

ExaMAX2[®]

SUPPORTING 112GB/S PAM4 PERFORMANCE

The ExaMAX2[®] backplane connector system supports 112Gb/s PAM4 industry specifications. It maintains mating interface compatibility with previous ExaMAX[®] products to allow cost/performance flexibility for designers. The mating interface and connector design is optimized to support the demanding electrical and mechanical requirements of 112G systems. ExaMAX2 delivers industry leading SI performance includes RL, ILD and reflections.

- The innovative beam-on-beam mating interface provides improved SI performance and exceptionally low mating forces
- 100% backward mating compatibility to previous ExaMAX products
- Industry leading RL and reflections performance
- No resonances before 60GHz
- Available in both 90Ω and 85Ω versions



TARGET MARKETS



FEATURES

- 90Ω nominal impedance version
- 85Ω nominal impedance version
- Beam-on-beam mating interface
- One additional signal pin per column
- T-top pre-load and protection
- Supports multiple system structures

BENEFITS

- Meets industry specifications such as OIF 112Gb/s PAM4 and IEEE 100Gb/s PAM4
- Meets industry specifications such as PCIe[®] 6.0 and UPI3.0
- Provides low crosstalk while eliminating insertion loss resonances
- Reduces mating force up to 65% compared to traditional blade and beam designs
- Integrates high and low speed signals into the same connector
- Protect the beam tip during mating process
- Traditional backplane, midplane orthogonal, direct-mate orthogonal, coplanar, mezzanine

TECHNICAL INFORMATION

MATERIAL

- Contacts: High performance copper alloy
- Plating(s): Performance-based plating at separable interface (Telcordia GR-1217-CORE) tin over nickel on press-fit tails
- Housings: High performance thermoplastic, UL94-V0

ELECTRICAL PERFORMANCE

- Contact Resistance: 20mV max., 100mA current
- Insulation Resistance: 500V DC
- Dielectric Withstanding Voltage: 500V DC

MECHANICAL PERFORMANCE

- Long mating wipe of > 2mm
- X and Y capture a generous 1.1mm
- Mating Force: 0.35N max. per contact
- Unmating Force: 0.10N min. per contact

ENVIRONMENTAL

- Operating Temperature Range: -55°C to +85°C

APPROVALS AND CERTIFICATIONS

- Telcordia GR-1217-CORE Central Office qualification passed
- UL E66906

SPECIFICATIONS

- OIF 112Gbps PAM4
- IEEE 100Gbps PAM4
- PCIe® 6.0
- UPI 3.0

PACKAGING

- PVC Trays (ESD)

TARGET MARKETS/APPLICATIONS



Communications



Data



Industrial & Instrumentation