

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 are optimized to support the demanding electrical and mechanical requirements of 112G systems. EXAMAX2® delivers industry-leading SI performance, including 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 92Ω and 85Ω versions



TARGET MARKETS



FEATURES

- 92Ω 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 UPI 3.0, PCIe® 6.0 and 7.0
- 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: 500VDC
- Dielectric Withstanding Voltage: 500VDC

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 112Gb/s PAM4
- IEEE 100Gb/s PAM4
- PCIe® 6.0
- UPI 3.0

PACKAGING

- PVC Trays (ESD)

TARGET MARKETS/APPLICATIONS



Communications



Data



Industrial & Instrumentation