

Micro TCA – Power Connectors

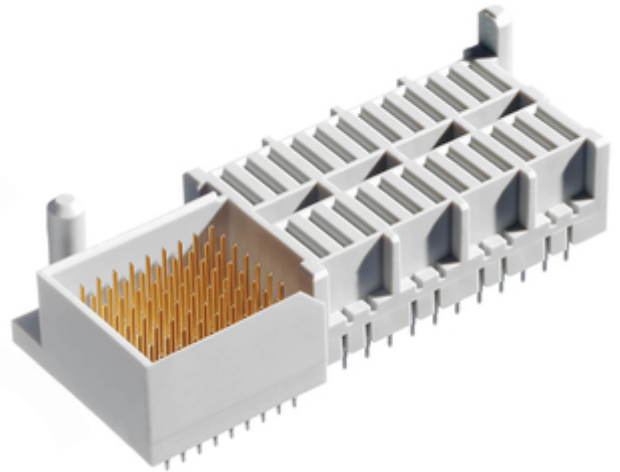
MicroTCA® is based on the approach of plugging AdvancedMC™ modules directly into the backplane. The aim is to build smaller and more flexible systems independent of carrier boards and AdvancedTCA®. MicroTCA® is aimed at applications that do not require high levels of computing power, but in which low space requirements and low costs are paramount. It opens up further areas of application in the mid- and low-end range, such as in image processing, medical technology, or automation technology.

Features

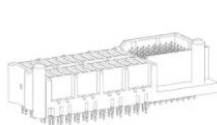
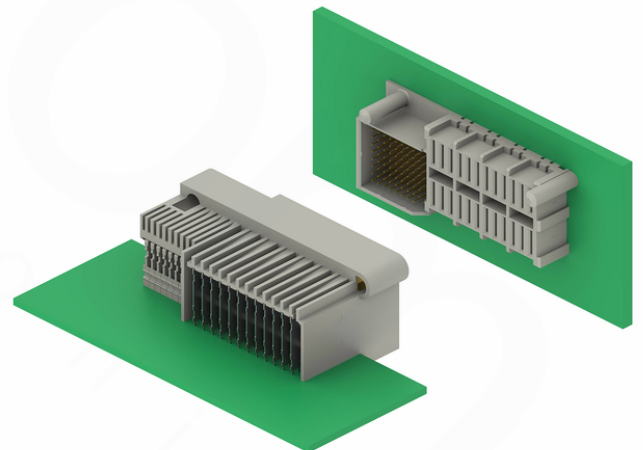
- Meets PICMG requirements

Applications

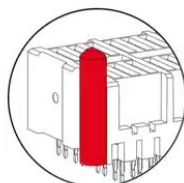
- Power applications
- Image processing
- Medical technology
- Automation technology



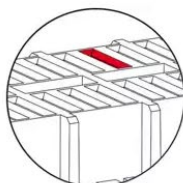
The connectors for MicroTCA and AdvancedTCA in press-fit technology enable high data transfer rates. The flat plate press-fitting technique enables simple press-fitting. The μ TCA system uses a straight connector located directly on the backplane, whereas the ATCA system uses the angled AMC connector on the daughter card.



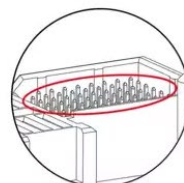
MTCA Power Backplane
detail overview



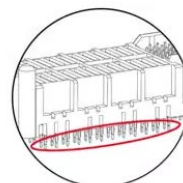
Guide Pin



internal spring contacts



signal contacts max. 1 A



power contacts max. 12 A

Specifications:

AdvancedTCA® and MicroTCA® are specifications developed by PICMG® with the aim of enabling standardized hardware solutions to handle the increased data traffic as well as meeting new communication solutions.

AdvancedTCA® is primarily focused on the infrastructure of telecommunication systems that have high requirements on availability. AdvancedTCA® makes it possible to build modular systems using components from different manufacturers. This technology can offer the possibility of more quickly developing flexible and cost-effective setups than had been possible with the previously available proprietary systems.

The concept of AdvancedTCA® is based on a scalable, high-performance architecture, which is evident in its high functional density, availability, and future-proofing, offering a platform on which many future-oriented applications can be implemented. Scalable data transfer rates of several terabits per second, multi-protocol support, the integrability of new services, and the convergence of access, core and optical networks are just as much a part of this as the integration of data center functions. The high flexibility of the AdvancedTCA® architecture is evident in its support of interconnects with Gigabit Ethernet, Fibre Channel, Infiniband, StarFabric, PCI Express, and RapidIO. Another core element of the systems is the high availability of 99.999%.

PICMG® has developed the AdvancedMC™ (Advanced Mezzanine Card) standard to make the AdvancedTCA® system even more cost-effective. The AdvancedMC™ modules are small cards that plug into a carrier board (in the form of an AdvancedTCA® daughter card) in parallel as a mezzanine application. The actual application is realized via the AdvancedMC™ modules, whereas the carrier board contains only management functions.

MicroTCA® is now based on the approach of plugging AdvancedMC™ modules directly into the backplane. The aim is to build smaller and more flexible systems independent of carrier boards and AdvancedTCA®. MicroTCA® is aimed at applications that do not require high levels of computing power, but in which low space requirements and low costs are paramount. It opens up further areas of application in the mid- and low-end range, such as in image processing, medical technology, or automation technology.