

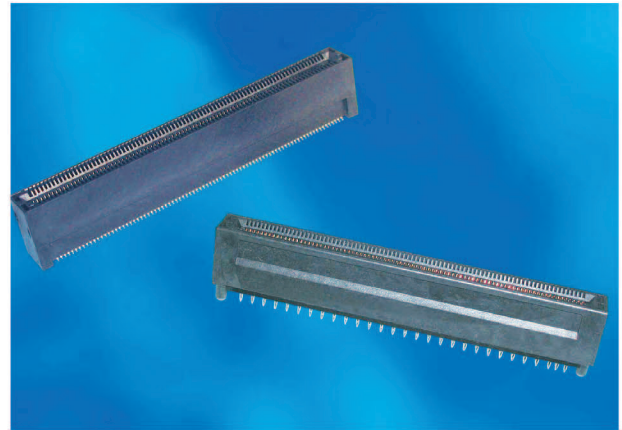


MicroTCA Backplane

FCI MicroTCA™ (μTCA™) vertical card-edge connectors provide 170 contacts on 0.75mm pitch and enable AdvancedMC™ modules to be plugged directly into a backplane. FCI offers options for press-fit or surface-mount (SMT) termination, and both connector versions are compatible with the PCB connector footprints that are defined in the MicroTCA specification. Customers can choose the termination option that best suits their system design and manufacturing preferences. The connector designs and PCB footprints are also optimized to support differential signaling with very low loss and crosstalk at speeds up to 12.5 Gb/s.

The press-fit connector version extends the use of MicroTCA architecture to thicker backplanes where proven press-fit technologies are often preferred. The surface-mount connector supports systems that employ smaller and less complex backplanes and allows the use of more cost-effective, SMT reflow soldering processes. Capability for connector installation using conventional press-fit or SMT assembly processes, combined with connector designs that require no costly hardware, secondary mechanical retention or compensating board stiffeners, results in low total applied cost. Metal retention clips on the SMT connectors provide additional mechanical strength after soldering.

The MicroTCA standard, developed within PICMG®, defines a physically small but very powerful system in a shelf measuring 4U high by 300 mm deep. The MicroTCA system architecture reduces size and cost by eliminating the AdvancedTCA® carrier board and providing a chassis that accepts AdvancedMC™ modules directly. The MicroTCA form factor is expected to be ideal for communications equipment, such as core routers and IP-gateways, radio base stations and switching centers, and customer premises equipment, where small physical size and cost are key design constraints.



FEATURES

- › Dual-row, 170-position card-edge interface with 0.75 mm contact pitch
- › Options for press-fit or surface-mount (SMT) termination
- › Compliant with the MicroTCA specification
- › Press-fit termination for application to thicker and larger backplanes
- › Surface-mount (SMT) termination with PCB footprint optimized for electrical performance
- › Very low loss and crosstalk for low-voltage differential signaling at data rates up to 12.5 Gb/s per lane
- › SMT footprint allows for increased flexibility in routing PCB traces
- › Metal retention clips at SMT connector ends provide additional mechanical strength after soldering
- › Lead-free and RoHS-compatible