

## Computer System Configuration

The processor is the brain of a computer and determines its speed and power.

A processor consists of millions of transistors etched on a chip. The transistors are either on or off and represent 0 or 1. This numbering system is called binary, and one switch is a bit, the smallest unit of data. Eight bits equal one byte.

Intel is the most popular manufacturer of computer processors. Initially processors were named with numbers, but Intel changed that with the introduction of the Pentium.

The clock speed of a processor is measured in megahertz (MHz). The higher the number, the faster the computer.

Processors also differ in the architecture of the chip, the instruction set, and the bus capacity.

A computer has two types of memory: ROM and RAM. ROM stands for Read-Only Memory; this memory stores unchanging data such as the BIOS.

RAM stands for Random Access Memory and is the computer's working area, a place to temporarily store program instructions and data.

RAM is measured in megabytes and gigabytes. Most new systems have at least a gig or more of RAM.

In addition to the processor and memory, the motherboard includes expansion slots. Some slots may have an expansion card, used to add components to the PC. Empty slots can be used to add new features or devices to your computer.

To extend the life of a computer, you may consider upgrading some of the components. Before you upgrade, be sure the performance gain will be worth the price and effort. Sometimes it's better simply to purchase a new computer.

