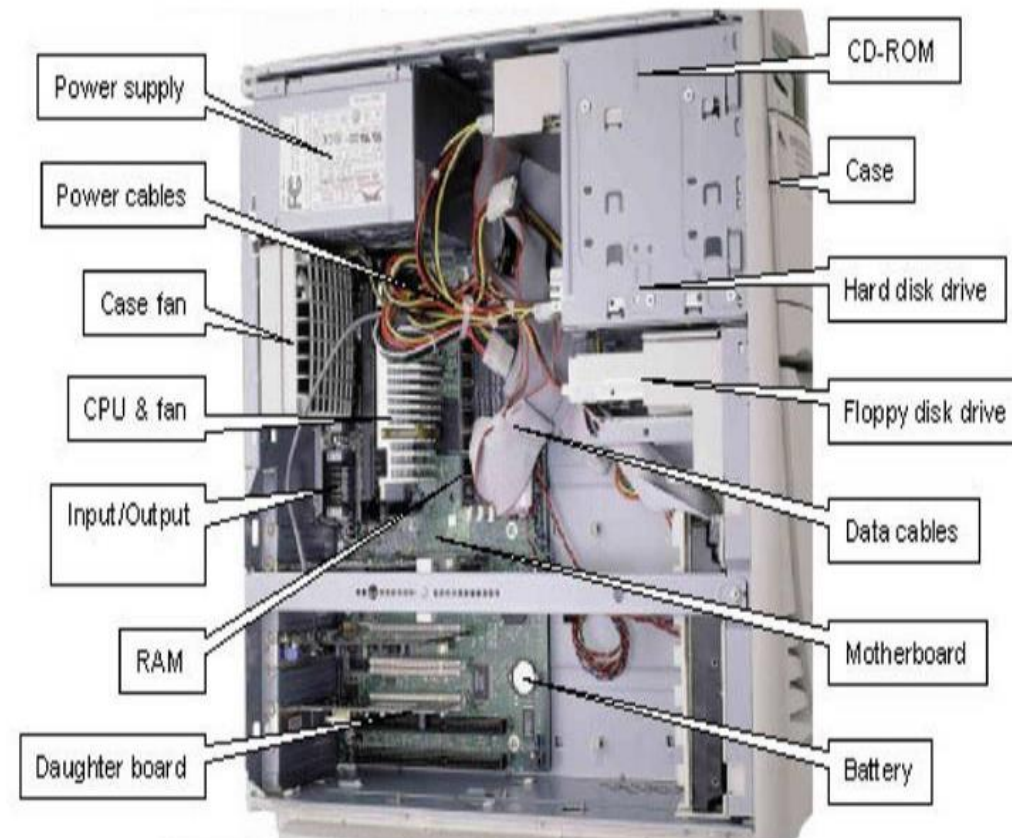
Computer Hardware

- Hardware, which is abbreviated as HW, refers to all physical components of a computer system, including the devices connected to it.
- Computer Hardware includes
 - Central Processing Unit
 - Input Devices
 - Output Devices
 - Storage Devices

Central Processing Unit

- The most important components of computer is the central processing unit (CPU), microprocessor and random access memory (RAM).
- Almost every other part of your computer connects to the system unit using cables.
- Hardware that is not part of the system unit is sometimes called a peripheral device or device.

Central Processing Unit



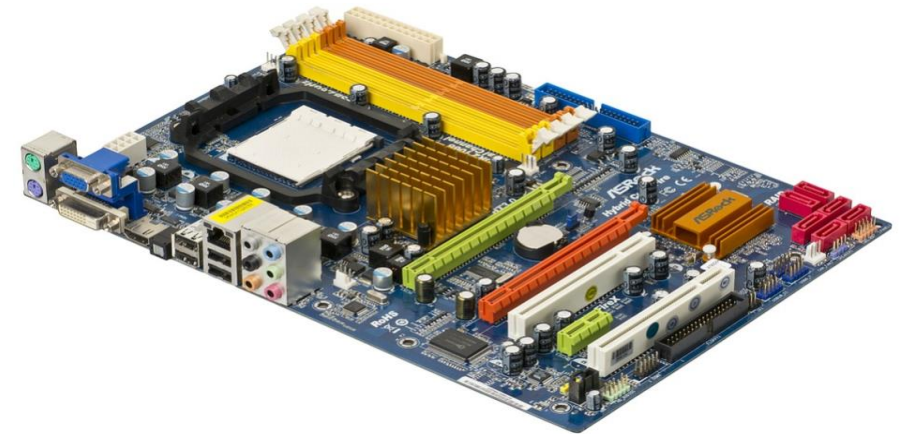
Central Processing Unit

- Motherboard
- Processor
- Memory
- Power supply
- Floppy drive
- Hard drive
- CD or DVD drive
- Modem

Central Processing Unit

Motherboard

- Also known as main board, system board and planar.
- It connects all the components inside the computer case.



Central Processing Unit

Processor

- The processor is often thought of as the "engine" or "brain" of the computer.
- It's also called the CPU (central processing unit).



Central Processing Unit

Memory

- The system memory is often called RAM (for random access memory).
- This is the primary memory, which holds all the programs and data the processor is using at a given time.



Central Processing Unit

Power Supply

- The power supply feeds electrical power to every single part in the PC.



Central Processing Unit

Floppy Drive

- The floppy drive is a simple, inexpensive, low-capacity, removable-media, magnetic-storage device.



Central Processing Unit

Hard Drive

- The hard disk is the primary archival storage memory for the system



Central Processing Unit

CD or DVD Drive

- CD (compact disc) and DVD (digital versatile disc) drives are relatively high-capacity, removable media, drive optical drives.
- Many recent systems include a rewriteable CD (CD-RW) along with or combined with a DVD-ROM drive.



Central Processing Unit

Modem / Network Card

- Component that allow the computer to connect to the network or the Internet.



Input Devices

- Any peripheral(piece of computer hardware equipment)used to provide data and control signals to the computer.
- Allows the user to put data in to the computer.
- Common input devices are:
 - Keyboard
 - Mouse
 - Touchscreen
 - Scanner
 - Webcam

Input Devices



Keyboard



Mouse

Input Devices



Touchscreen





Scanner

Output Devices

- Any piece of computer hardware equipment used to communicate the results of data processing carried out by a computer to the outside world.
- Common output devices are:
 - Monitor
 - Printer
 - Speakers
 - Projector

Output Devices

	
Printer	Monitor

Output Devices



Speakers




Projector

Storage Devices

- Refers to computer components, devices, and recording media that capable of storing data.
- Examples of storage devices:
 - Floppy disk
 - Hard disk
 - Pen drive
 - Optical disk

Storage Devices

	<p>Floppy disk</p> <ul style="list-style-type: none">• Capacity: 1.44MB• Portable• Require floppy disk drive to read/write
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Storage Devices



Hard disk

- Capacity: 100GB – 1TB
- Not portable

Storage Devices



USB Flash drive

- Capacity: 8GB – 1TB
- Portable

Storage Devices



Optical disc

- Capacity:
 - CD: 650MB
 - DVD: 4.7GB
 - BD: 25GB
- Portable
- Require optical disc drive