**COMPUTER HARDWARE**

*Computer hardware* is the term given to the physical devices and circuitry that make up a digital computer.

**Input-Process-Output Model**
The *Input-Process-Output Model (IPO)* is a description of the basic stages in information processing.

![Input-Process-Output Model of Information Processing](image)

**Input** is the data that flows into the system. **Processing** is the activity that transforms the input into a more useful form. **Output** is the information that flows out of the system. **Storage** is used to store data as it is processed or for later processing.

**Example**
Pretend you’re using a word processor to type a document. The input is the characters that you type and the formatting commands that you select with the mouse. The processing is the transformation of your input into a formatted document. The output is the display of the document on the video. The storage is the device (e.g. SD card) on which the document is saved.
**Computer Organization**

Being machines that process information, physical computers contain various hardware devices that support the IPO model.

An *input device* provides data to the computer.

*Examples*

- [Input device image]

An *output device* communicates information to external entities (humans or other devices).

*Examples*

- [Output device image]
The **CPU** (which stands for *central processing unit*) is the device that carries out the instructions of the computer program.

The **internal memory** (also called the *main memory* or *primary storage*) is directly accessible to the CPU and so is used to store the computer program and its data while it is executing.

The **external memory** (also called *secondary storage*) is not directly accessible to the CPU and so is used for long-term storage of computer programs and data. External memory devices include hard disk drives, USD flash drives and SD cards.