

XCede® Family Cable Assemblies

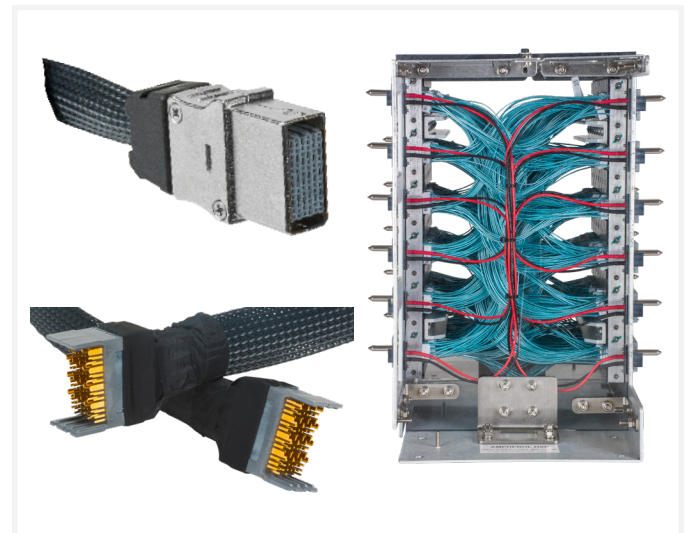
EXTENDING THE REACH OF PASSIVE COPPER IN IO, BACKPLANE, AND MIDPLANE CABLE APPLICATIONS

Cable Backplane Systems is part of Amphenol ICC's Highspeed Backplane Product business, dedicated to developing and manufacturing cabled backplane solutions for next generation system architectures. Our customers are leading providers of datacenter switches and routers, enterprise servers and high performance computers. Products include IO style cables, internal OverPass cables, and full mesh harness structures for both backplane and midplane applications.

- Extends the reach of passive copper for next generation real world system designs; complementary with direct orthogonal designs, intermatable with existing board mount connector designs
- Lowers overall system costs by reducing or eliminating the need for expensive active devices like retimers and high performance board materials
- Market leading backplane connector families – XCede®, XCede® Plus, and X2
- Proven reliability of passive twin ax copper coupled with advanced wire attachment and 100% high speed test coverage provides peace of mind

FEATURES

- Fully passive copper cable assembly
- Same mechanical benefits as backplane connectors
- Low loss twin ax cable
- Linear transmission to ~30 GHz
- Flexible pin out
- 30 – 26 AWG wire gauges
- 100% high speed test coverage
- Mate compatible with press fit headers and right angle



TARGET MARKETS



- Turn key support provides mechanical application design services and signal integrity consultation from wire level through system level

BENEFITS

- Low cost reliable signal transmission
- High pin counts, blind mate & high density
- Overcomes limitation of PCB materials
- Enables 25G NRZ and 56G PAM4
- Allows for full mesh designs with cable harnesses
- Optimization of transmission and cable routing
- Assurance of functional performance
- Line cards / switch cards can be shared between systems allowing for a scalable platform

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance Copper Alloy
- Plating(s): Performance-based plating at separable interface (Telcordia GR-1217-CORE)
- Housings: High Performance Thermoplastic, UL94-V0
- Wire: Silver and tin plated copper, polyolefin, aluminized polyester foils

ELECTRICAL PERFORMANCE

- Differential Impedances: 85Ω & 100Ω nominal
- Supporting all major protocols: IEEE, InfiniBand, OmniPath, UPI, PCIe, SAS

MECHANICAL PERFORMANCE

- Mating wipe: >2mm
- Housing Capture: min 1mm X and Y
- Durability: ≥200 mating cycles
- Mate and unmate forces equal to press fit connectors

APPROVALS AND CERTIFICATIONS

- Telcordia GR-1217 – CORE Central Office
- UL94 V-0
- Twin AX UL – HB and VW1

PACKAGING

- Product specific

ENVIRONMENTAL

- Operating Temperature Range: -40°C to 85°C connector system

SPECIFICATIONS

- TB-2321 – XCele Cable Systems Product Datasheet
- TB-2150 – XCele Product Specification

TARGET MARKETS/APPLICATIONS



Switches
Routers
Access
Hubs
Wireless Infrastructure



Servers
Datacenter
External Storage System
Supercomputers

PART NUMBERS

DESCRIPTION

4X6 XCele Female Cable

4X6 Male XCele + Cable

PART NUMBER

HS30133001

HS30710001