



METROPOLITAN INTERNATIONAL UNIVERSITY

COURSE UNIT: COMPUTER CARE AND MAINTENANCE

FACULTY: SCIENCE AND TECHNOLOGY

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QUESTION

Read about Computer Hardware parts and ports (Both internal and External)

Computer hardware:

Refers to all the physical part of a computer system that you can see and touch. These includes all the electronic circuits, chips, cables, ports and all other connected components and devices.

Hardware is typically directed by software to execute any command or instruction.

Computer hardware components:

Computer hardware components are categorized into two parts, namely;

1. Internal hardware components:

- ✓ Hard drive

Hard disk drives are physical storage devices that store both permanent and temporary data in different formats, including programs, OSes, device files, photos, etc.

- ✓ Motherboard

This is a printed circuit board that holds the central processing unit (CPU) and other essential internal hardware and functions as the central hub that all other hardware components run through.

- ✓ Video card
- ✓ Sound card, extra

2. External hardware components:

- Monitor

A monitor is an output device similar to a TV screen that displays information, documents or images generated by the computing device

- Keyboard

A keyboard is an input device featuring a standard QWERTY keyset that enables users to input text, numbers or special characters.

- Mouse

A mouse is a hand-held pointing device that moves a cursor around a computer screen and enables interaction with objects on the screen. It may be wired or wireless.

- Computer case

Note:

There are many different kinds of hardware components that can be installed inside, and others connected to the outside of a computer.

What is a Port?

A port: is a physical docking point using which an external device can be connected to the computer.

Can also be programmatic docking point through which information flows from a program to computer or over the internet.

A port has the following characteristics:

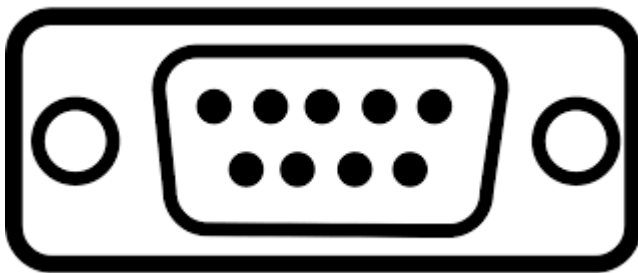
- External devices are connected to a computer using cables and ports.
- Ports are slots on the motherboard into which a cable of external device is plugged in.
- Examples of external devices attached via ports are mouse, keyboard, monitor, microphone, speakers etc.

Following are few important types of ports:

1. Serial Port:

A serial port is a physical communication interface that enables the transfer of data between devices, such as a computer and a modem or a printer.

It transmits data serially, which means that the bits of data are sent one after the other over a single wire



Parallel Port:

A parallel port is a type of computer interface that allows you to connect devices for data transfer.

It was commonly found on older computers and used for connecting printers, scanners, and other peripherals.



PS/2 Port:

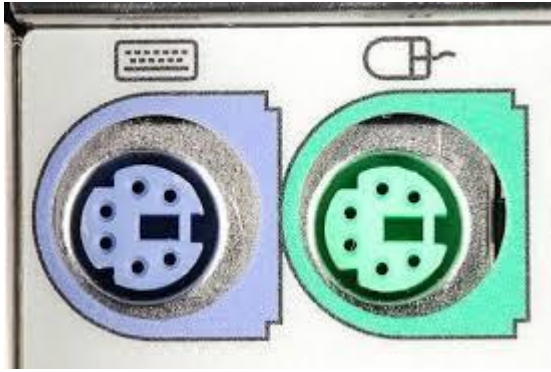
A PS/2 port is a mini DIN connector that connects the mouse or keyboard to the computer system.

Besides accepts 6-pin plug. IBM introduced it in 1987. Moreover, its full form is **Personal System/2**. Nowadays, computers use the USB port for the keyboard and mouse.

Characteristics of a PS/2 port

Characteristics of a PS/2 port are as follows:

- This port was used earlier for connecting the mouse and keyboard.
- We can also call it **mouse port**.
- Some areas still use this port for security reasons.
- Usually, this port uses a color scheme that is, purple for the keyboard and teal green for the mouse.
- No restrictions on key rollover.



USB (Universal Serial Bus) Port

The USB port is the standard interface for connecting the computer to external devices like printer, camera, keyboard, speaker, etc.

Besides, we can say that it is an industry-standard for short-distance digital data communication.



VGA Port:

1. Connects monitor to a computer's video card.
2. Has 15 holes.

3. Similar to serial port connector but serial port connector has pins, it has holes.

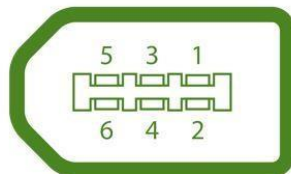


Power Connector

1. Three-pronged plug.
2. Connects to the computer's power cable that plugs into a power bar or wall socket

Firmware Port

1. Transfers large amount of data at very fast speed.
2. Connects camcorders and video equipment to the computer
3. Data travels at 400 to 800 megabits per seconds.
4. Invented by Apple.
5. Three variants: 4-Pin FireWire 400 connector, 6-Pin FireWire 400 connector and 9-Pin FireWire 800 connector.

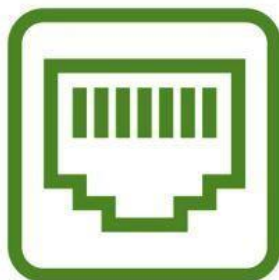


Modem Port:

2. Connects a PC's modem to the telephone network.

**Ethernet Port:**

1. Connects to a network and high speed Internet.
2. Connect network cable to a computer.
3. This port resides on an Ethernet Card.
4. Data travels at 10 megabits to 1000 megabits per seconds depending upon the network bandwidth.

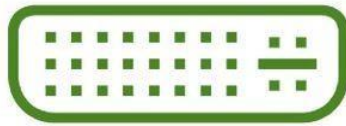
**Game Port:**

1. Connect a joystick to a PC.
2. Now replaced by USB.

Digital Video Interface, DVI port:

1. Connects Flat panel LCD monitor to the computer's high end video graphic cards.

2. Very popular among video card manufacturers.



Sockets:

1. Connect microphone, speakers to sound card of the computer.



Reference:

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