

AMC – (CN074 Series) Connector

Yamaichi Electronics USA, Inc. is pleased to announce the Advanced Mezzanine Card (CN074 Series) connector designed for use with high-speed interfaces up to 12.5 Gbit/sec. This product complies with the PICMG AMC.0 REV. 1.0 SPEC. ratified by the PICMG Executive Committee JAN of 2005.

The CN074 connector is a “Z-pluggable” surface mounted compression connector. The design is modular in concept. There are three basic parts to the connector: the contacts mating to the AMC Module, the flex circuit, and the contacts mating to the carrier board. Many of the internal parts are interchangeable within the B, B+, AB, and A+B+ connectors, and only the housing is different. This allows more flexibility meeting the spec, as well as other custom oriented designs. An example of this would be an A Type slot only requirement. The contact design implements a very short stub. All are designed for $100\Omega \pm 10\Omega$ controlled impedance. A special stiffener inside counterbalances the metal stiffener under the compressive part of the carrier board. This controls PCB and connector warpage, and allows easy insertion of the AMC modules into the slot.

At the very heart of the connector is a high performance, high speed FPC, called the YFlex. Making use of LCP as the base substrate, produces very low CTE, and integrates B²IT interconnect technology. The differential pair matched impedance designs already incorporated in our standard YFB product line, allows customers the confidence in delivering high speed data transfers. Combined with excellent electrical properties, and overall performance, these connectors address the Carrier grade needs for Reliability, Availability, and Serviceability (RAS).



FEATURES

- **PICMG AMC.0 Revision 1.0 Compliant**
- **GR-1217-CORE Compliant**
 - **Compression style contacts to the carrier board with wiping action to ensure high reliability**
 - **Integrated high performance Yamaichi developed Yflex with B²IT interconnect technology**
- **Base substrate is LCP material which has a very low CTE**
- **Contacts designed for high speed applications – very short stub**
- **Supports speeds beyond 12.5 Gbit/s**
- **Low Dielectric Constant Insulation Material:**
 - **Connector Housing: 3.10 @ 6 GHz**
 - **Yflex: 2.85 @ 6 GHz**
- **Controlled Impedance Contacts 100 $\Omega \pm 10\Omega$**
- **200 mating cycles**
- **Operating Temperature: -40°C to 70°C**