3M™ Mini D Ribbon (MDR) Cable Assembly
.050" High Speed Video Data Transmission System, 36 Position 14X36-SZ6B-XXX-0HC

- Supports LVDS Channel Link™ signaling
- 10 shielded pairs (100 ohm) +2 drains for high bandwidth applications
- 1 USB pair & 4 singles
- High density 36 position MDR with rugged ribbon type contact
- Metal junction shell with Quick Release Latches
- EMI over-molded junction shell with rugged thumbscrew retention
- See Regulatory Information Appendix (RIA) for chemical compliance information

Physical

Connector Contact Plating
- Wiping Area: 30 μ (0.76 μm) Min. Gold
- Thumbscrew Shell Color: Beige
- Thumbscrew Shell Material: Acrylonitrile Butadiene Styrene (ABS)
- Metal shell plating: Nickel
- Metal shell material: Aluminum, .050" [1.27 mm] Thick

Cable
- Color: Beige
- Jacket Material: Polyvinyl Chloride (PVC)
- Flammability: AWM VW-1

Electrical

- Voltage Rating: 30 V
- Current Rating: 1 A
- Insulation Resistance: > 1 × 10^8 Ω at @100 V_{DC}
- Withstanding Voltage: 350 V_{RMS} for 1 minute
- Individually Shielded Twisted Pairs
- Characteristic Impedance: 100 ± 10Ω
- Conductor Size: 28 AWG Stranded
- Propagation Velocity: 1.25 ns/ft [4.1 ns/m ]

Environmental

- Temperature Rating: -20°C to +75°C

UL File No.: E86982

Channel Link is a trademark of National Semiconductor.

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373
3M™ Mini D Ribbon (MDR) Cable Assembly

.050” High Speed Video Data Transmission System, 36 Position 14X36-SZ6B-XXX-0HC

Metal Latching Shell

36 Position High Density Mini D Ribbon (MDR) Male Plug

Cable (Shielded Twisted Pairs)

2X Squeeze Release Latches

32.0 [1.3]

LENGTH

32.0 [1.3]

36 Position High Density Mini D Ribbon (MDR) Male Plug

2X Squeeze Release Latches

MDR 36 Position Plug Both Ends

39.8 [1.6]

12.7 [0.5]

Tolerance Unless Noted

<table>
<thead>
<tr>
<th>mm</th>
<th>Inch</th>
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<tbody>
<tr>
<td>±.1</td>
<td>±.00</td>
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( ) Dimensions for Reference only

Assembly Length Tolerance

Cable Length:
0.5 to 1.5 meters -0 +.05 meters
2 to 10 meters -0 +3% of length

Generic End Detail
MDR 36 Position Plug (Both Ends)

Ordering Information

14X36-SZ6B-XXX-0HC (RIA E1 & C1 apply)

Backshell Options:
T = Over-molded 4-40 thumbscrew
1 = Metal Latching Shell

Length:
100 = 1.0 meters
200 = 2.0 meters
500 = 5.0 meters

TS-2102-B
Sheet 2 of 4

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Interconnect Solutions
http://www.3M.com/interconnects/
3M™ Mini D Ribbon (MDR) Cable Assembly
.050" High Speed Video Data Transmission System, 36 Position 14X36-SZ6B-XXX-0HC

Over-Molded #4-40 Thumbscrew

Cable (See pinout for cable construction)

2X Thumbscrew #4-40 thread

LENGTH

45.7 [1.8]

(See ordering information)

Generic End Detail
MDR 36 Position Plug
(Both Ends)

Note: 1. Use 3341-31 jacksocket for mounting receptacle to panel.

Assembly Length Tolerance
Cable Length:
0.5 to 1.5 meters –0 + .05 meters
2 to 10 meters –0 +3% of length

3M is a trademark of 3M Company.
For technical, sales or ordering information call 800-225-5373

3M Interconnect Solutions
http://www.3M.com/interconnects/
### 3M™ Mini D Ribbon (MDR) Cable Assembly

.050” High Speed Video Data Transmission System, 36 Position  
14X36-SZ6B-XXX-0HC

#### MDR 36 Position Pinout (F36-02)

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<th>Pair</th>
<th>Signal</th>
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<tr>
<td>1</td>
<td>A0-</td>
<td>1</td>
<td>USB Pwr</td>
<td>W6</td>
<td>13</td>
<td>A0-</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>A0+</td>
<td>19</td>
<td>Shld Gnd</td>
<td>Drain</td>
<td>31</td>
<td>A0+</td>
<td>19</td>
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<tr>
<td>2</td>
<td>A1-</td>
<td>2</td>
<td>A4-</td>
<td>6</td>
<td>14</td>
<td>A1-</td>
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<tr>
<td>2</td>
<td>A1+</td>
<td>20</td>
<td>A4+</td>
<td>6</td>
<td>32</td>
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<td>7</td>
<td>15</td>
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</tr>
<tr>
<td>3</td>
<td>A2+</td>
<td>21</td>
<td>A5+</td>
<td>7</td>
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<td>USB-</td>
<td>30</td>
<td>SP2</td>
<td>USB-</td>
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</table>

**Notes:**
1. All pairs are individually shielded with aluminum foil.
2. Pair shields are wrapped Aluminium out and in contact with six internal drains (logic ground).
3. Outer braid and foil (chassis ground) is isolated from inner drains (logic ground).
Regulatory Information Appendix
3M Electronic Solutions Division/Interconnect

EUROPE

Appendix E1: European Union RoHS


This product is RoHS Compliant 2005/95/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E2: European Union RoHS


This product contains lead in the compliant pin area in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/747/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E3: European Union RoHS


This product contains lead in the solder tail area in excess of the maximum concentration value allowed.

Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix E4: European Union RoHS


This product contains decaBDE in the insulating material in excess of the maximum concentration value allowed but is compliant by exemption under EU Commission Decision 2005/717/EC.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.
Appendix E5: European Union RoHS


This product contains lead in excess of the maximum concentration value allowed but is compliant by exemption under Item 6 of the Annex to the Directive.

“RoHS Compliant 2005/95/EC” means that the product or part (“Product”) does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

CHINA

Appendix C1: China RoHS

Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products. This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the Warranty stated below.

Appendix C2: China RoHS

Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products. This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part does contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

The numerical reference in the symbol above should not be construed as a representation regarding the product’s life or an extension of a product warranty. The product warranty is stated below. In the event any product is proven not to conform with 3M’s Regulatory Information Appendix, then 3M’s entire liability and Buyer’s exclusive remedy will be in accordance with the product Warranty stated below.
Appendix C3: China RoHS

Electronic Industry Standard of the People’s Republic of China, SJ/T11363-2006, Requirements for Concentration Limits for Certain Hazardous Substances in Electronic Information Products.

This symbol, per Marking for the Control of Pollution Caused by Electronic Information Products, SJ/T11364-2006, means that the product or part does contain a substance, as detailed in the chart below, in excess of the following maximum concentration values in any homogeneous material: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M’s best knowledge and belief based upon information provided by third party suppliers to 3M.

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<table>
<thead>
<tr>
<th>部件名称 (Part or Component Name)</th>
<th>有毒有害物质或元素 (Hazardous Substances or Elements)</th>
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<tr>
<td>合金 (Metal alloy)</td>
<td>铅 (Pb)</td>
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</table>
| 勾选 (☑️) 表示该有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006 标准规定的限量要求以下。(Indicates that this hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.)
| XX: 表示该有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006 标准规定的限量要求。(Indicates that this hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.) |

Important Notice

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Warranty; Limited Remedy; Limited Liability.

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