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# ReadyNetGo ... News

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<http://www.readynetgo.net>

### TIP OF THE MONTH

If you're thinking of upgrading your computer instead of buying new, take your time and do some research first in order to get the best product for your needs. There are many choices in computer components so consider the following before buying:

1. Hardware components are not compatible across the board. Many components are manufactured to work optimally with certain products (sometimes not the top of the line). For instance, a motherboard is very specific in the type of CPU and memory that it can use.
2. The cost of a product is often an indicator of performance and reliability. Many companies manufacture products solely to accommodate low budget buyers. These products, in many cases, will not perform as well or for as long as a product that has been researched and tested at length.

So if you do decide to upgrade your own machine, research, research, research and compare the true costs (potential downtime, maintenance, support etc.) of your desired products.

**Have you backed-up your computer today??**

### PC Interfaces Lead the Way!

In order for your computer to work as a system, a channel (or pathway) must be established that allows your components to communicate with each other. This channel is called an interface and is an integral part of how the computer functions. The interface is identified by the arrangement of pins on the internal or external device (this also determines the type of cable needed).

Two valuable interfaces to remember are related to your system's hard drive: IDE/ATA (Integrated Drive Electronics/AT Attachment) and SCSI (Small Computer System Interface). Both types of drives are attached to the system board (or motherboard) via unique cables and are useful for different reasons:

- 1) **IDE/ATA** is less expensive, more widespread, and performs well in a system with 1-3 components, such as a hard drive and CD-ROM (It can support up to 4 devices). IDE/ATA only supports storage devices (i.e. hard drives, tape drives, CD-ROMs, zip drives) but has many options for each device from budget conscious to performance conscious.
- 2) **SCSI** is more expensive and is in a high-performance category. SCSI performs well with up to 15 devices attached and handles multi-tasking operations smoothly. It also can share documents with non-PC platforms such as Mac or Unix.

Overall, if you are cost conscious and need a basic machine that performs well, go with IDE/ATA. If you want the flexibility of adding multiple devices, are performance minded, and cost is not a primary factor, opt for SCSI. (over)

### WWW (Websites Worth Watching)

1. [www.dealnews.com](http://www.dealnews.com) - Special sales and coupons from retailers and manufacturers
2. [www.dailydeals.com](http://www.dailydeals.com) - same as above
3. [www.zdnet.com](http://www.zdnet.com) - Computer reviews and advice
4. [www.sitepoint.com](http://www.sitepoint.com) - Need help with your website? Look here for how-to articles and helpful suggestions
5. [www.m-w.com](http://www.m-w.com) - Merriam Webster dictionary & thesaurus (link for audible pronunciations is included)

## Additional PC Interfaces

Find past newsletter issues at: [www.readynetgo.net/newsletter/](http://www.readynetgo.net/newsletter/)

**IEEE-1394 (FireWire)** – Newest interface, transfer speeds of 400 Mbps. Used predominantly for sound and video connections (consumer electronics) which require real-time, high speed data transfer. Can connect **up to 63 devices** to a single port by daisy-chaining devices together. Soon to come out will be external hard drives attached via IEEE-1394.

**USB (Universal Serial Bus)** – USB can support **up to 127 external devices** daisy-chained together or attached via USB hubs. With a limited transfer speed of 1.5 MB/s, USB 1.1 is best used for slower devices such as mice, keyboards and scanners. USB 2.0 is rated at 60 MB/s which rivals IEEE-1394. USB ports are equipped to handle all of the latest digital devices such as digital speakers, cameras and joysticks. In addition, these ports are well suited for PC telephony and removable storage devices. USB supports hot swapping (no need to turn off the computer before installing a device) and plug-n-play. USB ports are now standard on all new PCs.

**Serial** – Commonly used for modems, hand held scanners/wands and on older systems, keyboards and mice. Standard on all PCs. Serial cables can **function well up to 50 feet** from the system unit. The most common serial interface standard is RS-232C with a 9 pin male D-shell connector used for an external modem.

**PS/2** – Specific serial interface used for attaching a mouse or keyboard to your computer. Plugs into a 6-pin mini-DIN connector (on an ATX style system board). Standard on all new PCs. Older PCs used a 5-pin DIN connector and did not have a dedicated PS/2 port for mice.

**Parallel port** – standard port on virtually every PC manufactured. **Slowest of all interfaces** – mostly used by printers but tape drives, hard disks and CD-ROM drives can be used with parallel ports as well. Parallel cables function well under 10 feet.

**PCMCIA (or PC Card) slots** – Originally produced for notebook computers. There are 3 types of PC Cards; Type I, Type II and Type III. Type I cards are used for memory expansion while Type II cards are used for all other expansion functions except hard drives which are reserved for Type III cards. Common PC card adapters include fax/modems, SCSI adapters, network adapters and IDE host adapters. Each adapter supports up to 16 devices. Due to the small size and easy configuration, PC Cards have expanded into the PDA or mobile computing world.

**DVI (Digital Visual Interface)** – One of the newest interfaces for digital displays, DVI is not as widespread as analog interfaces but it is expected to become more popular especially now with the advance of LCD monitors. Unlike other digital interfaces, DVI supports 3 connections; digital-only, analog only and digital/analog on a single connection which means you can attach any display to your computer system.

## More Tips on Hard Drive Interfaces

**Important:** When researching hard disk products, keep in mind that the IDE/ATA interface is referred to by many names which include: ATA, ATA/ATAPI, EIDE, ATA-2, Fast ATA, ATA-3, Ultra ATA, and Ultra DMA. The difference between each refers to the speed at which the interface can transfer data.

**IDE/ATA** works well with **non-networked machines doing single tasks** while SCSI (due to its advanced capabilities) is best suited for servers where multiple users need to access multiple devices simultaneously.

If you are looking to upgrade your hard drive and have a fairly old system, you may need to upgrade the **BIOS** (Basic Input Output System) as well. The BIOS, which is the **lowest level interface** in your computer, contains the software that allows your applications to communicate with your hardware.