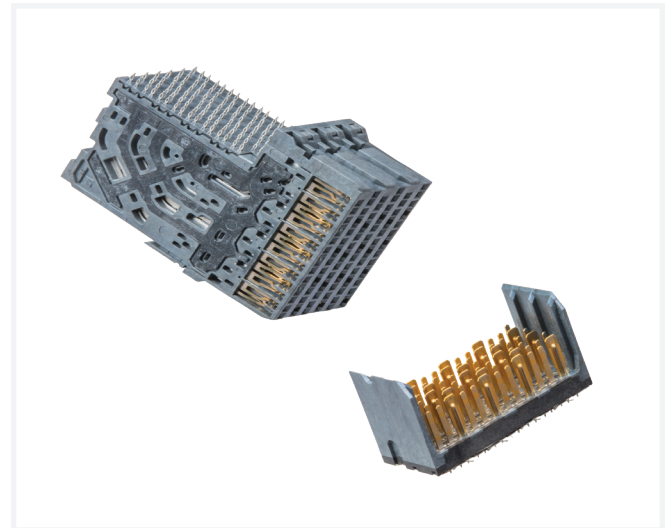


X2 Backplane Connector

DESIGNED TO ACHIEVE 56G DATA RATE REQUIREMENTS

While maintaining the same mating interfaces, this connector design provides designers with readily available 85Ω and 100Ω solutions to meet a wide variety of application needs, including Ethernet and PCI.

- Up to 82 differential pairs per inch
- Mechanical longevity and ruggedness
- Guidance and keying options
- 4-, 5-, 6-pair configurations
- Integrated power and guidance



TARGET MARKETS



FEATURES

- Backwards mate compatibility
- Up to 82 differential pairs per linear inch
- Embedded capacitor availability
- Derivatives including coplanar and orthogonal configurations
- Proprietary crosstalk reducing technologies
- 15.7mil drill compliant pin allows deeper backdrilling
- Optimized footprints with ground vias between pairs

BENEFITS

- Scalable upgrades to 56Gb/s without costly redesigns
- Meets the high density needs of today's designs
- Additional margin and overall system savings
- Provides a complete solution for unique requirements
- Proven EMI and signal integrity advantages
- Dual diameter vias enhance the return loss performance
- Allows elongated antipads that further improve impedance

TECHNICAL INFORMATION

MATERIAL

- Housing: LCP (1st shot), conductive plastic (2nd shot)
- Contact Base Metal: Copper alloy
- Plating: Performance-based plating at separable interface; meets requirements of product specification

ELECTRICAL PERFORMANCE

- Signal Current Rating: 1A per contact
- Ground Current Rating: 2A per contact
- Power Current Rating: 6A per contact
- Signal Dielectric withstanding voltage: 600 VAC (RMS)
- Ground Dielectric withstanding voltage: 750 VAC (RMS)
- Mating interface contact resistance change 10mΩ maximum
- Compliant pin to plated through hole resistance 1mΩ maximum
- Insulation resistance 1000MΩ

MECHANICAL PERFORMANCE

- 250 mating cycles
- Signal Contact Mating Force: 0.59N max per contact
- Ground Contact Mating Force: 0.59N max per contact
- Signal Contact Wipe Length: 1.5mm – 3.0mm
- Ground Contact Wipe Length: 3.0mm – 4.0mm
- Compliant Pin Insertion Force: 5lbs – 15lbs per pin
- Compliant Pin Retention Force: 0.5lbs – 2.0lbs per pin

ENVIRONMENTAL

- Maximum non-operating temperature (unmated): 125°C for 24 hours
- Maximum operating temperature: 105°C
- Minimum operating temperature: -40°C
- In accordance with Telcordia GR-1217-CORE & EIA-364 standards

APPROVALS AND CERTIFICATIONS

- UL94-V-0

SPECIFICATIONS

- Product Specification – TB2150
- Design Guidelines – TB2211

PACKAGING

- Tray/Tube

TARGET MARKETS/APPLICATIONS



Hubs
Switches
Routers
Optical Transport
Wireless Infrastructure
Test Equipment
Emulation Equipment



Servers
External Storage Systems
Supercomputers