

3M™ Mini D Ribbon (MDR) Cable Assembly

.050" High Speed Digital Data Transmission System, 50 Position

14150-EZBB-XXX-0LC



- Supports LVDS Channel Link™ signaling
- Ideal for high speed switch backplanes
- 20 shielded pairs (100 ohm) +6 grounds for high bandwidth applications
- High density 50 position MDR with rugged ribbon type contact
- Quick release latches
- RoHS* compliant

Date Modified: January 25, 2007

TS-0959-08
Sheet 1 of 3

Physical

Connector Contact Plating

Wiping Area: 30μ" [0.76μm] Min. Gold

Shell

Color: Beige

Material: Acrylonitrile Butadiene Styrene (ABS)

Cable

Color: Beige

Jacket Material: Polyvinyl Chloride (PVC)

Flammability: AWM VW-1

Electrical

Voltage Rating: 30 V

Current Rating: 1 A

Insulation Resistance: $> 1 \times 10^8 \Omega$ at @100 V_{DC}

Withstanding Voltage: 350 V_{RMS} for 1 minute

Individually Shielded Twisted Pairs

Characteristic Impedance: $100 \pm 10 \Omega$

Conductor Size: 28 AWG Stranded

Propagation Delay: 1.25 ns/ft [4.1 ns/m]

Environmental

Temperature Rating: -20°C to +75°C

**RoHS compliant" 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, unless the substance is in an application that is exempt under RoHS: (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 knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E86982

ChannelLink is a trademark of National Semiconductor Corporation.



Interconnect Solutions

<http://www.3M.com/interconnects/>

3M is a trademark of 3M Company.

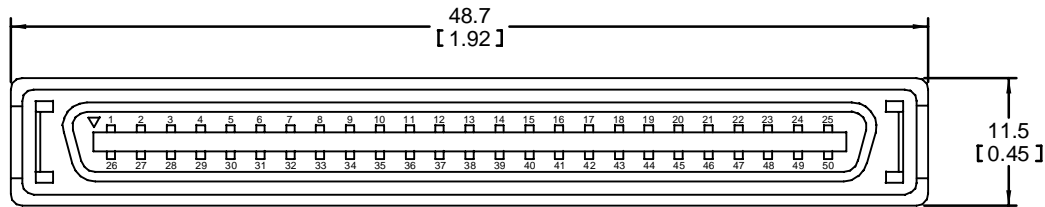
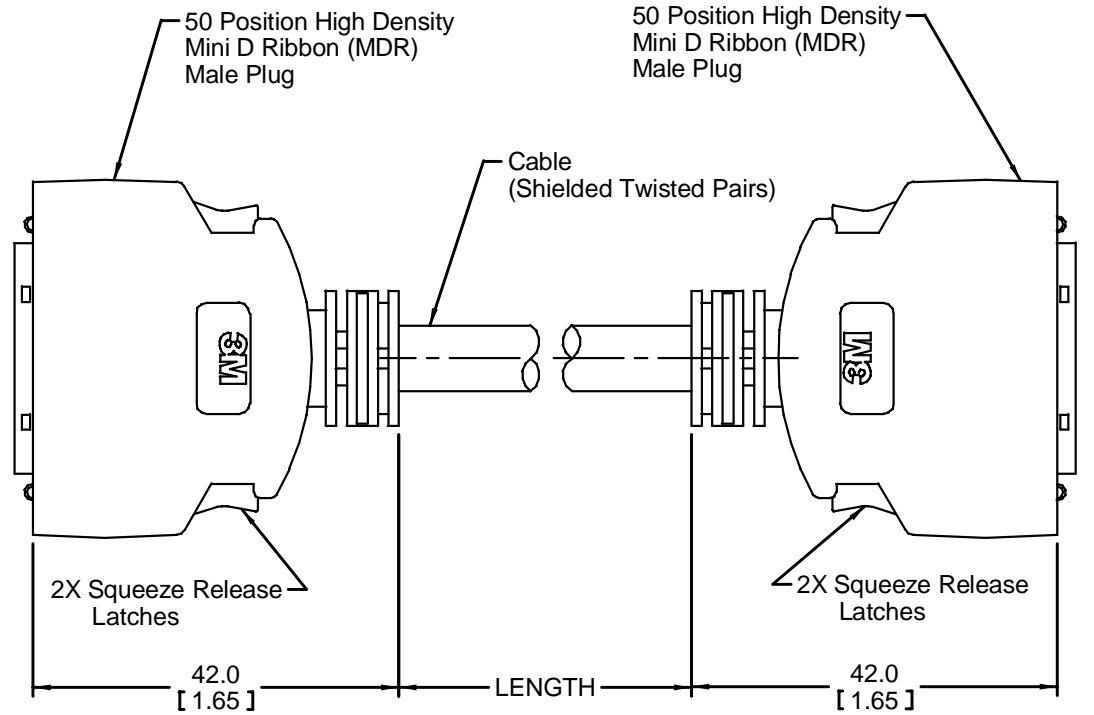
For technical, sales or ordering information call

800-225-5373

3M™ Mini D Ribbon (MDR) Cable Assembly

.050" High Speed Digital Data Transmission System, 50 Position

14150-EZBB-XXX-0LC



MDR 50 Position Plug
Both Ends

mm [inch]		
Tolerance Unless Noted		
	0.0	0.00
mm	±.1	±.01

[] 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

Ordering Information

14150-EZBB-XXX-0LC

Length:	
050 = 0.5 meter	400 = 4.0 meters
100 = 1.0 meter	500 = 5.0 meters
150 = 1.5 meters	600 = 6.0 meters
200 = 2.0 meters	700 = 7.0 meters
250 = 2.5 meters	800 = 8.0 meters
300 = 3.0 meters	900 = 9.0 meters
350 = 3.5 meters	A00 = 10.0 meters

TS-0959-08
Sheet 2 of 3

3M™ Mini D Ribbon (MDR) Cable Assembly

.050" High Speed Digital Data Transmission System, 50 Position

14150-EZBB-XXX-0LC

MDR 50 Position, Pinout (C50-1)

P1						P2					
Pair	Signal	Position	Position	Signal	Pair	Pair	Signal	Position	Position	Signal	Pair
1	A0-	1	26	drain 1		20	B0-	1	26	drain 6	
1	A0+	2	27	A1-	2	20	B0+	2	27	B1-	19
3	A2-	3	28	A1+	2	18	B2-	3	28	B1+	19
3	A2+	4	29	AClk-	4	18	B2+	4	29	BClk-	17
	drain 2	5	30	AClk+	4		drain 5	5	30	BClk+	17
5	A3-	6	31	A4-	6	16	B3-	6	31	B4-	15
5	A3+	7	32	A4+	6	16	B3+	7	32	B4+	15
7	A5-	8	33	A6-	8	14	B5-	8	33	B6-	13
7	A5+	9	34	A6+	8	14	B5+	9	34	B6+	13
9	A7-	10	35	drain 3		12	B7-	10	35	drain 4	
9	A7+	11	36	N/C		12	B7+	11	36	N/C	
	N/C	12	37	ICMB+	10		N/C	12	37	ICMB+	10
11	Link A	13	38	ICMB-	10	11	Link B	13	38	ICMB-	10
11	Link B	14	39	N/C		11	Link A	14	39	N/C	
	N/C	15	40	B7+	12		N/C	15	40	A7+	9
	drain 4	16	41	B7-	12		drain 3	16	41	A7-	9
13	B6+	17	42	B5+	14	8	A6+	17	42	A5+	7
13	B6-	18	43	B5-	14	8	A6-	18	43	A5-	7
15	B4+	19	44	B3+	16	6	A4+	19	44	A3+	5
15	B4-	20	45	B3-	16	6	A4-	20	45	A3-	5
17	BClk+	21	46	drain 5		4	AClk+	21	46	drain 2	
17	BClk-	22	47	B2+	18	4	AClk-	22	47	A2+	3
19	B1+	23	48	B2-	18	2	A1+	23	48	A2-	3
19	B1-	24	49	B0+	20	2	A1-	24	49	A0+	1
	drain 6	25	50	B0-	20		drain 1	25	50	A0-	1

Notes:

1. All pairs are individually shielded with aluminum foil.
2. Pair shields are wrapped Aluminum out and in contact with six internal drains (logic ground).
3. Outer braid and foil (chassis ground) is isolated from inner drains (logic ground).



Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.



3M Electronics

6801 River Place Blvd.
Austin, TX 78726-9000
800/225-5373
www.3M.com/electronics

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



Minimum 10%
Post-Consumer Fiber

Printed in USA.

© 3M 2007