molex® IEEE 1394b-2002
Sockets and
Cable Assemblies

Beta and Bilingual

IEEE 1394b-2002 is the next generation of IEEE 1394 technology for higher speeds, powered cables and other new applications.

IEEE 1394 high performance serial bus is a widely accepted industry standard. It offers high bandwidth, peer-to-peer structure and device self-configuration and ID. The IEEE 1394b-2002 standard takes it to the next level of performance while maintaining backward compatibility.

The new sockets and plugs meet or exceed the IEEE 1394b-2002 specifications.

Using Molex's innovative 9-pin interface, the 1394b system is capable of S3200 signaling over two differential channels. The interface design incorporates a 3-stage contact mating sequence to enable hot plug capabilities and to protect the signal pairs.

Molex's 1394b-2002 is available in two keyed configurations:

■ Beta: Higher speed advantage of connectivity to other beta devices

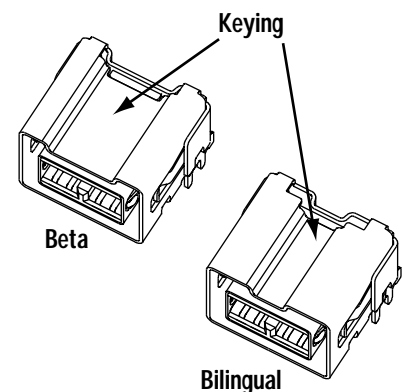■ Bilingual: Offers backward compatibility for legacy devices (1394 four pin or six pin)

FEATURES AND SPECIFICATIONS

Sockets (Beta Series 44605 and 45240, and Bilingual Series 45241 and 44647)

■ Double shielded socket for improved EMI:
  - Inner shield for cable ground
  - Outer shield for chassis ground

■ Rugged leaf contacts rated for a minimum of 1,000 cycles

■ PCB mounting available in SMT or hybrid-SMT with through-hole outer shield

Cable Assemblies (Beta Series 44610, and Bilingual Series 44995, 45261)

■ Rugged spring contacts withstand a minimum of 1,000 cycles

■ Keyed to eliminate mismating

■ Plug shield connects to inner socket shield for reliable cable grounding

■ Over molded cable plug has no exposed metal ground shield which protects users from ground loops

■ Full electrical testing on each assembly for reliability
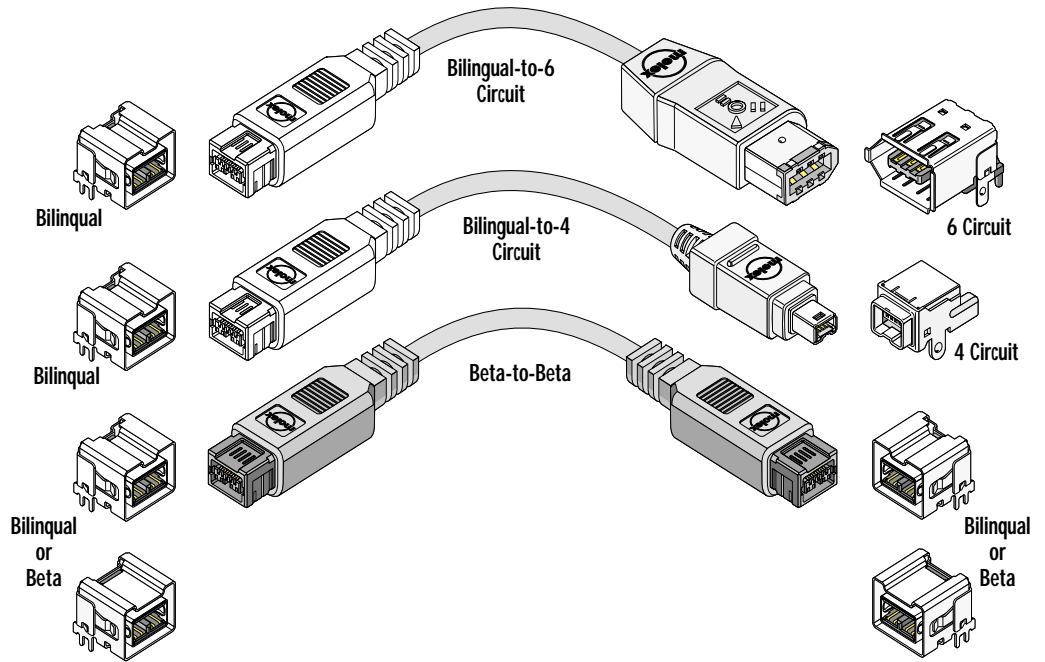

Keying

Beta

Bilingual

Applications

This next generation of IEEE 1394 technology offers higher bandwidth and a wider range of applications including the following:

- Desktop/Laptop Computers
- DV Camcorders
- External Hard Drives
- Protocol Analyzers
- Set-Top Boxes
- Game Players
- DVD/Audio Components
- Automotive
- Printers
- Scanners
- HDTV/DVCR

Bilingual

Bilingual-to-6 Circuit

6 Circuit

Bilinqual

Bilingual-to-4 Circuit

4 Circuit

Bilinqual or Beta

Beta-to-Beta

Bilinqual or Beta

ORDERING INFORMATION

Socket Type	Shield Type	Socket Order No.
Beta	SMT	44605-0001
	SMT with through Hole Outer Shell	45240-0001
Bilingual	SMT	44647-0001
	SMT with Through Hole Outer Shell Offset Pegs	45241-0001
	SMT with Through Hole Outer Shell Inline Pegs	45241-0002

Cable Type	Assembly Length	Assembly Order No.
Beta to Beta	4.50m (14.76')	44610-0001
	2.00m (6.56')	44610-0002
	1.00m (3.28')	44610-0003
Bilingual to 6-Circuit 1394	4.50m (14.76')	44995-0045
	2.00m (6.56')	44995-0020
	1.00m (3.28')	44995-0010
Bilingual to 4-Circuit 1394	4.50m (14.76')	45261-0045
	2.00m (6.56')	45261-0020
	1.00m (3.28')	45261-0010