



# Glossary

The following list defines or identifies technical terms, abbreviations, and acronyms used in Dell user documents.

## **A**

Abbreviation for ampere(s).

## **AC**

Abbreviation for alternating current.

## **AC power switch**

A switch with two AC power inputs that provides AC power redundancy by failing over to a standby AC input in the event of a failure to the primary AC input.

## **access**

Refers to the actions a user can take on a variable value. Examples include read-only and read-write.

## **adapter card**

An expansion card that plugs into an expansion-card connector on the computer's system board. An adapter card adds some specialized function to the computer by providing an interface between the expansion bus and a peripheral device. Examples of adapter cards include network cards, sound cards, and SCSI adapters.

## **ADB**

Abbreviation for assign database.

## **AGP**

Abbreviation for Advanced Graphics Port. A high performance graphics interface becoming available for Pentium Pro systems.

## **ASCII**

Acronym for American Standard Code for Information Interchange. A text file containing only characters from the ASCII character set (usually created with a text editor, such as Notepad in Windows®), is called an ASCII file.

## **ASIC**

Acronym for application-specific integrated circuit.

## **ASPI**

Advanced SCSI programming interface.

## **asset tag code**

An individual code assigned to a computer, usually by a system administrator, for security or tracking purposes.

## **attribute**

As it relates to an attribute is a piece of information related to a component. Attributes can be combined to form groups. If an attribute is defined as read-write, it may be defined by a management application.

## **autoexec.bat file**

The **autoexec.bat** file is executed when you boot your computer (after executing any commands in the **config.sys** file). This start-up file contains commands that define the characteristics of each device connected to your computer, and it finds and executes programs stored in locations other than the active directory.

**backup**

A copy of a program or data file. As a precaution, you should back up your computer's hard drive on a regular basis. Before making a change to the configuration of your computer, you should back up important start-up files from your operating system.

**baud rate**

A measurement of data transmission speed. For example, modems are designed to transmit data at one or more specified baud rate(s) through the COM (serial) port of a computer.

**beep code**

A diagnostic message in the form of a pattern of beeps from your computer's speaker. For example, one beep, followed by a second beep, and then a burst of three beeps is beep code 1-1-3.

**BGA**

Abbreviation for Ball Grid Array, an IC package that uses an array of solder balls, instead of pins, to connect to a PC board.

**binary**

A base-2 numbering system that uses 0 and 1 to represent information. The computer performs operations based on the ordering and calculation of these numbers.

**BIOS**

Acronym for basic input/output system. Your computer's BIOS contains programs stored on a flash memory chip. The BIOS controls the following:

- Communications between the microprocessor and peripheral devices, such as the keyboard and the video adapter
- Miscellaneous functions, such as system messages

**bit**

The smallest unit of information interpreted by your computer.

**boot routine**

When you start your computer, it clears all memory, initializes devices, and loads the operating system. Unless the operating system fails to respond, you can reboot (also called *warm boot*) your computer by pressing <Ctrl><Alt><Del>; otherwise, you must perform a cold boot by pressing the reset button or by turning the computer off and then back on.

**bootable diskette**

You can start your computer from a diskette. To make a bootable diskette, insert a diskette in the diskette drive, type `sys a:` at the command line prompt, and press <Enter>. Use this bootable diskette if your computer will not boot from the hard drive.

**bpi**

Abbreviation for bits per inch.

**bps**

Abbreviation for bits per second.

**BTU**

Abbreviation for British thermal unit.

**bus**

An information pathway between the components of a computer. Your computer contains an expansion bus that allows the microprocessor to communicate with controllers for all the various peripheral devices connected to the computer. Your computer also contains an address bus and a data bus for communications between the microprocessor and RAM.

**byte**

Eight contiguous bits of information, the basic data unit used by your computer.

**C**

Abbreviation for Celsius.

**cache**

A fast storage area that keeps a copy of data or instructions for quicker data retrieval. For example, your computer's BIOS may cache ROM code in faster RAM. Or, a disk-cache utility may reserve RAM in which to store frequently

accessed information from your computer's disk drives; when a program makes a request to a disk drive for data that is in the cache, the disk-cache utility can retrieve the data from RAM faster than from the disk drive.

### **capability**

Refers to the actions that an object can perform, or actions that can be taken on a managed object. For example, if a card is hot-pluggable, it is capable of being replaced while the system power is ON.

### **CDRAM**

Abbreviation for cached DRAM, which is a high-speed DRAM memory chip developed by Mitsubishi that includes a small SRAM cache.

### **CD-ROM**

Abbreviation for compact disc read-only memory. CD drives use optical technology to read data from CDs. CDs are read-only storage devices; you cannot write new data to a CD with standard CD drives.

### **chip**

A set of microminiaturized, electronic circuits that are designed for use as processors and memory in computers. Small chips can hold from a handful to tens of thousands of transistors. They look like tiny chips of aluminum, no more than 1/16" square by 1/30" thick, which is where the term "chip" came from. Large chips, which can be more than a half inch square, hold millions of transistors. It is actually only the top one thousandth of an inch of a chip's surface that holds the circuits. The rest of it is just a base.

### **CIM**

Acronym for Common Information Model, which is a model for describing management information from the DMTF. CIM is implementation independent, allowing different management applications to collect the required data from a variety of sources. CIM includes schemas for systems, networks, applications and devices, and new schemas will be added. It provides mapping techniques for interchange of

CIM data with MIB data from SNMP agents and MIF data from DMI-compliant systems.

### **CIMOM**

Acronym for common information model object manager.

### **CI/O**

Acronym for comprehensive input/output.

### **cm**

Abbreviation for centimeter(s).

### **CMOS**

Acronym for complementary metal-oxide semiconductor. In computers, CMOS memory chips are often used for NVRAM storage.

### **COMn**

The device names for the first through fourth serial ports on your computer are COM1, COM2, COM3, and COM4. The default interrupt for COM1 and COM3 is IRQ4, and the default interrupt for COM2 and COM4 is IRQ3. Therefore, you must be careful when configuring software that runs a serial device so that you don't create an interrupt conflict.

### **component**

As they relate to DMI, manageable components are operating systems, computer systems, expansion cards, or peripherals that are compatible with DMI. Each component is made up of groups and attributes that are defined as relevant to that component.

### **config.sys file**

The **config.sys** file is executed when you boot your computer (before running any commands in the **autoexec.bat** file). This start-up file contains commands that specify which devices to install and which drivers to use. This file also contains commands that determine how the operating system uses memory and controls files.

### **controller**

A chip that controls the transfer of data between the microprocessor and memory or between the microprocessor

and a peripheral device such as a disk drive or the keyboard.

**control panel**

The part of the computer that contains indicators and controls, such as the power switch, hard drive access indicator, and power indicator.

**conventional memory**

The first 640 KB of RAM. Conventional memory is found in all computers. Unless they are specially designed, MS-DOS<sup>®</sup> programs are limited to running in conventional memory.

**COO**

Acronym for cost of ownership.

**cooling unit**

Sets of fans or other cooling devices in a system chassis.

**coprocessor**

A chip that relieves the computer's microprocessor of specific processing tasks. A math coprocessor, for example, handles numeric processing. A graphics coprocessor handles video rendering. The Intel<sup>®</sup> Pentium<sup>®</sup> microprocessor, for example, includes a built-in math coprocessor.

**cpi**

Abbreviation for characters per inch.

**CPU**

Abbreviation for central processing unit. See also **microprocessor**.

**CRC**

Abbreviation for cyclic redundancy code, which is a number derived from, and stored or transmitted with, a block of data in order to detect corruption. By recalculating the CRC and comparing it to the value originally transmitted, the receiver can detect some types of transmission errors.

**cursor**

A marker, such as a block, underscore, or pointer that represents the position at which the next keyboard or mouse action will occur.

**DAT**

Acronym for digital audio tape.

**dB**

Abbreviation for decibel(s).

**dBA**

Abbreviation for adjusted decibel(s).

**DC**

Abbreviation for direct current.

**device driver**

A program that allows the operating system or some other program to interface correctly with a peripheral device, such as a printer. Some device drivers—such as network drivers—must be loaded from the **config.sys** file (with a **device=** statement) or as memory-resident programs (usually, from the **autoexec.bat** file). Others—such as video drivers—must load when you start the program for which they were designed.

**DIMM**

Acronym for dual in-line memory module. A small circuit board containing DRAM chips that connects to the system board.

**DIN**

Acronym for *Deutsche Industrie Norm* which is the standards-setting organization for Germany.

A DIN connector is a connector that conforms to one of the many standards defined by DIN. DIN connectors are used widely in personal computers. For example, the keyboard connector for PCs is a DIN connector.

**DIP**

Acronym for dual in-line package. A circuit board, such as a system board or expansion card, may contain DIP switches for configuring the circuit board. DIP switches are always toggle switches, with an ON position and an OFF position.

**directory**

Directories help keep related files organized on a disk in a hierarchical, "inverted tree" structure. Each disk has a "root" directory; for example, a c:\>

prompt normally indicates that you are at the root directory of hard drive C. Additional directories that branch off of the root directory are called *subdirectories*. Subdirectories may contain additional directories branching off of them.

***display adapter***

See **video adapter**.

***DMA***

Abbreviation for direct memory access. A DMA channel allows certain types of data transfer between RAM and a device to bypass the microprocessor.

***DMI***

Abbreviation for Desktop Management Interface. DMI enables the management of your computer system's software and hardware. DMI collects information about the system's components, such as the operating system, memory, peripherals, expansion cards, and asset tag. Information about the system's components is displayed as a MIF file or through the Dell Inspector program.

***DMTF***

Abbreviation for Distributed Management Task Force, a consortium of companies representing hardware and software providers, of which Dell is a member.

***dpi***

Abbreviation for dots per inch.

***DPMS***

Abbreviation for Display Power Management Signaling. A standard developed by the Video Electronics Standards Association (VESA<sup>®</sup>) that defines the hardware signals sent by a video controller to activate power management states in a monitor. A monitor is said to be DPMS-compliant when it is designed to enter a power management state after receiving the appropriate signal from a computer's video controller.

***DRAC***

Refers to a remote management capability.

***DRAM***

Acronym for dynamic random-access memory. A computer's RAM is usually made up entirely of DRAM chips. Because DRAM chips cannot store an electrical charge indefinitely, your computer continually refreshes each DRAM chip in the computer.

***drive-type number***

Your computer can recognize a number of specific hard drives. Each is assigned a drive-type number that is stored in NVRAM. The hard drive(s) specified in your computer's System Setup program must match the actual drive(s) installed in the computer. The System Setup program also allows you to specify physical parameters (logical cylinders, logical heads, cylinder number, and logical sectors per pack) for drives not included in the table of drive types stored in NVRAM.

***DTE***

Abbreviation for data terminal equipment. Any device, such as a computer system, that can send data in digital form by means of a cable or communications line. The DTE is connected to the cable or communications line through a data communications equipment (DCE) device, such as a modem.

***ECC***

Abbreviation for error checking and correction.

***ECP***

Abbreviation for Extended Capabilities Port.

***EDO***

Acronym for extended data output dynamic random access memory which is a type of DRAM that is faster than conventional DRAM. EDO RAM can start fetching the next block of memory at the same time that it sends the previous block to the CPU.

***EEPROM***

Acronym for electrically erasable programmable read-only memory.

**EIDE**

Abbreviation for enhanced integrated drive electronics. EIDE devices add one or more of the following enhancements to the traditional IDE standard:

- Data transfer rates of up to 16 MB/sec
- Support for drives other than just hard drives, such as CD and tape drives
- Support for hard drives with capacities greater than 528 MB
- Support for up to two controllers, each with up to two devices attached

**EISA**

Acronym for Extended Industry-Standard Architecture, a 32-bit expansion-bus design. The expansion-card connectors in an EISA computer are also compatible with 8- or 16-bit ISA expansion cards.

To avoid a configuration conflict when installing an EISA expansion card, you must use the EISA Configuration Utility. This utility allows you to specify which expansion slot contains the card and obtains information about the card's required system resources from a corresponding EISA configuration file.

**EMC**

Abbreviation for Electromagnetic Compatibility.

**EMI**

Abbreviation for electromagnetic interference.

**EMM**

Abbreviation for expanded memory manager. A utility that uses extended memory to emulate expanded memory on computers with an Intel386™ or higher microprocessor.

**EMS**

Abbreviation for Expanded Memory Specification.

**EPP**

Abbreviation for Enhanced Parallel Port which provides improved bidirectional data transmission. Many devices are designed to take advantage of the EPP standard, especially devices, such as network or SCSI adapters that connect to the parallel port of a portable computer.

**EPROM**

Acronym for erasable programmable read-only memory.

**ESD**

Abbreviation for electrostatic discharge.

**expanded memory**

A technique for accessing RAM above 1 MB. To enable expanded memory on your computer, you must use an EMM. You should configure your system to support expanded memory only if you run application programs that can use (or require) expanded memory.

**expansion bus**

Your computer contains an expansion bus that allows the microprocessor to communicate with controllers for peripheral devices, such as a network card or an internal modem.

**expansion-card connector**

A connector on the computer's system board or riser board for plugging in an expansion card.

**extended memory**

RAM above 1 MB. Most software that can use it, such as the Windows operating system, requires that extended memory be under the control of an XMM.

**external cache memory**

A RAM cache using SRAM chips. Because SRAM chips operate at several times the speed of DRAM chips, the microprocessor can retrieve data and instructions faster from external cache memory than from RAM.

**F**

Abbreviation for Fahrenheit.

**FAT**

Acronym for file allocation table. The file system structure used by MS-DOS<sup>®</sup> to organize and keep track of file storage. The Windows NT<sup>®</sup> operating systems can optionally use a FAT file system structure.

**FCC**

Abbreviation for Federal Communications Commission.

**FEPRM**

Acronym for Flash Erasable Programmable Read-Only Memory. Flash memory is a kind of non-volatile storage device similar to EEPROM, but the erasing is done only in blocks or the entire chip.

**flash bios**

A PC BIOS that is stored in flash memory rather than in a ROM. A flash BIOS chip can be updated in place, whereas a ROM BIOS must be replaced with a newer chip.

**flash memory**

A type of EEPROM chip that can be reprogrammed from a utility on diskette while still installed in a computer; most EEPROM chips can only be rewritten with special programming equipment.

**format**

To prepare a hard drive or diskette for storing files. An unconditional format deletes all data stored on the disk.

**FPBGA**

Acronym for field programmable gate array, a programmable logic chip (PLD) with a high density of gates.

**FRU**

Acronym for field replaceable unit.

**ft**

Abbreviation for feet.

**FTP**

Abbreviation for file transfer protocol.

**g**

Abbreviation for gram(s).

**G**

Abbreviation for gravities.

**GB**

Abbreviation for gigabyte(s). A gigabyte equals 1,024 megabytes or 1,073,741,824 bytes.

**graphics coprocessor**

See **coprocessor**.

**graphics mode**

A video mode that can be defined as *x* horizontal by *y* vertical pixels by *z* colors.

**group**

As it relates to DMI, a group is a data structure that defines common information, or attributes, about a manageable component.

**GUI**

Acronym for graphical user interface.

**h**

Abbreviation for hexadecimal. A base-16 numbering system, often used in programming to identify addresses in the computer's RAM and I/O memory addresses for devices. The sequence of decimal numbers from 0 through 16, for example, is expressed in hexadecimal notation as: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, 10. In text, hexadecimal numbers are often followed by *h*.

**heat sink**

A metal plate with metal pegs or ribs that help dissipate heat. Most microprocessors include a heat sink.

**HIP**

Abbreviation for Dell OpenManage Hardware Instrumentation Package (HIP).

**HMA**

Abbreviation for high memory area. The first 64 KB of extended memory above 1 MB. A memory manager that conforms to the XMS can make the HMA a direct extension of conventional memory. See also **upper memory area** and **XMM**.

**host adapter**

A host adapter implements communication between the computer's bus and the controller for a peripheral device. (hard drive controller subsystems include integrated host adapter circuitry.) To add a SCSI expansion bus to your system, you must install or connect the appropriate host adapter.

**hot plug**

The ability to remove and replace a redundant part while the system is being used. Also called a "hot spare."

**HPFS**

Abbreviation for the High Performance File System option in the Windows NT operating systems.

**Hz**

Abbreviation for hertz.

**ICES**

Abbreviation for Interface-Causing Equipment Standard (in Canada).

**ICU**

Abbreviation for ISA Configuration Utility.

**IDE**

Abbreviation for Integrated Device Electronics. IDE is a computer system interface, used primarily for hard drives and CDs.

**I/O**

Abbreviation for input/output. The keyboard is an input device, and a printer is an output device. In general, I/O activity can be differentiated from computational activity. For example, when a program sends a document to the printer, it is engaging in output activity; when the program sorts a list of terms, it is engaging in computational activity.

**ID**

Abbreviation for identification.

**IHV**

Acronym for independent hardware vendor. IHVs often develop their own

MIBs for components that they manufacture.

**interlacing**

A technique for increasing video resolution by only updating alternate horizontal lines on the screen. Because interlacing can result in noticeable screen flicker, most users prefer noninterlaced video adapter resolutions.

**internal microprocessor cache**

An instruction and data cache built in to the microprocessor. The Intel Pentium microprocessor includes a 16-KB internal cache, which is set up as an 8-KB read-only instruction cache and an 8-KB read/write data cache.

**IPX**

Acronym for internetwork packet exchange.

**IRQ**

Abbreviation for interrupt request. A signal that data is about to be sent to or received by a peripheral device travels by an IRQ line to the microprocessor. Each peripheral connection must be assigned an IRQ number. For example, the first serial port in your computer (COM1) is assigned to IRQ4 by default. Two devices can share the same IRQ assignment, but you cannot operate both devices simultaneously.

**ISA**

Acronym for Industry-Standard Architecture. A 16-bit expansion bus design. The expansion-card connectors in an ISA computer are also compatible with 8-bit ISA expansion cards.

**ITE**

Abbreviation for information technology equipment.

**jumper**

Jumpers are small blocks on a circuit board with two or more pins emerging from them. Plastic plugs containing a wire fit down over the pins. The wire connects the pins and creates a circuit. Jumpers provide a simple and reversible method of

changing the circuitry in a printed circuit board.

**K**

Abbreviation for kilo-, indicating 1,000.

**KB**

Abbreviation for kilobyte(s), 1,024 bytes.

**KB/sec**

Abbreviation for kilobyte(s) per second.

**Kbit(s)**

Abbreviation for kilobit(s), 1,024 bits.

**Kbit(s)/sec**

Abbreviation for kilobit(s) per second.

**key combination**

A command requiring you to press multiple keys at the same time. For example, you can reboot your computer by pressing the <Ctrl><Alt><Del> key combination.

**kg**

Abbreviation for kilogram(s), 1,000 grams.

**kHz**

Abbreviation for kilohertz, 1,000 hertz.

**LAN**

Acronym for local area network. A LAN system is usually confined to the same building or a few nearby buildings, with all equipment linked by wiring dedicated specifically to the LAN.

**lb**

Abbreviation for pound(s).

**LCC**

Acronym for leaded or leadless chip carrier.

**LIF**

Acronym for low insertion force. Some computers use LIF sockets and connectors to allow devices, such as the microprocessor chip, to be installed or removed with minimal stress to the device.

**LED**

Abbreviation for light-emitting diode. An electronic device that lights up when a current is passed through it.

**local bus**

On a computer with local-bus expansion capability, certain peripheral devices (such as the video adapter circuitry) can be designed to run much faster than they would with a traditional expansion bus. Some local-bus designs allow peripherals to run at the same speed and with the same width data path as the computer's microprocessor.

**LPTn**

The device names for the first through third parallel printer ports on your computer are LPT1, LPT2, and LPT3.

**LRA**

Acronym for local response agent.

**m**

Abbreviation for meter(s).

**mA**

Abbreviation for milliampere(s).

**mAh**

Abbreviation for milliampere-hour(s).

**math coprocessor**

See **coprocessor**.

**Mb**

Abbreviation for megabit.

**MB**

Abbreviation for megabyte(s). The term *megabyte* means 1,048,576 bytes; however, when referring to hard drive storage, the term is often rounded to mean 1,000,000 bytes.

**MB/sec**

Abbreviation for megabytes per second.

**Mbps**

Abbreviation for megabits per second.

**MBR**

Abbreviation for master boot record.

**MCA**

Abbreviation for Micro Channel Architecture, which is designed for multiprocessing. MCA eliminates potential conflicts that arise when installing new peripheral devices. MCA is not compatible with either EISA or XT bus architecture, so older cards cannot be used with it.

**memory**

A computer can contain several different forms of memory, such as RAM, ROM, and video memory. Frequently, the word *memory* is used as a synonym for RAM; for example, an unqualified statement such as "a computer with 16 MB of memory" refers to a computer with 16 MB of RAM.

**memory address**

A specific location, usually expressed as a hexadecimal number, in the computer's RAM.

**memory manager**

A utility that controls the implementation of memory in addition to conventional memory, such as extended or expanded memory.

**memory module**

A small circuit board containing DRAM chips that connects to the system board.

**MHz**

Abbreviation for megahertz.

**MIB**

Acronym for management information base. MIB is used to send detailed status/commands from or to an SNMP managed device.

**microprocessor**

The primary computational chip inside the computer that controls the interpretation and execution of arithmetic and logic functions. Software written for one microprocessor must usually be revised to run on another microprocessor. *CPU* is a synonym for microprocessor.

**MIDI**

Abbreviation for musical instrument digital interface.

**MIF**

Acronym for management information format. A MIF file contains information, status, and links to component instrumentation. MIF files are installed into the MIF database by the DMI service layer. The content of a MIF is defined by a DTMF working committee and is published in the form of a MIF definition document. This document identifies the groups and attributes that are relevant to DMI-manageable components.

**mm**

Abbreviation for millimeter(s).

**modem**

A device that allows your computer to communicate with other computers over telephone lines.

**MOF**

Acronym for managed object format, which is an ASCII file that contains the formal definition of a CIM schema.

**mouse**

A pointing device that controls the movement of the cursor on a screen. Mouse-aware software allows you to activate commands by clicking a mouse button while pointing at objects displayed on the screen.

**MPEG**

Acronym for Motion Picture Experts Group. MPEG is a digital video file format.

**ms**

Abbreviation for millisecond(s).

**MS-DOS**

Abbreviation for Microsoft® Disk Operating System.

**MTBF**

Abbreviation for mean time between failures.

**multifrequency monitor**

A monitor that supports several video standards. A multifrequency monitor can adjust to the frequency range of the signal from a variety of video adapters.

**mV**

Abbreviation for millivolt(s).

**name**

The name of an object or variable is the exact string that identifies it in an SNMP Management Information Base (MIB) file, or in a DMI Management Information Format (MIF) file, or in a CIM Management Object File (MOF).

**NDIS**

Abbreviation for Network Driver Interface Specification.

**NIC**

Acronym for network interface controller.

**NIF**

Acronym for network interface function. This term is equivalent to NIC.

**NLM**

Abbreviation for NetWare® Loadable Module.

**NMI**

Abbreviation for nonmaskable interrupt. A device sends an NMI to signal the microprocessor about hardware errors, such as a parity error.

**noninterlaced**

A technique for decreasing screen flicker by sequentially refreshing each horizontal line on the screen.

**ns**

Abbreviation for nanosecond(s), one billionth of a second.

**NTFS**

Abbreviation for the NT File System option in the Windows NT operating system.

**NuBus**

Proprietary expansion bus used on Apple Macintosh personal computers.

**NVRAM**

Acronym for nonvolatile random-access memory. Memory that does not lose its contents when you turn off your computer. NVRAM is used for maintaining the date, time, and system configuration information.

**OID**

Abbreviation for object identifier. An implementation-specific integer or pointer that uniquely identifies an object.

**online access service**

A service that typically provides access to the Internet, e-mail, bulletin boards, chat rooms, and file libraries.

**OTP**

Abbreviation for one-time programmable.

**parallel port**

An I/O port used most often to connect a parallel printer to your computer. You can usually identify a parallel port on your computer by its 25-hole connector.

**parameter**

A value or option that you specify to a program. A parameter is sometimes called a *switch* or an *argument*.

**partition**

You can divide a hard drive into multiple physical sections called *partitions* with the **fdisk** command. Each partition can contain multiple logical drives.

After partitioning the hard drive, you must format each logical drive with the **format** command.

**PC 98**

The third PC 9x specification, which defines five categories (Consumer, Office, Mobile, Entertainment and Workstation). It eliminates the ISA bus and pushes the minimum requirements to a 200MHz CPU with 32MB of RAM and 256K of L2 cache. PC 98 machines must support OnNow, and the BIOS must support booting from a CD and be Y2K compliant. Systems cannot ship with ISA cards installed, but may have an ISA bus for legacy devices.

**PC card**

A credit-card sized, removable module for portable computers standardized by PCMCIA. PC Cards are also known as "PCMCIA cards." PC Cards are 16-bit devices that are used to attach modems, network adapters, sound cards, radio transceivers, solid state disks and hard disks to a portable computer. The PC Card is a "plug and play" device, which is configured automatically by the Card Services software.

**PCI**

Abbreviation for Peripheral Component Interconnect. A standard for local-bus implementation developed by Intel Corporation.

**PCMCIA**

Personal Computer Memory Card International Association. An international trade association that has developed standards for devices, such as modems and external hard drives, that can be plugged into portable computers.

**PERC**

Acronym for PowerEdge Expandible RAID controller.

**peripheral device**

An internal or external device—such as a printer, a disk drive, or a keyboard—connected to a computer.

**PGA**

Abbreviation for pin grid array, a type of microprocessor socket that allows you to remove the microprocessor chip.

**physical memory array**

The physical memory array is the entire physical memory of a system. Variables for physical memory array include maximum size, total number of memory slots on the motherboard, and total number of slots in use.

**physical memory array mapped**

The physical memory array mapped refers to the way physical memory is divided. For example, one mapped area may have 640 KB and the other mapped area may have between 1 Megabyte and 127 Megabytes.

**PIC**

Acronym for programmable interrupt controller.

**PIP**

Acronym for peripheral interchange program. A CP/M utility program that was used to copy files.

**pixel**

A single point on a video display. Pixels are arranged in rows and columns to create an image. A video resolution, such as 640 x 480, is expressed as the number of pixels across by the number of pixels up and down.

**PLCC**

Acronym for plastic leaded chip carrier.

**Plug and Play**

An industry-standard specification that makes it easier to add hardware devices to personal computers. Plug and Play provides automatic installation and configuration, compatibility with existing hardware, and dynamic support of mobile computing environments.

**PME**

Abbreviation for Power Management Event. A PME is a pin on a peripheral component interconnect that allows a PCI device to assert a wake event.

**POST**

Acronym for power-on self-test. Before the operating system loads when you turn on your computer, the POST tests various system components such as RAM, the disk drives, and the keyboard.

**power supply**

An electrical system that converts AC current from the wall outlet into the DC currents required by the computer circuitry. The power supply in a personal computer typically generates multiple voltages.

**power unit**

A set of power supplies in a system chassis.

**ppm**

Abbreviation for pages per minute.

**PQFP**

Abbreviation for plastic quad flat pack, a type of microprocessor socket in which the microprocessor chip is permanently mounted.

**Program Diskette Maker**

The Program Diskette Maker allows you to create program diskette sets, or master copies, of software that Dell installed on your computer system. It is essential that you create these diskette sets as soon as possible. You may need a set of master diskettes if you ever experience problems with your hard drive and need to reinstall your Dell-installed software. If your system includes Dell-installed software, you can select this program from the Dell Accessories program folder.

**program diskette set**

The set of diskettes from which you can perform a complete installation of an operating system or application program. When you reconfigure a program, you often need its program diskette set.

**protected mode**

An operating mode supported by 80286 or higher microprocessors, protected mode allows operating systems to implement:

- A memory address space of 16 MB (80286 microprocessor) to 4 GB (Intel386 or higher microprocessor)
- Multitasking
- Virtual memory, a method for increasing addressable memory by drive

The Windows NT, OS/2, and UNIX<sup>®</sup> 32-bit operating systems run in protected mode. MS-DOS cannot run in protected mode; however, some programs that you can start from MS-DOS, such as the Windows operating system, are able to put the computer into protected mode.

**provider**

A provider is an extension of a CIM schema that communicates with managed objects and accesses data and event notifications from a variety of sources. Providers forward this information to the CIM Object Manager for integration and interpretation.

**PS/2**

Abbreviation for Personal System/2.

**PXE**

Abbreviation for Pre-boot eXecution Environment.

**QFP**

Acronym for quad flat pack.

**RAID**

Acronym for redundant array of independent drives.

**RAM**

Acronym for random-access memory. The computer's primary temporary storage area for program instructions and data. Each location in RAM is identified by a number called a *memory address*. Any information stored in RAM is lost when you turn off your computer.

**RAMBUS**

Acronym for Rambus DRAM, a type of memory (DRAM) developed by Rambus, Inc.

**RAMDAC**

Acronym for random-access memory digital-to-analog converter.

**RAW**

Unprocessed. The term refers to data that is passed along to an I/O device without being interpreted. In contrast, *cooked* refers to data that is processed before being passed to the I/O device.

It often refers to uncompressed text that is not stored in any proprietary format. The term comes from UNIX, which supports cooked and raw modes for data output to a terminal.

**RDRAM**

Acronym for Rambus DRAM. A dynamic RAM chip technology from Rambus, Inc. Direct RDRAMs are used in computers. Direct RDRAM chips are housed in RIMM modules, which are similar to DIMMs but have different pin settings. The chips can be built with dual channels, doubling the transfer rate to 3.2 GB/sec.

**read-only file**

A read-only file is one that you are prohibited from editing or deleting. A file can have read-only status if:

- Its read-only attribute is enabled.
- It resides on a physically write-protected diskette or on a diskette in a write-protected drive.
- It is located on a network in a directory to which the system administrator has assigned read-only rights to you.

**readme file**

A text file included with a software package or hardware product that contains information supplementing or updating the documentation for the software or hardware. Typically, readme files provide installation information, describe new product enhancements or corrections that have not yet been documented, and list known problems or other things you need to be aware of as you use the software or hardware.

**real mode**

An operating mode supported by 80286 or higher microprocessors, real mode imitates the architecture of an 8086 microprocessor.

**refresh rate**

The rate at which the monitor redraws the video image on the monitor screen. More precisely, the refresh rate is the frequency, measured in Hz, at which the screen's horizontal lines are recharged (sometimes also referred to as its *vertical frequency*). The higher the refresh rate, the less video flicker can be seen by the human eye. The higher refresh rates are also noninterlaced.

**RFI**

Abbreviation for radio frequency interference.

**RGB**

Abbreviation for red/green/blue.

**RIMM**

Acronym for Rambus In-line Memory Module, which is the Rambus equivalent of a DIMM module.

**ROM**

Acronym for read-only memory. Your computer contains some programs essential to its operation in ROM code. Unlike RAM, a ROM chip retains its contents even after you turn off your computer. Examples of code in ROM include the program that initiates your computer's boot routine and the POST.

**rpm**

Abbreviation for revolutions per minute.

**RTC**

Abbreviation for real-time clock. Battery-powered clock circuitry inside the computer that keeps the date and time after you turn off the computer.

**SCA**

Acronym for single connector attachment.

**schema**

A collection of class definitions that describes managed objects in a particular environment. A CIM schema is a collection of class definitions used to represent managed objects that are common to every management environment, which is why CIM is called the Common Information Model.

**SCSI**

Acronym for small computer system interface. An I/O bus interface with faster data transmission rates than standard ports. You can connect up to seven devices (15 for some newer SCSI types) to one SCSI interface.

**SDMS**

Abbreviation for SCSI device management system.

**sec**

Abbreviation for second(s).

**SEC**

Abbreviation for single-edge contact.

**serial port**

An I/O port used most often to connect a modem to your computer. You can usually identify a serial port on your computer by its 9-pin connector.

**settings**

Settings are conditions of a manageable object help to determine what happens when a certain value is detected in a component. For example, a user can set the upper critical threshold of a temperature probe to 75 degrees Celsius. If the probe reaches that temperature, the setting results in an alert being sent to the management console so that user intervention can be taken. Some settings, when reached, can trigger a system shutdown or other response that can prevent damage to the system.

**service tag number**

A bar code label on the computer that identifies it when you call Dell for customer or technical support.

**SGRAM**

Acronym for synchronous graphics RAM.

**shadowing**

A computer's system and video BIOS code is usually stored on ROM chips. Shadowing refers to the performance-enhancement technique that copies BIOS code to faster RAM chips in the upper memory area (above 640 KB) during the boot routine.

**SIMD**

Abbreviation for Single Instruction Multiple Data.

**SIMM**

Acronym for single in-line memory module. A small circuit board containing DRAM chips that connects to the system board.

**SIP**

Acronym for single in-line package, which is a type of housing for electronic components in which the connecting pins protrude from one side. A SIP is also called a Single In-line Pin Package (SIPP).

**SKU**

Acronym for stock keeping unit.

**SMART**

Acronym for Self-Monitoring Analysis Reporting Technology. A technology that allows hard drives to report errors and failures to the system BIOS, which then displays an error message on the screen. To take advantage of this technology, you must have a SMART-compliant hard drive and the proper support in the system BIOS.

**SMBIOS**

Acronym for system management BIOS.

**SMD**

Acronym for surface mount device.

**SNMP**

Abbreviation for Simple Network Management Protocol. SNMP is an industry-standard interface that allows a network manager to remotely monitor and manage workstations.

**SODIMM**

Acronym for small outline-DIMM. A DIMM module with a thinner profile due to the use of TSOP chip packages. SODIMMs are commonly used in laptop computers.

**SOIC**

Acronym for Small Outline IC, a small-dimension, plastic, rectangular, surface mount chip package that uses gull-wing pins extending outward.

**SOJ**

Acronym for small outline package J-lead, a small-dimension, plastic, rectangular surface mount chip package with j-shaped pins on its two long sides.

**SRAM**

Abbreviation for static random-access memory. Because SRAM chips do not require continual refreshing, they are substantially faster than DRAM chips.

**state**

Refers to the condition of an object that can have more than one condition. For example, an object may be in the "not ready" state.

**status**

Refers to the health or functioning of an object. For example, a temperature probe can have the status normal if the probe is measuring acceptable temperatures. When the probe begins reading temperatures that exceed limits set by the user, it reports a critical status.

**SVGA**

Abbreviation for super video graphics array. VGA and SVGA are video standards for video adapters with greater resolution

and color display capabilities than previous standards.

To display a program at a specific resolution, you must install the appropriate video drivers and your monitor must support the resolution. Similarly, the number of colors that a program can display depends on the capabilities of the monitor, the video driver, and the amount of video memory installed in the computer.

**switch**

On a computer system board, switches control various circuits or functions in your computer system. These switches are known as *DIP switches*; they are normally packaged in groups of two or more switches in a plastic case. Two common DIP switches are used on system boards: *slide switches* and *rocker switches*. The names of the switches are based on how the settings (on and off) of the switches are changed.

**syntax**

The rules that dictate how you must type a command or instruction so that the computer understands it. A variable's syntax indicates its data type.

**system board**

As the main circuit board, the system board usually contains most of your computer's integral components, such as the following:

- Microprocessor
- RAM
- Controllers for standard peripheral devices, such as the keyboard
- Various ROM chips

Frequently used synonyms for system board are *motherboard* and *logic board*.

**system configuration information**

Data stored in memory that tells a computer what hardware is installed and how the computer should be configured for operation.

**system diskette**

System diskette is a synonym for *bootable diskette*.

**system memory**

System memory is a synonym for *RAM*.

**System Setup program**

A BIOS-based program that allows you to configure your computer's hardware and customize the computer's operation by setting such features as password protection and energy management. Some options in the System Setup program require that you reboot the computer (or the computer may reboot automatically) in order to make a hardware configuration change. Because the System Setup program is stored in NVRAM, any settings remain in effect until you change them again.

**system.ini file**

A start-up file for the Windows operating system. When you start Windows, it consults the **system.ini** file to determine a variety of options for the Windows operating environment. Among other things, the **system.ini** file records which video, mouse, and keyboard drivers are installed for Windows.

Running the Control Panel or Windows Setup program may change options in the **system.ini** file. On other occasions, you may need to change or add options to the **system.ini** file manually with a text editor, such as Notepad.

**table**

In SNMP MIBs, a table is a two dimensional array that describes the variables that make up a managed object.

**termination**

Some devices (such as the last device at each end of a SCSI cable) must be terminated to prevent reflections and spurious signals in the cable. When such devices are connected in a series, you may need to enable or disable the termination on these devices by changing jumper or switch settings on the devices or by changing settings in the configuration software for the devices.

**text editor**

An application program for editing text files consisting exclusively of ASCII characters. Windows Notepad is a text editor, for example. Most word processors use proprietary file formats containing binary characters, although some can read and write text files.

**text mode**

A video mode that can be defined as *x* columns by *y* rows of characters.

**threshold values**

Systems are normally equipped with various sensors that monitor temperature, voltage, current, and fan speed. The sensor's threshold values specify the ranges (min and max values) for determining whether the sensor is operating under normal, noncritical, critical or fatal conditions. Dell-supported threshold values are

- UpperThresholdFatal
- UpperThresholdCritical
- UpperThresholdNon-critical
- Normal
- LowerThresholdNon-critical
- LowerThresholdCritical
- LowerThresholdFatal

**time-out**

A specified period of system inactivity that must occur before an energy conservation feature is activated.

**tpi**

Abbreviation for tracks per inch.

**TQFP**

Acronym for thin quad flat pack.

**TSR**

Abbreviation for terminate-and-stay-resident. A TSR program runs "in the background." Most TSR programs implement a predefined key combination (sometimes referred to as a *hot key*) that allows you to activate the TSR program's

interface while running another program. When you finish using the TSR program, you can return to the other application program and leave the TSR program resident in memory for later use.

TSR programs can sometimes cause memory conflicts. When troubleshooting, rule out the possibility of such a conflict by rebooting your computer without starting any TSR programs.

### **TSOP**

Acronym for thin small outline package. A very-thin, plastic, rectangular surface mount chip package with gull-wing pins on its two short sides. TSOPs are about a third as thick as SOJ chips.

### **UART**

Acronym for universal asynchronous receiver transmitter, the electronic circuit that makes up the serial port.

### **UDP**

Acronym for user datagram protocol.

### **UL**

Abbreviation for Underwriters Laboratories.

### **UMB**

Abbreviation for upper memory blocks.

### **unicode**

A fixed width, 16-bit world wide character encoding, developed and maintained by the Unicode Consortium.

### **upper memory area**

The 384 KB of RAM located between 640 KB and 1 MB. If the computer has an Intel386 or higher microprocessor, a utility called a *memory manager* can create UMBs in the upper memory area, in which you can load device drivers and memory-resident programs.

### **UPS**

Abbreviation for uninterruptible power supply. A battery-powered unit that automatically supplies power to your computer in the event of an electrical failure.

### **USB**

Abbreviation for Universal Serial Bus. A USB connector provides a single connection point for multiple USB-compliant devices, such as mice, keyboards, printers, and computer speakers. USB devices can also be connected and disconnected while the system is running.

### **utility**

A program used to manage system resources—memory, disk drives, or printers, for example.

### **UTP**

Abbreviation for unshielded twisted pair.

### **UUID**

Acronym for Universal Unique Identification.

### **V**

Abbreviation for volt(s).

### **VAC**

Abbreviation for volt(s) alternating current.

### **varbind**

An algorithm used to assign and object identifier or OID. The varbind gives rules for arriving at the decimal prefix that uniquely identifies an enterprise, as well as the formula for specifying a unique identifier for the objects defined in that enterprise's MIB.

### **variable**

A component of a managed object. A temperature probe, for example, has a variable to describe its capabilities, its health or status, and certain indexes that you can use to help you in locating the right temperature probe.

### **VCCI**

Abbreviation for Voluntary Control Council for Interference.

### **VCR**

Abbreviation for video cassette recorder.

**VDC**

Abbreviation for volt(s) direct current.

**VESA**

Acronym for Video Electronics Standards Association.

**VGA**

Abbreviation for video graphics array. VGA and SVGA are video standards for video adapters with greater resolution and color display capabilities than previous standards. To display a program at a specific resolution, you must install the appropriate video drivers and your monitor must support the resolution. Similarly, the number of colors that a program can display depends on the capabilities of the monitor, the video driver, and the amount of video memory installed for the video adapter.

**VGA feature connector**

On some systems with a built-in VGA video adapter, a VGA feature connector allows you to add an enhancement adapter, such as a video accelerator, to your computer. A VGA feature connector can also be called a *VGA pass-through connector*.

**video adapter**

The logical circuitry that provides—in combination with the monitor—your computer's video capabilities. A video adapter may support more or fewer features than a specific monitor offers. Typically, a video adapter comes with video drivers for displaying popular application programs and operating systems in a variety of video modes.

On some Dell computers, a video adapter is integrated into the system board. Also available are many video adapter cards that plug into an expansion-card connector.

Video adapters often include memory separate from RAM on the system board. The amount of video memory, along with the adapter's video drivers, may affect the number of colors that can be simultaneously displayed. Video adapters

can also include their own coprocessor for faster graphics rendering.

**video driver**

A program that allows graphics-mode application programs and operating systems to display at a chosen resolution with the desired number of colors. A software package may include some "generic" video drivers. Any additional video drivers may need to match the video adapter installed in the computer.

**video memory**

Most VGA and SVGA video adapters include memory chips in addition to your computer's RAM. The amount of video memory installed primarily influences the number of colors that a program can display (with the appropriate video drivers and monitor capabilities).

**video mode**

Video adapters normally support multiple text and graphics display modes. Character-based software displays in text modes that can be defined as  $x$  columns by  $y$  rows of characters. Graphics-based software displays in graphics modes that can be defined as  $x$  horizontal by  $y$  vertical pixels by  $z$  colors.

**video resolution**

Video resolution—800 x 600, for example—is expressed as the number of pixels across by the number of pixels up and down. To display a program at a specific graphics resolution, you must install the appropriate video drivers and your monitor must support the resolution.

**virtual memory**

A method for increasing addressable RAM by using the hard drive. For example, in a computer with 16 MB of RAM and 16 MB of virtual memory set up on the hard drive, the operating system would manage the system as though it had 32 MB of physical RAM.

**virus**

A self-starting program designed to inconvenience you. Virus programs have been known to corrupt the files stored on a hard drive or to replicate themselves

until a computer or network runs out of memory.

The most common way that virus programs move from one computer to another is via "infected" diskettes, from which they copy themselves to the hard drive. To guard against virus programs, you should do the following:

- Periodically run a virus-checking utility on your computer's hard drive
- Always run a virus-checking utility on any diskettes (including commercially sold software) before using them

### **VLSI**

Abbreviation for very-large-scale integration.

### **VLVESA**

Acronym for very low voltage enterprise system architecture.

### **vpp**

Abbreviation for peak-point voltage.

### **VRAM**

Acronym for video random-access memory. Some video adapters use VRAM chips (or a combination of VRAM and DRAM) to improve video performance. VRAM is dual-ported, allowing the video adapter to update the screen and receive new image data at the same time.

### **W**

Abbreviation for watt(s).

### **Wakeup on LAN**

The ability for the power in a client station to be turned on by the network. Remote wake-up enables software upgrading and other management tasks to be performed on users' machines after the work day is over. It also enables remote users to gain access to machines that have been turned off. Intel calls remote wake-up "Wake-on-LAN."

### **WH**

Abbreviation for watt-hour(s).

### **win.ini file**

A start-up file for the Windows operating system. When you start Windows, it consults the **win.ini** file to determine a variety of options for the Windows operating environment. Among other things, the **win.ini** file records what printer(s) and fonts are installed for Windows. The **win.ini** file also usually includes sections that contain optional settings for Windows application programs that are installed on the hard drive.

Running the Control Panel or Windows Setup program may change options in the **win.ini** file. On other occasions, you may need to change or add options to the **win.ini** file manually with a text editor such as Notepad.

### **Windows 95**

An integrated and complete Microsoft Windows operating system that does not require MS-DOS and that provides advanced operating system performance, improved ease of use, enhanced workgroup functionality, and simplified file management and browsing.

### **Windows NT**

High-performance server and workstation operating system software developed by Microsoft that is intended for technical, engineering, and financial applications.

### **write-protected**

Read-only files are said to be *write-protected*. You can write-protect a 3.5-inch diskette by sliding its write-protect tab to the open position or by setting the write-protect feature in the System Setup program.

### **XMM**

Abbreviation for extended memory manager, a utility that allows application programs and operating systems to use extended memory in accordance with the XMS.

### **XMS**

Abbreviation for eXtended Memory Specification.

**ZIF**

Acronym for zero insertion force. Some computers use ZIF sockets and connectors to allow devices such as the microprocessor chip to be installed or removed with no stress applied to the device.

**ZIP**

A 3.5 inch removable disk drive from lomega. Originally, it provided a 100 MB removable cartridges. The drive is bundled with software that can catalog the disks and lock the files for security.

A 250 MB version of the Zip drive also reads and writes the 100 MB Zip cartridges.

