

Cool Edge 1.00mm PCIe Connectors

HIGH SPEED SPACE–SAVING CONNECTOR FOR BOARD–TO–BOARD APPLICATIONS

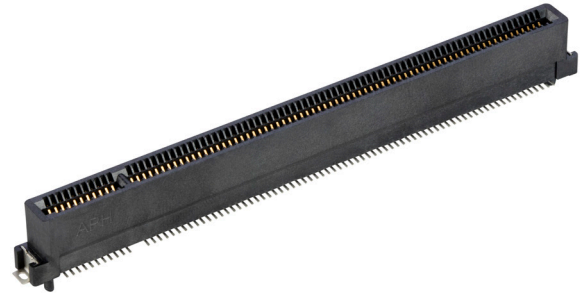
Cool Edge Signal connectors bring high speed PCIe support into a one-piece card edge package with 16Gb/s Gen4 and 32Gb/s Gen 5 capabilities. Slim connector design saves space on the motherboard while facilitating other higher density applications. These connectors come with a simple housing design with an overall reduced footprint, providing additional benefits over standard PCIe solutions. The conductive plastic design of these connectors provides enhanced signal integrity. The contact pads extend outwards from housing making inspection easier.

- Supports speeds up to 32Gb/s
- Saves more space than standard PCIe solution
- Enhanced signal integrity using conductive plastic design
- Simple housing design allow vertical AOI inspection

FEATURES

- Signal pin pitch at 1.00mm, based on PCIe interface
- 1.1A/pin for power application
- 0.7A/pin for signal application
- Supports speeds from 16Gb/s, up to 25Gb/s and 32Gb/s
- PCIe slots of x8 and x16
- Supports 1.6mm thick mating board
- Slim connector design: Height 9.6mm; Width 5.8mm; Length 95mm
- Simple housing design in vertical configuration
- Connector design with conductive plastic at the base
- Contact pads extend outwards from housing

NEW



TARGET MARKETS



BENEFITS

- Supports Board-to-Board applications
- Backward compatibility toward PCIe Gen3 and forward compatibility toward PCIe Gen5
- Support most add-in card and next generation GPU application
- Multiple applications served, from ICT to Consumer
- Saves more space than standard PCIe with slimmer form factor, smaller width and footprint
- Allows for easy Automated Optical Inspection (AOI) of the connector
- Provides good signal integrity performance at high speeds up to 32Gb/s
- Makes inspection easier compared to standard PCIe

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:
 - 30mΩ max.
 - 10mΩ max. change after test
- Current Rating: 1.1A per pin for power application/ 0.7A per pin for signal application with temperature rise not exceeding 30°C
- Dielectric Withstanding Voltage: 500V

MECHANICAL PERFORMANCE

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

SPECIFICATIONS

- Amphenol Product Specification: SCE009

ENVIRONMENTAL

- Temperature Life: 105±2°C for 240 hours. Per EIA 364-17
- Thermal Shock: 10 cycles between -55°C to +85°C. Per EIA 364-32
- Humidity: 24 cycles between 25±3°C at 80±3% RH and 65±3°C at 50±3% RH. Per EIA 364-31
- Mixed Flow Gas

PACKAGING

- Tray

TARGET MARKETS/APPLICATIONS

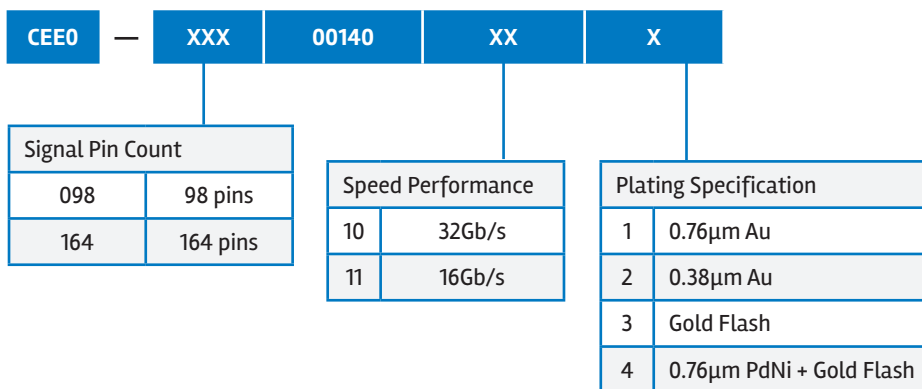


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PART NUMBER SELECTOR



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