**Microprocessors**

A microprocessor is a component that performs the instructions and tasks involved in computer processing. In a computer system, the microprocessor is the central unit that executes and manages the logical instructions passed to it. It is built over a silicon microchip.

A microprocessor is the most important unit within a computer system and is responsible for processing the unique set of instructions and processes. A microprocessor is designed to execute logical and computational tasks with typical operations such as addition/subtraction, inter-process and device communication, input/output management, etc. A microprocessor is composed of integrated circuits that hold thousands of transistors. The microprocessor is a multipurpose, clock driven, register based, digital integrated circuit that accepts binary data as input, processes it according to instructions stored in its memory and provides results as output.

Based on the instructions, a microprocessor does three basic things:

* Using its ALU (Arithmetic/Logic Unit), a microprocessor can perform mathematical operations like addition, subtraction, multiplication and division. Modern microprocessors contain complete floating-point processors that can perform extremely sophisticated operations on large floating-point numbers.
* A microprocessor can move data from one memory location to another.
* A microprocessor can make decisions and jump to a new set of instructions based on those decisions.