

Just USB Me! (And Don't Forget the Firewire)

IMAGINE getting into your car one day and being able to drive at 40 times the speed you were able to drive yesterday. You would be able to travel at more than 2,200 miles per hour. That is the performance difference between the old standard and a new standard for USB that will start appearing in computer systems this year.

Are you not sure of what USB is or why you should care? Let's take a closer look.

USB is the acronym for "universal serial bus," an open standard initially developed by a consortium of seven computer and telecom companies to help simplify the interconnection of devices to computers. USB allows for the easy connection of almost every type of peripheral an agent might want to connect to a desktop, laptop, or personal digital assistant (PDA). But it does not stop there.

Those producers who have been benefiting from computers for some time will recall the time they bought something to add to their computer system, only to be highly frustrated by the complexities of installing the device. In the 1980s and early 1990s, almost every peripheral the producer bought required its own interface card to be configured and installed inside the computer. The installation process was difficult, confusing, and sometimes would not work at all, no matter what was tried. With a separate cable required for every peripheral, a computer might end up looking more like an octopus than the sleek, sophisticated machine it was supposed to be. Thankfully, those days are almost behind us, and USB promises to help close that chapter for good.

So what exactly is USB?

Simply put, it is a port into which to plug things, much like a port for the printer, keyboard, or mouse; only USB is smarter, much smarter. By detecting the slight voltage changes caused by connecting or disconnecting a device, USB technology can ask the attached peripherals what they are and then automatically load and unload the appropriate device drivers for them without requiring the producer to intervene or even reboot the system. In the old days it was pretty much one peripheral per port. USB hypothetically allows for the connection of up to 127 devices to one port.

Expansion of a USB port is achieved by adding a USB hub. Devices that do not require a lot of power may run off the port exclusively without the need for a power cable. Apple Computer Corp. was the first to embrace this new technology by converting its keyboard, mouse, and many peripherals exclusively to USB. I wonder what is taking everyone else so long.

Imagine the simplicity of having only one port into which everything plugs, never

having to reset the computer because the producer connected or disconnected a device, and knowing that the computer is aware of the items attached. Aside from the ease of use USB offers, there also is a tremendous cost advantage to its implementation. Devices that no longer rely on the old legacy standards (parallel, serial, or SCSI) are cheaper to produce because they now rely on an inexpensive, consistent interface. Many devices found today are starting to use USB technology. Everything from scanners, digital cameras, printers, and joysticks to speakers and specialized controllers slowly are making the transition. The advent of USB 2.0, also known as High Speed USB, will help. USB 2.0 allows the speed at which information is passed between the devices and the computer to increase almost 40 fold from the current standard of 1.5mbps to over 50mbps while maintaining 100% backward compatibility. That means a USB device the producer buys today will work with a new computer, laptop, or PDA he may buy next year.

Firewire

Another technology term the producer may have heard is "Firewire" or "IEEE-1394." To clarify the difference between the two, Firewire is technology similar to USB in its concept, however, the actual standard and implementation are totally different. Firewire is intended for such high demand peripherals as video and audio streams from camcorders, high-speed data storage, and networking. An easy way to remember the difference is that Firewire is for devices where high performance is a priority and price is not, while USB is for devices where price is a priority and high performance is not. Both Firewire and USB offer great promise for simplifying our lives.

Now that the producer knows what they are, let's take a look at how these related technologies can help.

Going Digital

As most producers who have been reading this column know, I strongly believe in building lasting relationships with my clients. As my client list has grown over the years, however, I must admit that it sometimes is difficult to recall what clients look like. To help with this dilemma, I have decided to add photographs to all of my files. Eventually, I plan to be able to pull the photos up on-line as well. A digital camera was the obvious answer to assist with this. After spending several weeks investigating the pros and cons of several models, I settled on the Sony Mavica MV-CCD200. The most notable features of this camera are its USB port and a three-inch CD/RW drive, which can hold up to 1,000 pictures on a three-inch disc. It also is capable of taking short video movies. Any CD-ROM capable of reading a CD/RW disk can access all of this digital imagery. If the producer has an older CD-ROM drive, the Sony also can record on a CD-R, which then also would be compatible.

USB in the PDA

While USB is not a widely available option in PDAs at this time, look for it to be soon. Most major manufacturers are looking at implementing the technology over the next 24 months. Microsoft also is planning to implement USB support in its upcoming release of Talisker, a new version of the Windows for handhelds operating system found in some PDAs such as the Hewlett Packard Jornada 710/720 series. Windows for handhelds, also known as Windows CE, is the second most popular operating system for PDAs after the Palm OS.

Hypothetically speaking, I can envision a whole interconnected travel case for my PDA. Taking the sales process on the road never will have been easier. By using USB

technology built into my PDA and a companion attaché case, I would be able to pull up real-time data for a prospect, print the required applications pre-filled with the prospect's information on the USB connected printer, get his signature, take his photograph with a USB camera, make copies of the signed applications with my USB scanner, and then take him on a virtual tour of the office with the USB connected video goggles. OK, maybe I am stretching it a little bit, but you get the idea.

Q-Drive

A fantastic innovation I recently discovered is a device put out by Agate' Technologies Inc. (www.agatetech.com) called Q-drive. Q-drive is a USB device that comes in 16, 32, or 64 MB versions and when connected to a computer acts just like a hard drive. This car key-sized device is perfect for carrying data files and images between the home and office. It safely stores the information in non-volatile flash RAM, which means that it does not require any power when not in use. My mind is racing with thoughts of its possible uses.

As technology progresses and becomes more sophisticated, those who envision simplifying it should be applauded. USB is available on most computer systems running Windows 98/2000/ME or the most recent releases of Linux using kernel version 2.4 or greater. Implementing and having the technology world accept the standard right out of the gate is a feat in itself. Having the insurance world accept it will be the producer's reward. USB is a technology every producer should demand. Once he tries it, he never will accept anything less.