

Definitions

More about computer hardware
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CD-ROM drive	<i>Compact Disc-Read Only Memory drive.</i> A secondary storage device. That is, a device that can read programs and data that have been stored on a CD-ROM disc permanently. (A CD-ROM disc looks just like an audio CD.) One CD-ROM disc can store about 650 megabytes. The speed of a CD-ROM drive is described with such phrases as 1x, 2x, 4x, 6x, 8x, 16x, 32x, and so on. A 1x drive can transfer data on a CD-ROM disc at a rate of 150 KB/s. A 2x drive can transfer data at a rate of 300 KB/s. And so on. Nowadays, CDs are no longer read-only. For instance, there exist CD-Recordable (CD-R) discs that can be written to once. There also exist CD-Rewritable (CD-RW) discs that can be recorded, erased, and reused. But these newer types of discs require newer types of drives that support these features.
DVD-ROM drive	A secondary storage device. That is, a device that can read programs and data that have been stored on a DVD-ROM disc permanently. (A DVD-ROM disc looks just like an audio CD.) One DVD-ROM disc can store about 4.7 gigabytes. Future versions of these discs may store up to 17 gigabytes. The speed of a DVD-ROM drive is described with such phrases as 1x, 2x, 4x, 4.5x, 4.8x, and so on. A 1x drive can transfer data on a DVD-ROM disc at a rate of 1.321 MB/s. A 2x drive can transfer data at a rate of 2.642 MB/s. And so on.
floppy disk drive	Abbreviated FDD. A secondary storage device. That is, a device that can read data from and write data to floppy disks, a type of non-volatile memory. Today's floppy disks can store about 1.4 megabytes and measure 3.5 inches in width. That is, you will often hear people refer to a floppy disk as a 3.5-inch disk.
formatting	A process that prepares either a hard disk or a floppy disk for initial use. Formatting a disk will completely erase the contents. (Other types of disks need to be formatted as well, such as Jaz and Zip disks.)
hard drive	A.k.a. hard disk (abbreviated HD). A.k.a. hard disk drive (abbreviated HDD). A secondary storage device. That is, a type of non-volatile memory used to store programs and data permanently. Hard drives can store hundreds of megabytes to several gigabytes nowadays.
PCMCIA card	<i>Personal Computer Memory Card International Association card.</i> A.k.a. PC cards. An expansion card (about the size of a credit card, but thicker) used in laptops. Modems and network interface cards are perhaps the most common devices that come in the form of PCMCIA cards. Three types of PCMCIA cards exist: Type I, II, and III. Type I cards are the thinnest; Type III cards are the thickest. Type II cards are perhaps the most common. Most laptops come with 2 PCMCIA slots (ports). However, Type III cards are so thick that using one in your laptop often prevents you from using a second card as well, since Type III cards tend to cover up both slots, even though they only use one.

random access	A method of accessing data on a storage device. Devices that support random access allow you to access directly data anywhere on the device. Disks (<i>e.g.</i> , hard disks, floppy disks, CD-ROMs, DVD-ROMs) support random access. That is, a computer can access directly a file on a disk; a disk, unlike a tape, needn't be rewound or advanced.
secondary storage	A non-volatile (permanent) type of memory used to store programs and data. Examples of secondary storage devices include CD-ROM drives, DVD drives, floppy drives, hard drives, Jaz drives, tape drives, and Zip drives. Note that cache, RAM, and registers are <i>not</i> secondary storage devices.
sequential access	A method of accessing data on a storage device. Devices that only support sequential access require that you rewind or advance the storage medium before accessing specific data. Tapes (<i>e.g.</i> , backup tapes) require sequential access. That is, just as you must rewind or fast-forward a cassette tape to find your favorite song, so must you rewind or fast-forward a backup tape to find a particular file.
write-protected	A condition in which a disk's contents cannot be modified or deleted.