34 PAIR 30 AWG NON-HALOGEN UNIVERSAL SCSI CABLE

**CONSTRUCTION**

- **Pair Dimensions:**
  - Conductor: 30 AWG 7/38 Tin Plated Copper, 0.015 inch Diameter
  - Insulation: 0.007 inches of Foam Polyethylene, 0.025 inch Diameter
  - Pair: 2 Insulated Conductors Twisted Together

- **Final Assembly:**
  - Core: Filler
  - Layer 1: 5 Pairs (#1-5) Cabled Around Core
  - Layer 2: 11 Pairs (#6-16) Cabled Around Layer 1
  - Layer 3: 18 Pairs (#17-34) Cabled Around Layer 2
  - Buffer: Foam Polyethylene Tape
  - Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap
  - Outer Shield: 38 AWG Tin Plated Copper Braided, 85% Coverage
  - Jacket: 0.025 inches of Non-Halogen Thermoplastic, Color - Black
  - Diameter: 0.385 ± 0.010 inches
  - Print Legend: MADISON CABLE CORP. NON-HALOGEN Universal™ SCSI™

**COLOR CODE**

<table>
<thead>
<tr>
<th>Pair #</th>
<th>Cond #1 - Cond #4</th>
<th>Cond #5 - Cond #8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White/Tan-Tan/White</td>
<td>Brown/Pink-Pink/Brown</td>
</tr>
<tr>
<td>2</td>
<td>White/Brown-Brown/White</td>
<td>Brown/Orange-Orange/Brown</td>
</tr>
<tr>
<td>3</td>
<td>White/Pink-Pink/White</td>
<td>Brown/Yellow-Yellow/Brown</td>
</tr>
<tr>
<td>4</td>
<td>White/Orange-Orange/White</td>
<td>Brown/Green-Green/Brown</td>
</tr>
<tr>
<td>5</td>
<td>White/Yellow-Yellow/White</td>
<td>Brown/Blue-Blue/Brown</td>
</tr>
<tr>
<td>6</td>
<td>White/Green-Green/White</td>
<td>Brown/Violet-Violet/Brown</td>
</tr>
<tr>
<td>7</td>
<td>White/Blue-Blue/Blue</td>
<td>Brown/Gray-Gray/Brown</td>
</tr>
<tr>
<td>8</td>
<td>White/Violet-Violet/White</td>
<td>Pink/Orange-Orange/Pink</td>
</tr>
<tr>
<td>9</td>
<td>White/Gray-Gray/White</td>
<td>Pink/Yellow-Yellow/Pink</td>
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<tr>
<td>10</td>
<td>Tan/Brown-Brown/Tan</td>
<td>Pink/Green-Green/Pink</td>
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<tr>
<td>11</td>
<td>Tan/Pink-Pink/Tan</td>
<td>Pink/Blue-Blue/Pink</td>
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**ELECTRICAL CHARACTERISTICS**

- Impedance:
  - Differential: 125 ± 10 Ohms @ TDK
  - Single-Ended*: 90 ± 6 Ohms @ TDR

- Capacitance:
  - Mutual: 14 pF/ft Maximum @ 100 kHz and 1 MHz
  - Single-Ended: 20 pF/ft Maximum @ 100 kHz and 1 MHz

- Velocity of Propagation: 71% Nominal

- Time Delay: 1.50 ns/ft Maximum

- Time Delay Skew (Between Pairs): 0.025 ns/ft Maximum

- Attenuation:
  - Differential: 0.022 dB/ft Nominal @ 5 MHz
  - Single-Ended: 0.031 dB/ft Nominal @ 10 MHz
  - 0.044 dB/ft Nominal @ 20 MHz
  - 0.063 dB/ft Nominal @ 40 MHz
  - 0.090 dB/ft Nominal @ 80 MHz
  - 0.129 dB/ft Nominal @ 160 MHz
  - 0.180 dB/ft Nominal @ 200 MHz

- Near-End Crosstalk: 3% Maximum (Sum of REQ/ACK to all pairs at the outer layer plus REQ/ACK, Tested on a 12 meter sample)

- Dielectric Withstand: 500 Volts DC for 3 sec.

- Conductor DC Resistance: 0.10 Ohm/ft Nominal @ 20°C

**INDUSTRY STANDARDS**

- **SCSI Parallel Interconnect-3 (SPI-3):** Meets the requirements for Fast 10, Fast 20, Fast 40 and Fast 80 SCSI. Can be used for Differential (HVD & LVD) and Single-Ended Systems, as applicable.

- **SCSI Parallel Interconnect-4 (SPI-4) Draft:** Meets the requirements for Fast 10, Fast 20, Fast 40, Fast 80 and Fast 160 (Ultra 320) SCSI. Both Differential (HVD/LVD) and Single-Ended Systems are Applicable.

**PHYSICAL CHARACTERISTICS**

- Storage Temperature: -40°C to +80°C

**REVISION HISTORY**

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>06/23/01</td>
<td>Initial release</td>
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<tr>
<td>2</td>
<td>08/27/01</td>
<td>Added P/N. Legend, Temperature Rating at al.</td>
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