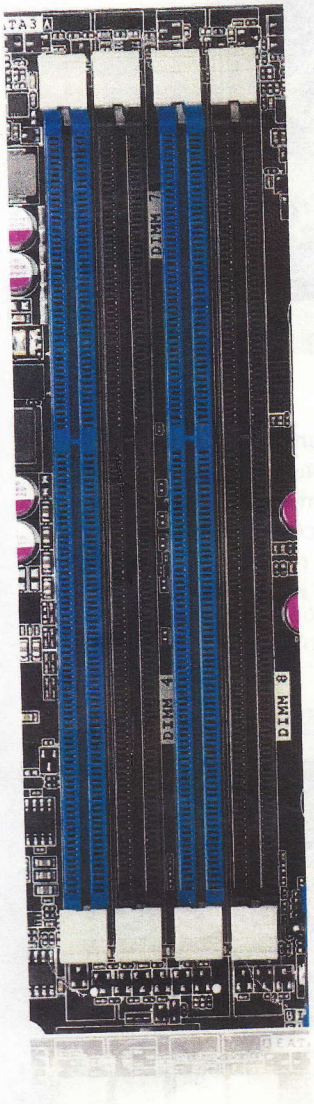
SMART COMPUTING DICTIONARY

Silicon Valley has long been notorious for churning out jargon along with its electronics, and it isn't showing any signs of slowing. With the rise of each new trend, more tech terms find their way into our day-to-day vocabulary. We focused on Desktop PCs in this month's feature package, and here you'll find some common jargon that you may see when shopping for one.



Memory slots typically feature alternating colors to help differentiate the slots.

Expansion slots • This specification covers the number of slots that the desktop PC allows for installing new add-on cards, such as a graphics, sound, or wireless cards. The expansion slot will match up with a type of slot on the motherboard, such as a PCI (Peripheral Controller Interface) or PCI-E (PCI-Express) slot.

Core • Modern processors feature multiple cores, each core capable of independently handling instructions from operating system. In general, the more cores a processor offers, the better it will be able to multitask and perform complex tasks. Currently, you'll find a variety of multi-core variants, including dual core (two), quad core (four), six-core, and eight-core. All of the cores fit into the single processor unit.

Cache • Cache is a processor specification, and it refers to the amount of memory on the processor for storage of recently computed values. Because the data is stored on the processor, the processor will be able to execute the task much more quickly than it could if it had to recompute the data or fetch it from another location.

DDR3 • This abbreviation stands for "Double Data Rate Type Three," and it's the type of memory found in modern desktop PCs. DDR3 is not compatible with previous-generation DDR2 modules, partly because DDR3 memory runs at a lower voltage than DDR2 modules.

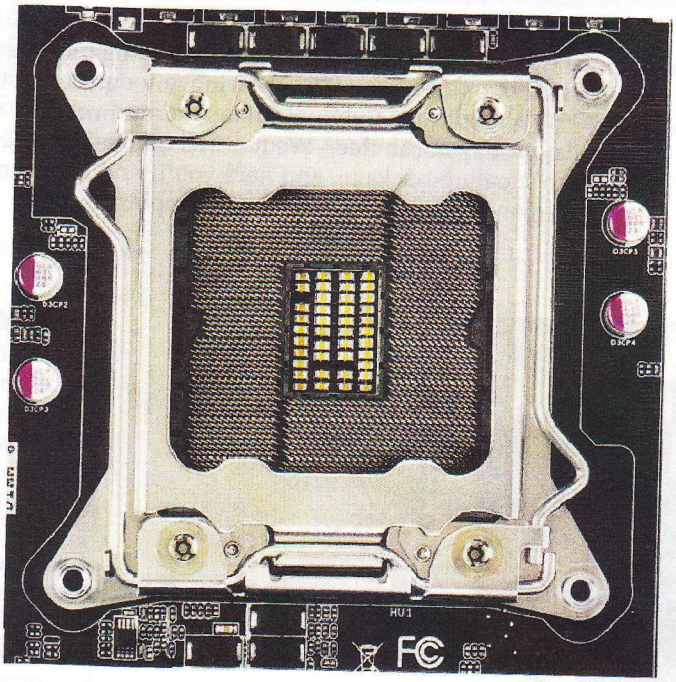
HDD RPM • Hard drive platters must spin when they access data, and HDD RPM is short for hard disk drive rotations per minute. The specification indicates how many times the platter can complete a 360-degree rotation each minute.

Common HDD RPM levels are 10,000, 7,200, and 5,400. A higher RPM level generally allows faster access to data.

Memory Slot • Many desktop computers offer four memory slots in which you can install RAM modules. However, some smaller desktops use motherboards that only provide two slots, while high-end desktop PCs may offer six or eight such slots. A larger number of slots is handy for future upgrades, because it's less likely you'll need to remove/replace existing memory in order to increase capacity.

SSD • Solid State Drive, a type of storage device that are much faster than traditional hard drives. Rather than relying on finding data on a moving platter, an SSD's data is stored on an electronic interface, such as a type of flash memory or random-access memory. The lack of mechanical parts allows for faster access time, reduces the chance of physical shock, and is quieter than a traditional hard drive.

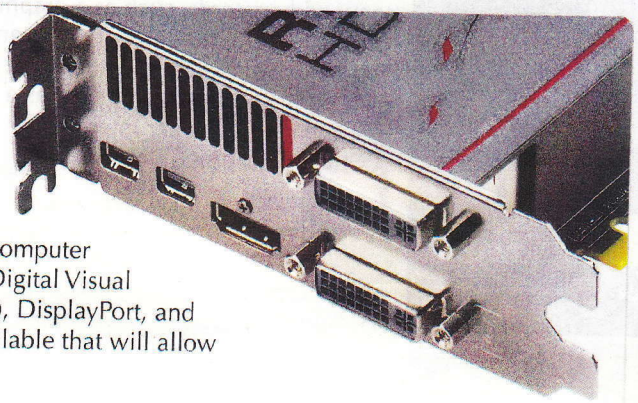
TB • The abbreviation for terabyte, TB is a measure of storage capacity. One TB is equal to 1 trillion bytes (or 1000 gigabytes) of data.



Here's what a CPU socket looks like on a motherboard.

Socket Type • Processors fit into a certain location on the motherboard, called the CPU socket. Processor manufacturers occasionally change the socket type to allow for changes in technology, so the socket may be different from processor to processor and from motherboard to motherboard. If you're looking to replace the processor in a desktop, make sure the new processor matches the CPU socket type on your motherboard.

Typically, you'll find multiple video ports on your PC.



Video ports • These are the ports found on the rear panel of the desktop PC that allow you to connect the computer to a monitor or HDTV. Common options include DVI (Digital Visual Interface), HDMI (High Definition Multimedia Interface), DisplayPort, and VGA (Video Graphics Array). Adapters are typically available that will allow you to convert from one type of port to another.