

Product Line-up

CN074-170-0005	Pin Count	170 (B+)	
CN074-085-0003		85 (B)	
CN074-170-0006		170 (AB)	
CN074-340-0001		340 (A+B+)	

CN080-170-0001	Pin Count	170	
CN080-170-0002		170 *	

* Special stiffener for backside use of backplane for further components

CN084-680-1232-1010-0	Pin count	680 MCH-1 MCH-3 MCH-3 MCH-2	
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CN084-680-1332-1110-0	Pin count	680 MCH-1 MCH-2 MCH-3 MCH-2	
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CN084-340-0032-0010-0	Pin count	340 MCH-3 MCH-2	
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CN084-340-1200-1000-0	Pin count	340 MCH-1 MCH-2	
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CN084-170-1000-1000-0	Pin count	170 MCH-1	
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CN084-170-0030-0010-0	Pin count	170 MCH-3	
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For other CN084 combinations and assembly tooling. Please contact Yamaichi

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Specifications in this document are reference values for representative products of each series. Since product improvement entails changes to electrical, material and mechanical properties, the purchasing party is strongly encouraged to inquire about the latest specifications before placing a purchase order.



Advanced Mezzanine Card Connectors

CN074, CN080 and CN084 Series

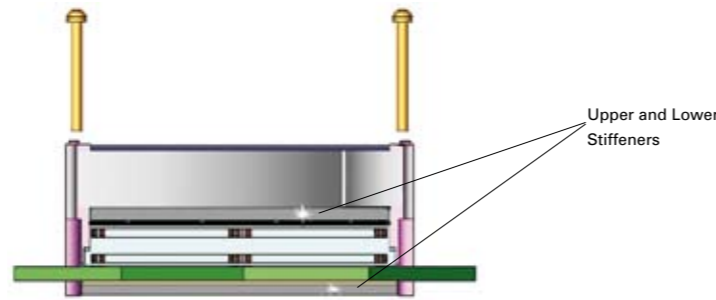
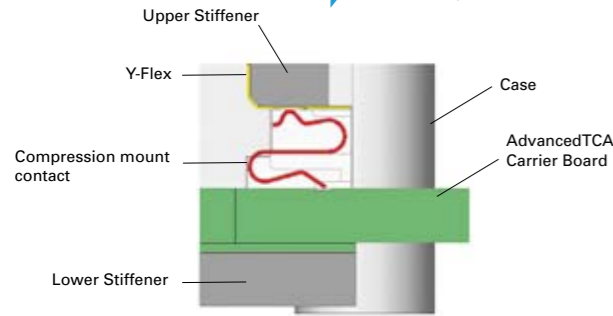
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COMPRESSION MOUNT TECHNOLOGY (CMT)

Advantages

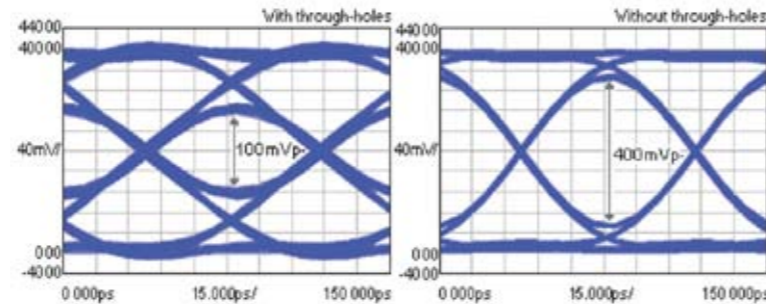
- ▶ Reduced insertion loss and cross-talk
- ▶ Flexible routing capabilities with less PCB layers
- ▶ Proven performance with vibration, bending and temperature changes

no compromise!



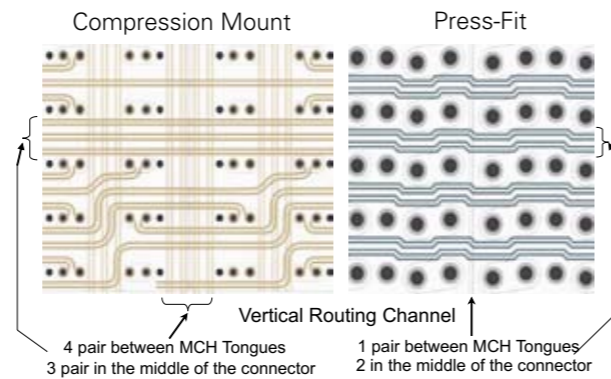
High Speed Transmission

- ▶ CMT enables outstanding High Speed performance due to no stub-effects
- ▶ Reduces cross-talk and insertion loss
- ▶ Transmission Waveform @12.5 Gbps (see diagram)



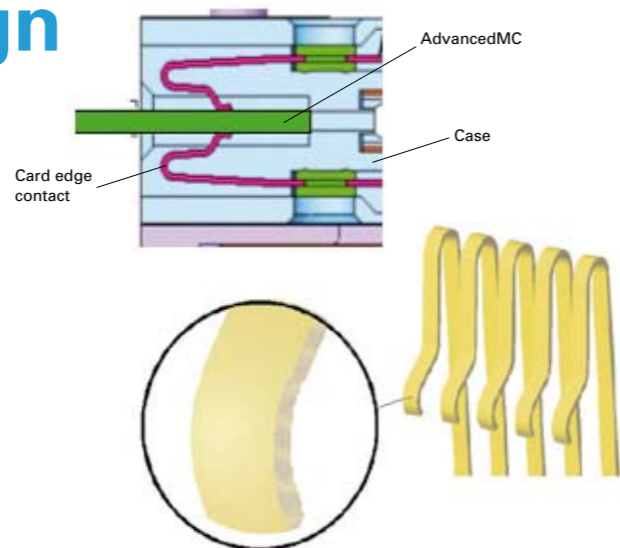
Routing Flexibility

- ▶ CMT allows the usage of blind via's and via's with a very small diameter
- ▶ More space for signal routing on the backplane available
- ▶ Reduced number of backplane layers (up to 25%)
- ▶ Cost saving due to less backplane layers



Reliable Contact Design

- ▶ Special contact shape with contact point at the bending area (not at the stamping / cutting area)
 - ✓ No burr at the contact point which will damage the surface
- ▶ Precisely defined contact force due to the contact shape design
 - ✓ Stable contact force for a whole lifetime
- ▶ Wider contact for tolerance compensation and reliable mating
 - ✓ No additional guiding needed



CN074 AdvancedMC™ Connectors for AdvancedTCA™

- ✓ Compression Mount Contacts (CMT)
- ✓ High speed transmission 12.5 Gbps
- ✓ Complete product range: B, B+, AB, A+B+
- ✓ Integrated YFLEX® technology
- ✓ Customised pin assignment possible
- ✓ Acc. to PICMG Spec. ATCA 3.0 R2.0



Insulation Resistance	100MΩ min. @ 80V DC
Withstanding Voltage	80V rms / min.
Differential Impedance	100Ω ±10Ω
Operating Temperature	-55°C to +105°C

Attenuation	<1dB @ 8GHz, <2dB @ 12GHz
Return loss	<20dB @ 5GHz, <13dB @ 8GHz
Cross-talk ratio	NE & FE <2%
Mating cycles	200 times

CN080 AdvancedMC™ Connectors for μTCA™

- ✓ Compression Mount Contacts (CMT)
- ✓ High Speed Transmission 12.5 Gbps
- ✓ Simplified routing (reduces number of backplane layers)
- ✓ Metal housing for improved stability
- ✓ Butterfly backplane (midplane) possible
- ✓ Backside of backplane can be used for further components
- ✓ Acc. to PICMG Spec. MTCA.0 R1.0



Insulation Resistance	100MΩ min. @ 80V DC
Withstanding Voltage	80V rms / min.
Differential Impedance	100Ω ±10Ω
Operating Temperature	-55°C to +105°C

Attenuation	<1dB @ 6.5GHz, <2dB @ 12GHz
Return loss	<20dB @ 5GHz, <13dB @ 8GHz
Cross-talk ratio	NE & FE <3%
Mating cycles	200 times

CN084 MCH Plug for μTCA™ Systems

- ✓ First and only company to mass produce the MCH plug
- ✓ High Speed Transmission 12.5 Gbps
- ✓ Variety of standard combinations available (see back cover)
- ✓ Flexible for customised combinations
- ✓ Up to 680 contacts with four tongues
- ✓ Decreases insertion force



Compression contacts on Au pad = NO press-in holes in PCB required
Fixing by stiffener and screws = NO soldering process
Mating reliability = NO guiding necessary