

PCIe® Gen 6 Mini Cool Edge 0.60mm Card Edge Connectors

MEETS EDSFF E1/E3, SFF-TA-1002, OCP NIC 3.0, GEN Z AND PCIE® ENCLOSURE COMPATIBLE FORM FACTOR(PECFF) SPECIFICATIONS

Mini Cool Edge is a 0.60mm high-density, high-speed card edge connector for new-generation small form factor systems. This fine-pitch solution offers multiple BTB applications like right angle, mezzanine, and coplanar connectors. Cable options are available for a complete interconnect solution.

Mini Cool Edge 0.60mm meets EDSFF, SFF-TA-1002 (1006/1007/1008/1020/1021), OCP NIC 3.0, Gen Z and JEDEC specifications.

- Applications include Solid State Drive (SSD), Network Interface Card (NIC), riser card and specific module card.
- Vertical, right angle, straddle mount, and orthogonal connector options with high-speed cable are available
- High speed 64GT/s, can upgrade to 112GT/s PAM4



TARGET MARKETS





FEATURES

- Signal pin pitch at 0.6mm with current rating of 1.1A,up to 12 pins for power application
- Signal pins options from 56, 84, 140, 168, 280
- Customization of pin count upon request
- Small form factor
- Supports 1.57mm mating board thickness. Support for 1.97mm, 2.36mm PCB board available upon request
- Hybrid & power individual options from 4C-HP, 4 power pins and 2 power pins are available

BENEFITS

- Supports small power BTB applications
- Provides power for module card
- Supports different board-to-board, module applications like FPGA, SSD, NIC
- Serves as a space-saving connector and cable solution
- Product portfolio meets standard BTB applications
- Support accelerator card, GPU applications, and power module

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TECHNICAL INFORMATION

MATERIAL

Contact Base Metal: Copper Alloy

• Contact Area Finish: Gold over Nickel

• Solder Area Finish: Tin over Nickel

■ Housing: High temperature thermoplastic (UL 94V-0)

ELECTRICAL PERFORMANCE

• Contact Resistance: 15m max. change after test

Insulation Resistance: 1000M min.

• Dielectric Withstanding Voltage: 300VAC

MECHANICAL PERFORMANCE

Durability: 200 mating cycles

• Mating Force: 0.55N/pin max.

■ Unmating Force: 0.05N/pin min.

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

SPECIFICATIONS

■ Amphenol Product Specification: S-ME-004

TARGET MARKETS/APPLICATIONS



Baseband Commercial Systems Networking Radio Units



High-end Computing System Server and Storage Systems