

# ExaMAX2® Cable Assembly

# EXAMAX2® CABLE BACKPLANE SYSTEMS

ExaMAX2® Cable Backplane Systems offer high density cable assemblies for both internal and external applications that are capable of delivering high speed performance of 112Gb/s per channel. ExaMAX2® cable applications include internal OverPass™ cables, external I/O cables, cabled midplane and cabled backplane.

- 112G performance with backward compatibility to ExaMAX® and ExaMAX+®
- Durable, reliable and protected interface eliminates pin stubbing
- Supports both 85 $\Omega$  and 100 $\Omega$  systems
- Fully passive copper connector and cable performance to optimize system costs
- Addresses system tolerances, blind mating and proper keying



#### **FEATURES**

- Capable of supporting 112Gb/s data rates
- Revolutionary beam-on-beam contact interface
- Hermaphroditic mating interface protects mating beams
- Efficient 92Ω design
- Internal & external IO systems
- Engineered wire management & termination
- Utilizes individual twin-axial cable
- Integration of float, alignment and keying all in one system

#### **BENEFITS**

- Supports present and future bandwidth needs
- Superior signal integrity performance
- Durable, reliable and protected interface eliminates pin stubbing
- Supports both 85 $\Omega$  and 100 $\Omega$  systems
- Addresses IO needs for both inside the box and outside the box cabling
- Impedance maintained and cross talk minimized in the wire termination
- Accommodates either planar or single differential pair cable construction
- Address system tolerances, blind mating and proper keying

## **ExaMAX2® Cable Assembly**

## **TECHNICAL INFORMATION**

#### **MATERIAL**

- Contacts: High performance copper alloy
- Housings: High Performance thermoplastic
- Raw Cable: Ag plated copper conductors with foam insulation covered by conductive foil

#### **ELECTRICAL PERFORMANCE**

- Contact Resistance:  $10m\Omega$  max. change from initial reading
- Current Rating (less than 30°C temperature rise above ambient): signal contact: 0.50 Amps/contact - ground contact: 2 Amps/contact
- Operating Voltage: 50VAC RMS

#### **MECHANICAL PERFORMANCE**

- Mating Force: 0.36N max. per contact, Unmating Force: 0.12
  N min. per contact
- Cable Strain Relief: 100N min. when axial load is applied directly to cable
- Panel Retention Frame: 120N min. when axial load applied to cable latched in frame

#### **ENVIRONMENTAL**

Telcordia GR-1217-CORE Central Office qualification pending

#### APPROVALS AND CERTIFICATIONS

- EIA 364: Electrical Connector/Socket Test Procedures Including Environmental Classifications
- IEC 60512: Connectors for Electronic Equipment –Tests and Measurement

#### **SPECIFICATIONS**

- Amphenol Product Specification: GS-12-1641
- Amphenol Application Specification: GS-20-0626

#### **PACKAGING**

Cable Packaging Specification: GS-14-1272

#### **TARGET MARKETS/APPLICATIONS**



Switches Routers



Storage Systems Router Server



**Ultrasound Equipment**