2 PAIR 28 AWG INFINIBAND TURBOTWINTM CABLE

PROPRIETARY DESIGN

THIS CONFIDENTIAL DOCUMENT HAS BEEN RELEASED WITH THE UNDERSTANDING THAT IT SHALL NOT BE SENT TO ANYONE OTHER THAN THE ORIGINAL INTENDED RECIPIENT WITHOUT PRIOR AUTHORIZATION FROM MADISON CABLE

Pair Component Pair Identification Shield. Polarity Mark Pair Insulation Drain Wire Jacket Final Assembly Pair Component Buffer

CONSTRUCTION

Inner Shield

Outer Shield

Jacket

Pair Component

Conductor: 28 AWG Solid Silver Plated Copper, 0.0126 Inch Diameter

Insulation: 0.012 Inches of Foam Polyolefin, 0.037 Inch Diameter, Color – Natural

Pair: 2 Singles Laid Flat and Parallel

Pair Drain Wire: 30 AWG Solid Silver Plated Copper, 0.010 Inch Diameter

Pair Shield: Aluminum/Polyester Tape, Aluminum Side Facing In, Color - See Color

Code Table Pair Jacket: Polyester Tape

Pair Diameter: 0.042 x 0.079 Inches Nominal

Pair Identification: Pairs sequentially numbered and polarity marked on entire length

of pair.

Final Assembly

Core: 2 Pairs (#1-2) Cabled Together

Buffer: Foam Polyolefin Tape

Inner Shield: Aluminum/Polyester Tape, Aluminum Side Facing Out, 25% Overlap

Outer Shield: 38 AWG Tin Plated Copper Braid, 85% Coverage

Jacket: 0.025 Inches of Flexible PVC, Color - Black

Diameter: 0.185 Inches Nominal

Print Legend (White Ink): "MADISON CABLE (UL) TYPE CL2 75°C 28 AWG

TurboTwinTM RoHS COMPLIANT {Date Code}¹"

Date code is a 4-digit code with the first 2 digits identifying the calendar week and the last 2 digits identifying the calendar year of manufacture. Example - 0206 for cable manufactured the second week of 2006.

COLOR CODE					
Pair # Pair Shield Color					
1	Green				
2	Yellow				

ELECTRICAL CHARACTERISTICS

Differential Impedance: 100 ± 5 Ohms @ TDR

Mutual Capacitance: 14 pF/ft Nominal Time Delay: 1.35 ns/ft Nominal

Time Delay Skew (Within Pair): 120 ps/7 m Maximum Time Delay Skew (Between Pairs): 500 ps/7 m Maximum

Attenuation: 10 dB/7 m Maximum @ 1.25 GHz

Near-End/Far-End Crosstalk²: 1% Maximum, Pulse Method, 100 ps rise-time

(20-80%)

Eye Pattern:

Input: 1000 mVp-p, 2.5 Gbps, 100 ps rise time (20-80%), CJTPAT

Mask: 316 mVp-p x 300 ps

Length: 5 meters (longer lengths achievable when equalized)

Conductor DC Resistance: 0.066 Ohms/ft Nominal @ 20°C

² Measured as maximum deviation from zero to peak differential (Single Pulse method)

SAFETY CERTIFICATION

UL Listing: Type CL2 as specified in Article 725 of the National Electrical Code RoHS Compliance: In Accordance to European Directive 2002/95/EC, Issue 13.2.2003

			REVISION HISTORY					
Tyree	Electropies MANION Cable	1	06/10/05	EP	Initial Release			
Tyco	Electronics	2	10/26/05	EP	Added P/N			
125 Goddard Memorial Drive • Worcester, MA 01603 USA		3	11/30/05	EP	Revised Legend			
Tel: (508) 752-2884 Toll-Free: (877) MADISON Fax: (508) 752-4230		4	05/05/10	DC	Revised legend and added date code			
Spec Number:	101-2458							
Part Number:	04KD2LF003							
Customer:		Prepared By:		D.M.	Card		Page	
Customer #:	mer #:		ewed By:	T. Gr	zvsiewicz	B. Morissette	1 of 1	

Users should evaluate the suitability of this product for their application. Contact factory for latest revision of specification. Tyco Electronics reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to the Buyer.