

## Amphenol ICC

# Mini Cool Edge 0.60mm Connectors

## HIGH DENSITY HIGH SPEED CONNECTOR FOR VERSATILE BOARD-TO-BOARD APPLICATIONS

Mini Cool Edge is a 0.60mm high density, high speed card edge connector for new generation small form factor system. This fine pitch solution offers multiple BTB applications like right angle, mezzanine and coplanar and support cable interconnect options.

Mini Cool Edge 0.60mm meets SFF-TA-1002, Gen Z, EDSFF and OCP NIC 3.0 specifications.

- Common applications include Solid State Drive, Network Interface Card, Add-In Card.
- Vertical, right angle, straddle mount and orthogonal options are available
- High Speed 32GT/s (or 56GT/s PAM4) capability



## **FEATURES**

- Signal pin pitch at 0.60mm with current rating of 1.1A, up to 12 pins for power application
- Signal pins options from 56, 84, 140, 168
- Customization of pin count upon request
- Small form factor
- Discrete pin design
- Supports 1.6mm thick mating board

## **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
- Supports single-ended, high speed differential pairs up to 32G NRZ, 56G PAM4
- For most standard BTB 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 (UL 94V-0)

### **ELECTRICAL PERFORMANCE**

- Contact Resistance: 30m  $\Omega$  max. initial; 15m  $\Omega$  max. change after test
- Power Supply: 72W max.
- Dielectric Withstanding Voltage: 300VDC

### **MECHANICAL PERFORMANCE**

- Durability: 200 mating cycles
- Mating Force: 0.6N/pin max.
- Unmating Force: 0.06N/pin min.

### **ENVIRONMENTAL**

- Humidity: 500 hours, 25±3°C at 80% ~95% RH.
  Per EIA 364-31B Method III
- Temperature Life: 105±2°C for 168 hours. Per EIA 364-17
- Thermal Shock: 5 cycles between -55°C to +85°C.
  Per EIA 364-32
- Mixed Flow Gas: 10 days to simulate 7 years field life. EIA364-65 class IIA

## **PART NUMBERS**

Description	Part Numbers
Mini Cool Edge 0.60mm 56 signal pins, SMT, Vertical	ME1005610101011
Mini Cool Edge 0.60mm 84 signal pins, SMT, Vertical	ME1008410101011
Mini Cool Edge 0.60mm 140 signal pins, SMT, Vertical	ME1014010101011
Mini Cool Edge 0.60mm 84 signal pins, SMT, Right angle	ME1008410201011
Mini Cool Edge 0.60mm 140 signal pins, SMT, OCP, Straddle mount	ME1014013401311
Mini Cool Edge 0.60mm 168 signal pins, SMT, OCP, Straddle mount	ME1016813401311
Mini Cool Edge 0.60mm 56 signal pins, 1x1, Press-fit, Orthogonal	ME2005602311011
Mini Cool Edge 0.60mm 56 signal pins, 1x4, Press-fit, Orthogonal	ME2005602311041

## **APPROVALS & CERTIFICATION**

• UL

## **SPECIFICATIONS**

- Amphenol Product Specification: S-ME-001

## PACKAGING

• Carrier Tape

## **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

# SSIOMINICOOLEDGE0618EA4

## www.amphenol-icc.com

#### **Disclaimer** Please note that the above information is subject to change without notice.