



AdvancedTCA – Highspeed Connectors and Power Connectors

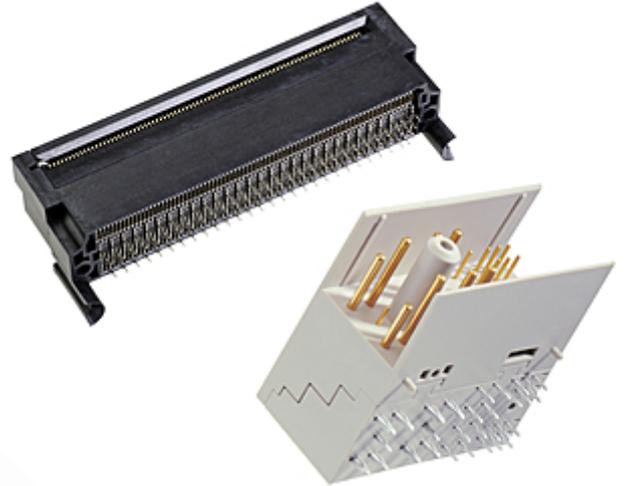
AdvancedTCA® excels in other applications with the highest requirements on availability, although it was originally specified for telecommunications infrastructure. AdvancedTCA® makes it possible to build modular systems using components from different manufacturers. This technology can offer the possibility of developing flexible and cost-effective setups.

Features

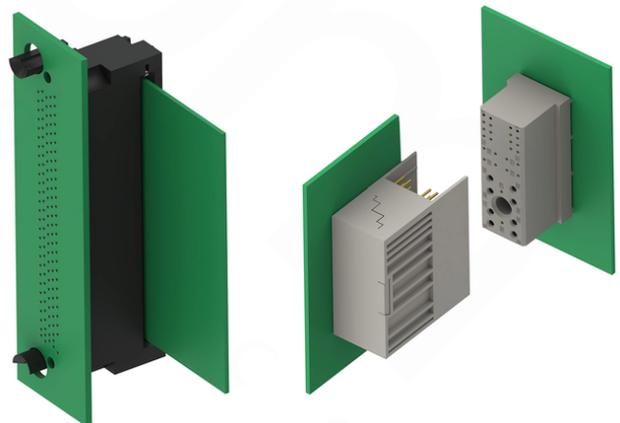
- Meets PICMG requirements
- con:card+ seal of quality
- Stamped press-fit zone with Tcom press®
- Cost-optimized design

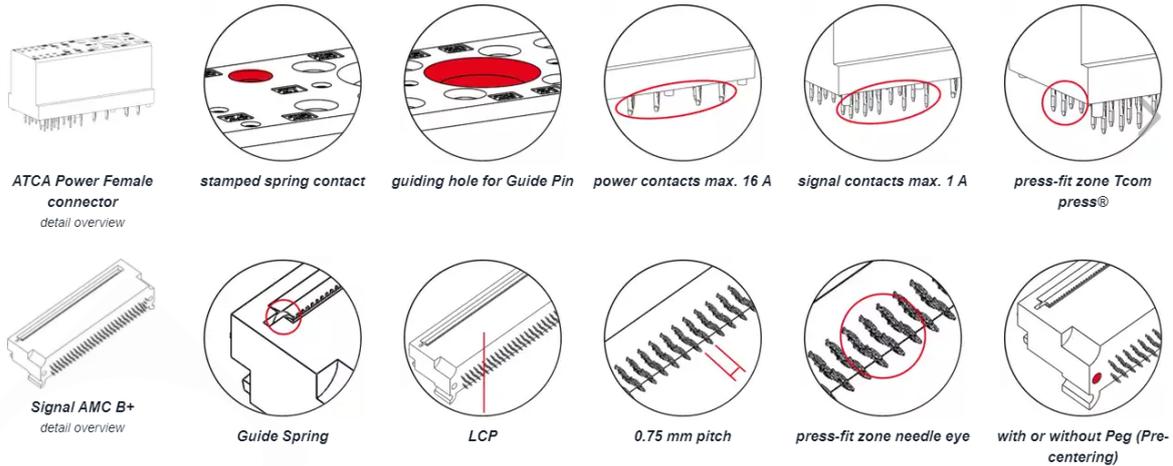
Applications

- Backplane daughter cards
- Power applications
- Highspeed board-to-board



The MicroTCA and AdvancedTCA connectors in press-fit technology enable high data transfer rates. The flat plate press-fitting technique enables efficient 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.





AdvancedTCA® and MicroTCA® – PICMG 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 the needs of new communication solutions.

AdvancedTCA® was specified for the highest requirements on availability in the field of telecommunications system infrastructure. AdvancedTCA® makes it possible to build modular systems using components from different manufacturers. This technology can offer the possibility of efficiently developing flexible and cost-effective setups.

The concept of AdvancedTCA® is based on a scalable, high-performance architecture. AdvancedTCA® is characterized by its high functional density, availability, and future-proofing. It offers a platform for many future-oriented applications. 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® meets the demands of cost-conscious applications that place greater emphasis on space requirements and investment than on computing power. It opens up further areas of application in the mid- and low-end range, such as in image processing, medical technology, or automation technology.