

Glossary

A - B

Adapter

- (1) A device that allows compatibility between different equipment.
- (2) A printed circuit board that connects a system board to a peripheral I/O device (devices) or adds specialized functions to the system.

Address

An identification, such as a label, number, or name that designates a particular location in storage or any other data destination or source.

Application

A program such as a word processor, image editor or database.

ASCII

An acronym for **A**merican **S**tandard **C**ode for **I**nformation **I**nterchange. A 7-bit standard code adopted to facilitate the interchange of data among various types of data processing and data communications equipment.

Backlight

The rear illumination of an LCD screen.

BIOS

An acronym for **B**asic **I**nput/**O**utput **S**ystem. The program that customizes a computer.

Boot

Derives from “bootstrap”. To start or restart a computer system by reading instructions from a storage device into the computer’s memory. If the computer is already turned on, it’s a “warm boot;” if not, it’s a “cold boot.”

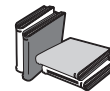
C - D

Cache memory

A small high-speed memory for the temporary storage of information, usually used between a slower large memory and a fast central processing unit.

CD-ROM

Compact **D**isk **R**ead **O**nly **M**emory. This refers to both the disk type and the drive. The disk can hold over 600 MB of data,



text, graphics, sound and video information. Although the form is similar to the audio CD, its formatting is different.

CMOS

Complementary Metal-Oxide Semiconductor. This chip keeps track of setup information. The BIOS is located on this chip. The *Setup* utility is used to change it.

Configure

To assemble a selection of hardware or software into a system and to adjust each of the parts so that they all work together.

Configuration

An assembly of machines that are interconnected and are programmed to operate as a system. The layout or design of elements in a hardware or information processing system.

CPU

Central Processing Unit. The component of a computer system with the circuitry to control the interpretation and execution of instructions. This computer has a “Pentium”.

Crash

The system suddenly stops working. This usually requires a system reboot.

Disk drive

A device that reads data from a magnetic disk and copies it into the computer’s memory so that it can be used by the computer, and that writes data from the computer’s memory onto a disk so that it can be stored.

DOS

An acronym for **Disk Operating System**. A specialized, disk-oriented program that provides an easy-to-use link between the user and a computer's disk drive.

DRAM

Dynamic RAM. Storage that the computer must refresh at frequent intervals.

Driver

A series of instructions the computer follows to reformat data for transfer to and from a particular peripheral device. The electrical and mechanical requirements are different from one kind of device to another, so software drivers are used to standardize the format of data between them and the central processor.

E - F

External option

An device attached to the outside of the system unit which extends and enhances its operation. i.e. printer or mouse.

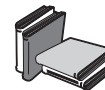
G - H

Hot

(i.e. a socket/port is hot.) A port is always ready to accept a connection.

Hot Swap

Hot Swappable devices can safely be attached or removed from the computer without turning it off. This procedure



may also include special commands. The operating system, PnP BIOS, hardware and power subsystems, are coordinated to detect the device's presence and status and stop the system from "crashing" during a swap.

I - J

IDE

An abbreviation for **I**ntegrated **D**rive **E**lectronics (or **I**ntelligent **D**evice **E**lectronics). Among IBM-compatible computers, this is the most common type of internally-mounted hard disk controller. External devices usually use SCSI controllers.

Internal option

A part installed inside the system unit cover which enhances operation of the system, such as an adapter and a memory chip.

Interrupt

A signal that, when activated, causes the hardware to transfer the program control to some specific location in main storage, thus breaking the normal flow of the program being executed.

K - L

KB

(Kilobyte) 1024 bytes.

LBA Mode

An abbreviation for **L**ogical **B**lock **A**ddress Mode. This is an alternate way for the BIOS to interpret cylinder, head and sector information about hard disks. Before LBA mode, the BIOS

could not properly support IDE hard disks larger than 528 MB. This system allows BIOS support for IDE hard disks up to 8.4 GB.

LCD

An abbreviation for **L**iquid **C**rystal **D**isplay. A way to make images appear by reflecting light on a special crystalline substance. It features high visibility in high illumination levels but no visibility in low illumination levels.

Load

In programming, enter data into storage or working registers.

M - N

MB

(Megabyte) 1,048,576 bytes, 1024KB

Memory

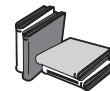
The storage facilities of the computer, capable of storing vast amounts of data.

Microprocessor

The basic arithmetic, logic, and control elements required for processing (generally contained on one integrated circuit chip). Microprocessors are widely used as the control devices for microcomputers, household appliances, and thousands of other devices.

Mode

A method or condition of operation.

**Monitor**

A video display which comprises a CRT (Cathode Ray Tube) and associated circuitry.

Mouse

A device for moving a cursor or other objects around on the display screen. A typical mouse has one or more buttons on the top of a small box that can be moved around on a flat surface. The mouse's main advantage is that it can move a cursor around on the screen with great precision.

MPEG

Moving **P**icture **E**xperts **G**roup. A video and audio compression standard which allows decompression at 1.2 MB to 1.5 MB/second so CD players can replay color movies at a realistic 30 frames/second.

NTSC

National **T**elevision **S**tandards **C**ommittee. A video broadcast standard of 525 scan lines every 1/30 second. This is accomplished in 2 passes of 1/60 second each (60 Hz). This system is used mostly in North America and East Asia.

Nonvolatile memory

The contents of the memory storage unit are not lost when power is turned off (e.g. floppy, hard disk).

Notebook computer

A small portable computer that uses a flat panel liquid crystal display. It is about the size of a large book.

O - P

PAL/SECAM

Phase Alternate Line and Sequential Color and Memory. Two video broadcast standards of 625 scan lines every 1/25 second. This is accomplished in 2 passes of 1/50 second each (50 Hz). These systems are used mostly in Europe, Australia and parts of Africa.

Parallel printer

A printer that receives information from the computer one character (letter, number, etc.) at a time through eight wires. Additional wires are needed to exchange control signals.

Parameter

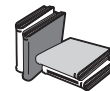
An arbitrary constant. A variable in an algebraic expression that temporarily assumes the properties of a constant.

PC Card

This term has largely replaced the term PCMCIA. See PCMCIA.

PCI

Peripheral Component Interface. A 32/64-bit local bus architecture widely used in Pentium-based PCs. Developed by DEC, IBM, Intel, and others, a PCI bus provides a high-bandwidth data channel between system-board components such as the CPU and devices such as hard disks and video adapters. The other widely adopted local-bus standard, the VL-Bus, is primarily used in 486 PCs.



PCMCIA

Personal **C**omputer **M**emory **C**ard **I**nternational **A**ssociation. A consortium of computer manufacturers that devised the standard for the credit card-size adapter cards used in many notebook computers. PCMCIA defines three card types: Type I cards can be up to 3.3 mm thick and are generally used for RAM and ROM expansion cards; Type II cards can be as thick as 5.5 mm and typically house modems and fax modems; Type III cards are the largest (up to 10.5 mm thick) and are mostly used for miniature hard disks. Windows 95's Plug and Play architecture provides PCMCIA support, which automatically recognizes when PCMCIA devices are inserted and removed. The simpler term PC Card has largely replaced this acronym to refer to these cards.

PnP

Plug **a**nd **P**lay. The technology that makes Windows 95 automatically detect and configure most of the adapters and peripherals connected to a PC. A fully PnP-enabled PC requires three PnP components: a PnP BIOS, PnP adapters and peripherals, and a PnP operating system. When adding a PnP-compliant device to a PnP PC, the operating system, in conjunction with PnP logic present in the BIOS and in the device itself, handles the IRQ settings, I/O addresses, and other technical aspects of the installation to ensure that the device doesn't conflict with other installed devices.

POST

Power-On-Self-Test. A sequence of self-tests automatically run by the computer whenever it is turned on or is reset.

PPP

Point-to-Point Protocol. A protocol that allows a computer to connect to the Internet through a dial-in connection and enjoy most of the benefits of a direct connection, including the ability to run graphical front ends such as Microsoft's *Internet Explorer*, *Mosaic* and Netscape's *Communicator*. PPP is generally considered to be superior to SLIP, because it features error detection, data compression, and other elements of modern communications protocols that SLIP lacks.

Q - R

RAM

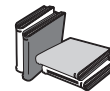
Random Access Memory. Memory into which the user can enter information and instructions (write), and from which the user can call up data (read). RAM is the “working memory” of the computer, into which application programs can be loaded from a storage device and then executed.

ROM

An acronym for **Read-Only Memory**. Generally, a solid state storage chip that is programmed at the time of its manufacture and that cannot be reprogrammed by the computer user.

Routine

A short set of program codes that perform a specific task.



S - T

SCSI

An abbreviation for **S**mall **C**omputer **S**ystem **I**nterface. This is a standard for connecting external devices (i.e. scanners and storage devices) to computers.

Serial port

An input/output port in a computer through which data is transmitted and received one bit at a time.

Setup

- (1) A utility program which modifies the BIOS.
- (2) In a computer that consists of an assembly of individual computing units, the arrangement of interconnections between the units, and the adjustments needed for the computer to operate.
- (3) The preparation of a computing system to perform a job or job step. Setup is usually performed by an operator and often involves performing routine functions.
- (4) The preparation of the system for normal operation.

Stop clock

A mode in which the CPU effectively shuts down.

Stop grant

A mode in which the CPU stops processing instructions.

TCP/IP

Transmission **C**ontrol **P**rotocol/**I**nternet **P**rotocol. A set of communication protocols developed by the U.S. Department of

Defense that allows dissimilar computers to share information over a network. TCP/IP is the glue that binds the Internet.

U - V

Utility

A program that helps the user run, enhance, create, or analyze other programs, programming languages, operating systems, and equipment. Utilities are designed to facilitate or aid the operation and use of the computer for a number of different applications and uses.

VGA

Video **G**raphics **A**dapter. Video system that allows simultaneous display of 256 colors at 640 x 480 graphics resolution and 720 x 400 text resolution.

This standard has been superseded by SVGA (256 colors at 800 x 600 resolution), XVGa (256 colors at 1024 x 768 resolution) and SXVGA (256 colors at 1280 x 1024 resolution)

Volatile memory

The contents of the memory storage unit are lost when the machine is turned off (e.g. cache or RAM).

W - Z

Zoomed Video (ZV) Port

The ZV Port is an enhanced PC Card port which has a direct connection between the PC Card and the notebook's AV subsystems. It allows for a dedicated data path to handle multimedia features.