



## Firewire / DIN / SCSI and SATA Tutorial

### ■ What is Firewire?

Firewire is a high speed communication interconnect standard defined by IEEE-1394. It was originally developed to connect PCs to other PCs or to peripherals such as digital cameras, camcorders, scanners, etc. An attractive advantage is the devices are hot pluggable (live connection/disconnection without data loss or interruption).

### ■ What is SCSI?

Small Computer System Interface or SCSI is a standard and interface for transferring data between PCs and peripherals such as disk drives. Some SCSI interfaces are also found on peripherals such as scanners and CD drives.

### ■ What is SATA?

SATA or Serial ATA is a storage interface used to connect laptop and desktop computers or external mass storage devices

such as a hard disk drives or optical drives. SATA can support data transfer rates as high as 3.0 Gbps per device (depending on hardware used).

### ■ What is eSATA?

eSATA or external SATA, was developed in 2004 to provide external high speed connectivity to external storage devices. eSATA technology supports hot plugging and a maximum cable length of 2 meters.

### ■ What is Ultra ATA/133?

Ultra ATA is a high speed interface using parallel transmission to connect not only mass storage devices but other peripherals such as DVD-ROM drives, CD-ROM drives tape drives, and floppy drives.

### ■ What is DIN and Mini DIN?

DIN stands for Deutsches Institut für Normung which is the German standards organization that developed this interface.

DIN connectors are available in many configurations from 3 to 9 positions. Also there are several different versions of the 5 pin connector where the angle of the arc swept between the first and last pin can be 180°, 240° or 270°. The most common uses for DIN connectors are analog audio, AT keyboard and mouse connections and MIDI applications.

Mini DIN connectors were also developed by Deutsches Institut für Normung. These connectors are similar to the DIN series but feature a smaller diameter connector and are available in different styles (pin counts and pin orientation). Some popular applications for Mini DIN connectors include S-Video and PS/2 Keyboard and mouse interconnects.

### Common Application Matrix

- SCSI, SATA, eSATA, Ultra ATA/133



Hard Disk Drive

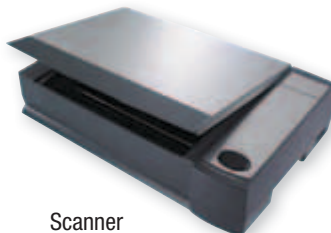


External Storage

- Firewire



Camera

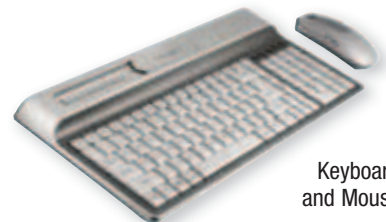


Scanner



Camcorder

- DIN and Mini DIN



Keyboard and Mouse



MIDI



S-Video

