Applications: Universal™ SCSI cables are designed to exceed all ANSI industry performance standards. With Universal™ SCSI all computer peripherals requiring a SCSI cable interconnect can be satisfied by a single product.

The Universal™ SCSI family of products is well suited for use in a diverse range of markets including:

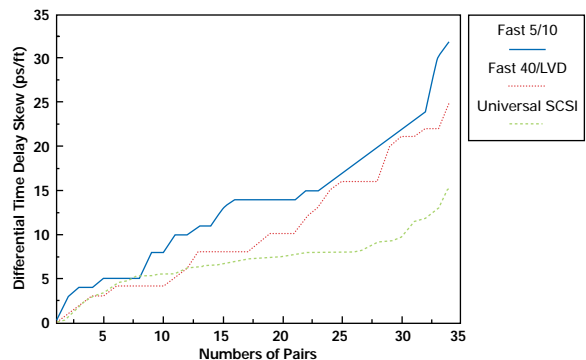|	
CAD/CAM	Video Editing
Publishing	File Servers
Data Warehousing	Internet Servers
Software Development	Print Servers
E-Commerce Systems	Database Systems
Mail Servers	Scientific & Engineering Systems

Universal™ SCSI

Universal™ SCSI cables can be used interchangeably for all SCSI applications including Fast 10, 20, 40 and Fast 80 (Ultra 160).

Features and Benefits

- Backward and forward compatible with all SCSI generations allowing the use of one cable for all applications

- Supports MSE/LVD devices

- Improved impedance match between internal (flat) and external cables provides enhanced signal integrity

- Up to 50% reduced time delay skew from previous SCSI cables

- Low crosstalk - typical external cables are 33% lower than SPI 3 requirements

- Compatible with existing connectors allowing ease of cable assembly

- Supports existing termination techniques providing assembly cost savings

- Available in 30 and 28 AWG external cables as well as 30 and 31 AWG internal cables
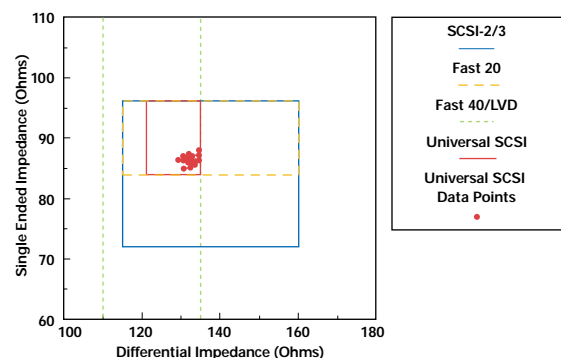
External Universal™ SCSI Cable Skew Performance

Skew comparison between Universal™ SCSI, Fast 5/10, and Fast 40/LVD illustrates significant improvement in skew performance

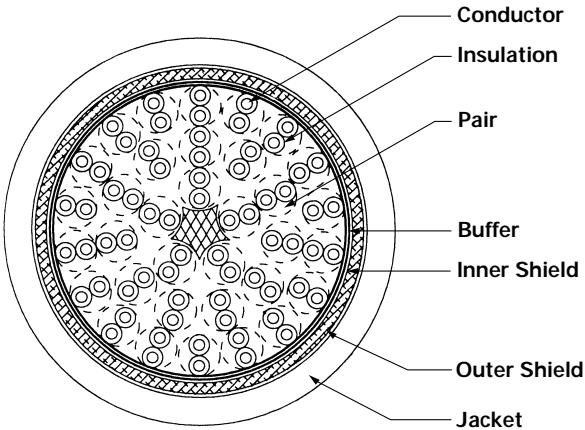## External Universal™ SCSI Cable Differential Impedance

Universal SCSI pair impedance data points illustrate the ability to meet the requirements of all SCSI generations

MADISON Cable Corporation
engineered cable solutions

Madison's Universal™ SCSI products eliminate the compatibility problems between generations of SCSI, forward and backward. These cables are designed and manufactured using proprietary processes that deliver the performance characteristics required by Fast 5, Fast 10, Fast 20, Fast 40 and Fast 80 and can support multimode MSE/LVD devices.

Revolutionary impedance control technology allows a single cable to meet requirements of all SCSI generations. Improved impedance match between internal (flat) and external cables delivers better signal integrity for transitions between internal and external interconnects.

Universal™ SCSI cables have the same diameter, bend radius, conductor size and insulation thickness as Fast 20 cables. Cable assembly manufacturers can use existing termination procedures – eliminating the need for additional training and tooling. In addition, Universal™ SCSI provides the ability to stock only one cable to handle all SCSI needs.

- Conductor
- Insulation
- Pair
- Buffer
- Inner Shield
- Outer Shield
- Jacket

Universal™ SCSI cables comply with the proposed 3% maximum peak-sum, near-end crosstalk requirement. Round shielded external cables typically have 1.9% while flat and round unshielded internal cables typically have 2.7%.

Time delay skew performance values for Universal™ SCSI are typically 18 ps/ft, up to a 50% improvement (reduction) over previous SCSI cables.

External Universal™ SCSI Cables (34 Pair)

Conductor Size	Specification	Part Number	Jacket Diameter	Attenuation @ 200 MHz	Minimum Bend Radius
30 AWG Solid	14780	68KBK00046*	0.370	0.50 dB/m Max	2.0
30 AWG Stranded	14779	68KBK00045*	0.385	0.59 dB/m Max	1.4
28 AWG Solid	14748	68KDK00048*	0.445	0.34 dB/m Max	2.6
28 AWG Stranded	14778	68KDK00049*	0.480	0.40 dB/m Max	1.8

* Black Jacket - consult factory for other jacket color options.

Internal Universal™ SCSI Cables 68 Conductor (0.025" Centerline Species)

Conductor Size	Specification	Part Number	Width	Span
31 AWG Stranded	15400	68E3Y00001P	1.700	1.675
30 AWG Solid	15398	68EBY00005P	1.700	1.675

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