

Computer Overview



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Key Concepts

BIOS:

Basic Input/Output System. A collection of software codes built into a PC that handle some of the fundamental tasks of sending data from one part of the computer to another.



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Boot or Boot Up:

The process that takes place when a PC is turned on and it performs the routines necessary to get all the components functioning properly and then to load the operating system.



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CMOS:

Complimentary Metal-Oxide Semiconductor. It is a special type of chip that uses a small battery to retain information about your PC's hardware configuration even while the computer is turned off.



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CPU:

Central Processing Unit, it usually means the microprocessor. It is the brain of the computer. It processes the information and instruction codes by a computer.



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POST:

Power On Self Test. The procedure a computer goes through when booting to verify that the basic components are functioning.



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RAM/ROM:

RAM is Random Access Memory, memory that a computer can read and write to. ROM is Read Only Memory, chips where data is stored that can only be read by a computer.



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System Files:

Small files containing software code that are the first files a computer reads from a disk when it is booted. In windows and DOS some system files are:

IO.sys MSDOS.sys Command.com
CONFIG.sys AUTOEXEC.bat
USER.dat SYSTEM.dat



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Power Supply:

All electricity enters through this point. This is a shielded metal box. It converts the current from standard outlets into the necessary voltages needed by the various parts of the computer.



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Hard Drive:

This is the main storage for a computer. Data is magnetically stored onto thin hard platters. It is the busiest mechanical part of the computer.



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Floppy Drive:

This is the device that reads your 3.5" floppy disks. It is the most universal way to move files from one PC to another.



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Sound Card:

This is used to record or reproduce multimedia sound. This may be in the form of an expansion card or it could be directly built onto the motherboard.



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Case:

Or chassis or sometime referred to as the CPU, is used to protect the internal components from dust and damage. It also provides a mounting place for all the internal components.



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CD-Burners:

This device uses laser to read data from a compact disc, but can also write data to a CD recordable disc. There are 2 types, CD-R and CD-RW. Data can only be written to a CD-R one time. Data can be written to a CD-RW many times.



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DVD Drives:

This device uses laser to read data from a DVD, digital versatile disk. DVD disk can store information more compact and on different layers than CD's.



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IDE Controllers:

Usually built onto the motherboard, the IDE slots provide a connection to send information to the floppy drive, hard drive and CD-ROM drive.



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PCI Expansion Slot:

Peripheral component interconnect. This slot is designed for hardware to use Plug and Play, which is an automatic detection and adaptation of new hardware.



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AGP Expansion Slot:

**Accelerated Graphics Port.
Used for 3D graphics cards to
provide faster access to the
computer memory.**



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Real Time Clock:

This component has a vibrating crystal that sets the pace and synchronizes the work of all other components.



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Heat Sink:

This is used to dissipate the heat produced by a processor so that the internal components of the chip don't melt.



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Ports:

- **Mouse Ports, also called PS2 ports**
- **Keyboard Ports**
- **USB ports - Universal Serial Bus**
- **Parallel ports**
- **Serial Ports**



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Video Card:

Translates image information into the electrical currents needed to display an image on a monitor.



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MODEM:

Modulator/Demodulator. This connects a PC to a phone line so that you can access information services and the internet.



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Fans:

Draws cool air over heat-critical components. Make sure the power supply fan opening is not blocked.



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Network Interface Card:

This connects and allows PC's to view a network. It also allows for high speed internet access.



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References

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by: Ron White, 1999 QUE

