

COMPONENTS OF A COMPUTER SYSTEM

A computer system is made up of 4 main types of components:

1. Input Unit
2. Output Unit
3. Central Processing Unit (CPU)
4. Memory Unit

INPUT UNIT

The user interacts with the computer via the I/O unit. The Input unit accepts data from the user send it to the CPU for processing.

Input devices are used as per the data user want to insert like for text and characters keyboard and light pen, for control signals mouse or track ball, for gesture and emotion face readers etc.

Each and every object or device or hardware which is used to insert data in a system is known as input device.

The Input unit converts the data that it accepts from the user, into a form that is understandable by the computer.

The input is provided to the computer using input devices like keyboard, trackball and mouse, voice sensors and mic etc.

A few example of input devices are as per given below:

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|--|---------------------------------|
| 1. Keyboard | 13. Gesture recognition devices |
| 2. Mouse | 14. Light gun |
| 3. Scanner | 15. Touch pad |
| 4. Joystick | 16. Remote |
| 5. Light pen | 17. Touch screen |
| 6. Digitizer | 18. Webcam |
| 7. Microphone | 19. Biometric devices |
| 8. Magnetic ink character recognition (MICR) | 20. Flash drives |
| 9. Optical character reader (OCR) | |
| 10. Digital camera | |
| 11. Paddle | |
| 12. Steering wheel | |

OUTPUT UNIT

The user interacts with the computer via the I/O unit. The output unit accepts data from the system.

output devices are used as per the format of processed data or information user want to opt like for text and characters printers, display, plotters etc.

Each and every object or device or hardware which is used to make output data available in a system is known as output device.

The output unit do not convert the data.

A few examples of Output devices are as per given below:

1. Monitor
2. Printer
3. Plotter
4. Projector
5. Speakers and ear piece

CENTRAL PROCESSING UNIT or PROCESSOR

A CPU controls, coordinates and supervises the operations of the computer. It is also called brain of the computers. It is responsible for processing of the input data. CPU consists of

Arithmetic Logic Unit (ALU) and Control Unit (CU)

ALU performs all the arithmetic and logic operations on the input data.

CU controls the overall operations of the computer i.e. it checks the sequence of execution of instructions, and, controls and coordinates the overall functioning of

the units of computer.

MEMORY UNIT

Memory unit stores the data, instructions, intermediate results and output, temporarily and permanently depending on memory type.

That memory which holds the data during the processing of data known as the main memory or primary memory of the computer.

All the input data which is going to be processed is send into the main memory before execution starts. This data includes instructions required for processing of data and raw data.

Any intermediate results are also stored in the main memory.

The output is stored in memory before being transferred to the output device. CPU can work with the information stored in the main memory.

The other storage unit known as secondary memory of the computer. The data, the programs and the output are stored permanently in the storage unit of the computer.

The capacity of this storage is huge.

Magnetic disks, optical disks and magnetic tapes, Hard disk and SSD are examples of secondary memory.