

# XCede® HD Plus

# 28G ADDITION TO THE XCEDE® HD FAMILY

The XCede® HD Plus backplane connector achieves high performance (up to 28+ Gb/s) in a Hard Metric form factor. Offering a linear density of up to 84 differential pairs per inch (33 differential pairs per centimeter), the XCede® HD Plus connector meets the high density needs of today's challenging architectures.

- 28+ Gb/s data rate
- Price and performance scalability
- Modular construction with integrated power and guidance options
- Compliant with the hard metric form factor
- 85 $\Omega$  and 100 $\Omega$  impedance



#### **FEATURES**

- Data rates capable up to 28 Gb/s to support system upgrades without costly redesigns
- Compliance with the hard metric form factor requirements outlined in EN 61076-4-101:2001
- Added metal shield tied to ground system with conductive posts
- Modified mating beams vs. previous XCede® HD versions
- Miniaturized compliant pins
- Leverages on application specific derivatives, including coplanar and orthogonal configurations
- Embedded capacitor available
- Meets standards, such as the IEEE 802.3bj

## **BENEFITS**

- Backwards mating compatible with XCede® HD connector
- Highest density with 1.80mm pitch
- Reduces crosstalk
- Moves resonance past 25GHz
- Improves impedance matching and enables deeper backdrilling
- Provides a complete solution for customer's unique requirements
- Additional margin and overall system cost savings
- Provides designers with the flexibility to design systems with an easy upgrade path to 56 Gb/s PAM4 performance



# **TECHNICAL INFORMATION**

#### **MATERIAL**

- Contact Finish Area: Gold
- Contact Base Metal: High performance copper alloy
- Housings: Glass reinforced polyester (LCP)

#### **ELECTRICAL PERFORMANCE**

- Signal Contact Current Rating: 1A
- Contact Resistance Change:  $10m\Omega$  max.
- Dielectric Withstanding Voltage: 750V RMS peak

#### **MECHANICAL PERFORMANCE**

- 2mm & 3mm signal wipes available
- Housing Capture: 1.03mm X & 0.61mm Y
- Guide Capture: 2mm X & Y
- Durability: 250 mating cycles

### **ENVIRONMENTAL**

■ Operating Temperature Range: -40°C to 105°C

#### **APPROVALS AND CERTIFICATIONS**

■ UL94 V-0

#### **SPECIFICATIONS**

- TB-2307 XCede® HD Plus General Product Specification
- TB-2237 XCede® HD Routing Guidelines
- TB-2245 XCede® HD & XCede® HD Plus Backplane Removal and Reinsertion Process
- TB-2252 XCede® HD & XCede® HD Plus Backplane Installation Process
- TB-2253 XCede® HD & XCede® HD Plus Wafer Removal and Replacement
- TB-2308 XCede® HD Plus Connector Design Guidelines

#### **PACKAGING**

PVC trays (ESD)

## **TARGET MARKETS/APPLICATIONS**



Hubs Switches Routers Wireless Infrastructure



Servers Networked Storage Systems Supercomputers