

Octax®-Adapter Octax to Quadrax Adapter Assembly

ULTRA HIGH-SPEED INTERCONNECT SOLUTIONS





Many systems already exist that use Quadrax at the board level. When high-speed data was new to the aerospace marketplace, Quadrax gained spec position on many systems at the board level and became the industry standard. The Octax® Adapter bridges the technology between Quadrax and the Octax 10 Gbps Ethernet connector system utilizing an over-molded strain relief.

The Octax connector:

- » Uses innovative inserts to isolate each twisted pair and contact
- » Cable pair twist is maintained extremely close to the contact termination to minimize characteristic impedance mismatch
- » Virtually eliminates near-end crosstalk by having inserts designed to serve as isolated cells
- » Can deliver 10x the data transmission speed (10 Gbps signal or higher) and 2x the density compared to Quadrax-type solutions



FEATURES & BENEFITS

Features:	Benefits:
CarlisleIT's high-speed backbone allows longer runs, with more disconnects and improved data rates.	Building in system headroom
High-speed backbone	Longer runs More disconnects Improved data rates Building in system headroom Only requires a board-level change to deliver 10g System flexibility for future upgrades Field-repairable (Simply change the card to interface to Octax-Solo and extend the 10g backbone to the box. No removal/replacement of the installed backbone required.)
Octax technology in the disconnects	Field-terminable & reworkable interconnections Flexibility of disconnect locations Fully-customizable adapter design (Cable type & Quadrax type)





Cable ID: OCTAX-ADP-10

Date / Time: 06/28/2018 04:41:51 PM Headroom 6.8 dB (NEXT 36-45) Test Limit: TIA Cat 6A Channel

Cable Type: Cat 6 U/UTP

NVP: 68.2%

Operator: -Software Version: 2.7800 Limits Version: 1.9500 Calibration Date:

Main (Tester): 09/24/2009 Remote (Tester): 09/24/2009 **Test Summary: PASS**

Model: DTX-1800 Main S/N: 1085047 Remote S/N: 1085048 Main Adapter: DTX-CHA001 Remote Adapter: DTX-CHA001

Length (ft), Limit 328	[Pair 78]	93
Prop. Delay (ns), Limit 555	[Pair 45]	149
Delay Skew (ns), Limit 50	[Pair 45]	10
Resistance (ohms)	[Pair 12]	5.6
Insertion Loss Margin (dB)	[Pair 45]	33.9
Frequency (MHz)	[Pair 45]	493.0
Limit (dB)	[Pair 45]	48.9

	Worst Case Margin		Worst (Worst Case Value	
PASS	MAIN	SR	MAIN	SR	
Worst Pair	36-45	12-78	36-45	36-78	
NEXT (dB)	6.8	7.3	6.8	12.5	
Freq. (MHz)	395.0	68.8	395.0	475.0	
Limit (dB)	28.9	42.7	28.9	26.7	
Worst Pair	36	78	45	36	
PS NEXT (dB) 7.8	9.4	9.3	13.9	
Freq. (MHz)	392.0	68.8	500.0	475.0	
Limit (dB)	26.0	39.9	23.2	23.8	

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PASS	MAIN	SR	MAIN	SR
Worst Pair	36-45	36-45	36-45	36-45
ACR-F (dB)	13.8	13.8	13.8	16.0
Freq. (MHz)	348.0	359.0	348.0	493.0
Limit (dB)	12.4	12.2	12.4	9.4
Worst Pair	45	45	45	36
PS ACR-F (dB)	14.8	15.2	17.2	15.3
Freq. (MHz)	348.0	359.0	476.0	369.0
Limit (dB)	9.4	9.2	6.7	8.9

N/A	MAIN	SR	MAIN	SR
Worst Pair	12-78	12-36	12-45	36-45
ACR-N (dB)	17.5	16.7	44.4	48.1
Freq. (MHz)	3.1	4.1	500.0	500.0
Limit (dB)	61.1	58.6	-23.2	-23.2
Worst Pair	36	12	45	36
PS ACR-N (dB)	18.1	16.9	43.7	48.8
Freq. (MHz)	10.0	4.1	500.0	475.0
Limit (dB)	47.5	56.1	-26.1	-24.1

PASS	MAIN	SR	MAIN	SR
Worst Pair	36	45	36	78
RL (dB)	2.3	7.0	2.3	9.3
Freq. (MHz)	480.0	51.5	480.0	342.0
Limit (dB)	6.0	14.9	6.0	6.7

Compliant Network Standards: 10BASE-T 100BASE-TX 100BASE-TX 100BASE-T ATM-51 ATM-155

TR-4

 100BASE-TX
 100BASE-T4

 10GBASE-T
 ATM-25

 ATM-155
 100VG-AnyLan

 TR-16 Active
 TR-16 Passive

93 ft Wire Map (T568B) Insertion Loss (dB) 60 **PASS** 50 40 30 20 10 250 500 750 MHz NEXT (dB) NEXT @ Remote (dB) 100 100 80 80 60 60 40 40 20 20 250 750 250 500 MHz MHz ACR-F (dB) ACR-F @ Remote (dB) 100 80 80 60 60 40 40 20 20 500 250 500 MHz MHz ACR-N (dB) ACR-N @ Remote (dB) 80 40 0 0 -40 ° 750 500 750 250 250 MHz RL (dB) RL @ Remote (dB) 100 100 80 80 60 60 40 40 20 20 250 MHz MHz



OCTAX-ADP-10_7-23-18.flw



LinkWare™ PC Version 9.9



See CarlisleIT's line of Connectors & Adapters products at: CarlisleIT.com/products/connectors-accessories/

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