

# 112G PAM4 Mini Cool Edge 0.60mm Card Edge Connectors

## MEETS SFF-TA-1002, OCP NIC 3.0 COMPATIBLE FORM FACTOR SPECIFICATIONS AND NETWORKING APPLICATIONS

Mini Cool Edge is a 0.60mm high-density, high-speed card edge connector for new-generation small form factor systems. The fine-pitch solutions in vertical orientation are now available for a complete interconnect solution.

Mini Cool Edge 0.60mm meets SFF-TA-1002, OCP NIC 3.0 specifications and networking applications. Common applications include Network Interface Card, Add-In Card, and GPU link.

- High Speed 112GT/s PAM4
- 85Ω/92Ω impedance
- Vertical connectors are now available.



### TARGET MARKETS



### FEATURES

- Signal pins options from 56, 84, 140, 168, 280
- Customization of pin count upon request
- Small form factor, meets SFF-TA-1002, OCP NIC 3.0 specs and networking application
- Supports mating boards with 1.6mm thickness and able to customize connectors to fit different PCB thickness
- Application-specific customization of Mini Cool Edge 0.6mm is available upon request
- Offer connector options with impedance of 85Ω and 92Ω

### BENEFITS

- Supports different board-to-board, module applications like FPGA, NIC, GPU Link
- Serves as a space-saving connector
- Support high-speed differential pairs up to 112G PAM4
- Support various server modules such as accelerator cards and GPU applications
- Supports GPU link and networking applications

# TECHNICAL INFORMATION

## MATERIAL

- Contact Base Metal: Copper Alloy
- Contact Area Finish: Gold over Nickel
- Solder Area Finish: Tin over Nickel
- Housing: High Temperature Thermoplastic (UL94V-0)

## ELECTRICAL PERFORMANCE

- Contact Resistance: 15mΩ max. change after test
- Insulation Resistance: 1000MΩ min.
- Dielectric Withstanding Voltage: 300VAC

## MECHANICAL PERFORMANCE

- Durability:
  - 200 mating cycles
  - High mating 10k cycles
- Mating Force: 0.55N/pin max.
- Unmating Force: 0.05N/pin min.

## SPECIFICATIONS

- Amphenol Product Specification: S-ME-004

## ENVIRONMENTAL

- Humidity: EIA-64-31B, Method III without conditioning
- Temperature Life: EIA-364-17, Method A(without electrical load) Test temperature and test duration per EIA 364-1000 Table 8
- Thermal Shock: EIA-364-32, Method A, Table 2, Test condition 1, -40°C to 105°C, perform 5 cycles in mated condition
- Mixed Flow Gas: EIA-364-65, Class IIA, option 4. For 7 years field life

## TOOLING INFORMATION

- Special pin count option available upon request

## TARGET MARKETS/APPLICATIONS



Baseband  
Commercial Systems  
Networking  
Radio Units



High-end Computing System  
Server and Storage Systems