COMPUTER SYSTEM DESIGN

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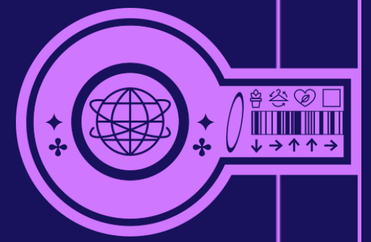


Can you recognize the picture below?

OBJECTIVE:

- To be able to know what is computer system and parts of a system unit
- To be able to understand and explain the function of all the parts of system unit

Computer System Design

- Concerned with the hardware design of the computer
- Concerned with the determination of what hardware should be used and how the parts should be connected

Computer System

- is a set of integrated devices that input, output, process, and store date and information. Computer system are currently built around a digital processing device.

Computer System

FIVE MAIN HARDWARE OC COMPUTER SYSTEM:

1. Input
2. Processing
3. Storage
4. Output
5. Communication Devices

SYSTEM UNIT

It is the main part of a desktop computer. It includes the motherboard, CPU, RAM and other components.

PARTS OF SYSTEM UNIT

SYSTEM CASE:

The primary function of System Unit is to hold all other components together and protect sensitive electronic parts from the outside elements

PARTS OF SYSTEM UNIT

MOTHER BOARD:

It holds together many crucial components including the CPU, Memory and connectors for input and output devices.

PARTS OF SYSTEM UNIT

POWER SUPPLY:

Device that supplies electric energy to an electric load. The purpose of power supply convert one form of electrical energy to another energy as a result of power. Also known electric power converters

PARTS OF SYSTEM UNIT

HEAT SINK:

A component designed to lower the temperature of an electronic devices. A heat sink without fan is called passive heat sink.

A heat sink with fan is called active heat sink.

PARTS OF SYSTEM UNIT

GRAPHICS CARD:

Also known video card that connects to the motherboard and generates output image to display. Graphic card include processing unit, memory and connection to a display device.

PARTS OF SYSTEM UNIT

PORTS:

Interface between a computer to another computer or peripheral devices.

PARTS OF SYSTEM UNIT

CPU or Processor:

Is a piece of hardware that carries out the instruction of the computer program. It is perform basic input and output operation

PARTS OF SYSTEM UNIT

NETWORK CARD:

Is a piece of hardware that carries out the instruction of the computer program. It is perform basic input and output operation

PARTS OF SYSTEM UNIT

HARD DISK DRIVE:

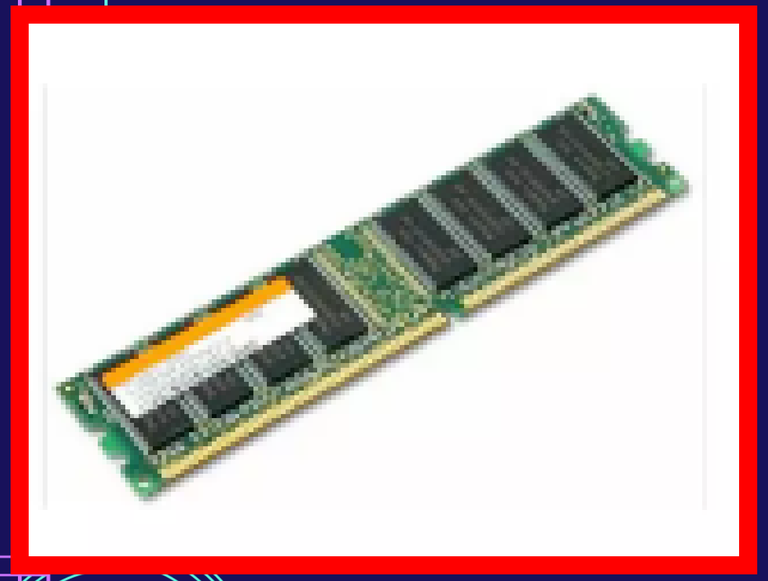
That stores and provides relatively quick access to large amounts of date. Also referred as the main storage device

PARTS OF SYSTEM UNIT

OPTICAL DISK DRIVE (ODD):

Is a device that uses photo diodes to detect reflecting lights on. Optic disk and uses a laser to read and write date.

PARTS OF SYSTEM UNIT



RANDOM ACCESS MEMORY (RAM):
Store data and instruction that are used by the CPU to perform some task. This instruction are usually loaded into RAM form secondary storage device.
The instruction called DRIVERS

TYPES OF COMPUTER CASES

Full-tower cases are generally big with a height that is about or more than 30 inches (more than 76 cm. Internal drive bays inside between 6 and 10 cm

TAKE NOTE:

Bay - refers to a space or slot in computing device where can insert a specific type of hardware component or peripheral. It is often used to expand or enhance the device functionality

TYPES OF COMPUTER CASES

Mid-Tower cases most widely used compuer cases. Mid Tower cases are about 45-60 cm and usually contain 2-4 internal drive bays.

TYPES OF COMPUTER CASES

Slim Line Case- are simply tower cases turned on their sideways. They can hold a monitor on top of the case

TYPES OF COMPUTER CASES

Small Form Factor (SFF) Case are custom cases that are designed to minimize the spatial volume of desktop computer. Variety of sizes shoe box, cubes, book sized PCs

ACTIVITY #2