

Micro-TCA Card Edge Connectors

FULLY COMPLIANT CONNECTOR FOR ADVANCED MC™ MODULES

Micro-TCA (μ TCA) vertical card edge connectors provide 170 contacts on a 0.75mm pitch and enable advanced MC™ modules to be plugged directly to a backplane. Micro-TCA card edge connector's conventional press-fit or surface mount assembly and connector designs require no costly hardware, resulting in low total applied cost.

- Up to 18Gb/s data rate per lane
- Press-fit and SMT version are available
- Modules can be plugged directly to the backplane



TARGET MARKETS



FEATURES

- Vertical card edge connectors with 170 contacts on a 0.75mm pitch
- Press-fit and SMT version are available
- No secondary mechanical retention or compensating board stiffeners needed
- Very low loss and crosstalk for low voltage differential signaling
- Surface mount mechanical hold-downs
- RoHS compliant and lead-free

BENEFITS

- Fully compliant with Micro-TCA specification
- Provides a solderless alternative for termination to thick PCBs
- Low total applied cost
- Allows data rates up to 18Gb/s
- Provide additional mechanical strength after soldering
- Meets environmental, health and safety standards

TECHNICAL INFORMATION

MATERIAL

- Contact Base Metal: Copper alloy
- Contact Area Finish: Gold over nickel
- Solder Area Finish: Tin over nickel or tin-lead over nickel
- Metal Board Locks: Copper alloy

ELECTRICAL PERFORMANCE

- Contact Resistance:
 - Initial: 25mΩ max.
 - Variation: Less than 10mΩ max.
- Current Rating: 0.5A min. per pin
- Voltage Rating: 12V AC (rms)

MECHANICAL PERFORMANCE

- Durability: Up to 500 mating cycles
- Insertion Force: 100N max. for whole connector
- Withdrawal Force: 65N max. for whole connector

ENVIRONMENTAL

- Salt Spray: Contact Resistance 35Ω max. final
- Thermal Shock: Contact Resistance (35Ω max. final)
- Solderability: 90% of immersed area must show no voids and pin holes

APPROVALS AND CERTIFICATIONS

- UL

SPECIFICATIONS

- Amphenol Product Specification:
 - GS-12-1132 for High Speed Micro-TCA 18G Press-fit IMLA type connector
 - GS-12-422 for Micro TCA 6.25G Press-fit IMLA type connector
 - GS-12-362 for Micro TCA 6.25G SMT type connector
- Industry Specification:
 - PICMG® specification MTCA.0 R1.0

PACKAGING

- Tray

TOOLING INFORMATION

- Tooled Up

TARGET MARKETS/APPLICATIONS



Switches
Routers
Network Interface Cards (NICs)
Host Bus Adapters (HBAs)



Servers
Storage Systems
Storage Controller Cards