

Computer System Components

Overview

This part is about the elements of a computer system.

The three parts of a computer system

A computer system can be divided into three functional parts:

- Input devices
- Processing & data storage devices
- Output devices

Understanding the purpose of each device makes it possible to make sense of ads for personal computer systems.



Input devices

Input devices are used to give the computer with various kinds of data such as text, sounds, graphics, or images. The chart below lists some common input devices.

Device	Purpose(s)
Mouse 	To navigate the user interface. To serve as a drawing/editing tool for graphics application programs.
Keyboard 	To navigate the user interface. To serve as a means of inputting text data.

Scanner 	To turn graphics, images, and text on paper into digital data for computer input.
Microphone 	To turn sound into digital data for computer input.
Musical Keyboard with MIDI port 	To turn musical sounds into digital data for computer input.
Graphic Tablet 	To turn hand motions into digital data for computer input.
Digital/Video Camera 	To turn things you can see into digital data for computer input.

Processing\storage devices

Processing/and data storage devices are usually contained within the computer box. The chart below lists some of the common processing/storage devices.

Device	Purpose
Microprocessor 	To process data according to the directions of the computer program. The microprocessor is the brains of the computer.

RAM (Random Access Memory) 	To provide the microprocessor with quick access to the data being processed. The RAM is the workspace of the computer.
Motherboard 	To provide connections between the microprocessor and all of the other parts of the computer. The motherboard is the office of the computer.
Modem 	To provide a connection between the microprocessor and another computer. The modem is the telephone of the computer.
Ethernet Card 	To provide a connection between two or more computers to construct a computer network.
Serial, Parallel, USB cards 	To connect keyboard, mouse, scanner, and other components to the microprocessor.
Sound Card 	To provide a connection between the speakers and the microprocessor. Also provides a connection between a MIDI device and the microprocessor.
Video Card 	To provide a connection between the monitor and the microprocessor.

Hard Drive 	To provide a means of storing data and computer programs. The hard drive is the filing cabinet of the computer.
Floppy Drive 	To provide a means of removable storage.
CD-ROM, CD-RW ROM, DVD-ROM (ROM: read-only memory) 	To provide a means of removable storage for very large files.

Output devices

Output devices are used to allow the computer user to see or hear the results of the processed data. The chart below lists some common output devices.

Device	Purpose
Monitor 	To allow the user to view the computer interface and to see the results of the processed data.
Speakers 	To allow the user to hear the results of the processed data.
Printer 	To allow the user to capture the results of the processed data in paper form.