A silicon chip that contains a CPU, loosely termed the brain of the microcomputer. In the world of personal computers, the terms microprocessor and CPU are used interchangeably. At the heart of all personal computers and most workstations sits a microprocessor. Microprocessors also control the logic of almost all digital devices, from clock radios to fuel-injection systems for automobiles.

Three basic characteristics differentiate microprocessors: Instruction set: The set of instructions that the microprocessor can execute. Bandwidth: The number of bits processed in a single instruction. Clock speed: Given in megahertz (MHz), the clock speed determines how many instructions per second the processor can execute. In both cases, the higher the value, the more powerful the CPU. For example, a 32-bit microprocessor that runs at 50MHz is more powerful than a 16-bit microprocessor that runs at 25MHz or 50MHZ. In addition to bandwidth and clock speed, microprocessors are classified as being either RISC (reduced instruction set computer) or CISC (complex instruction set computer).