

0.60mm Board to Board 85Ω– G830MA Series

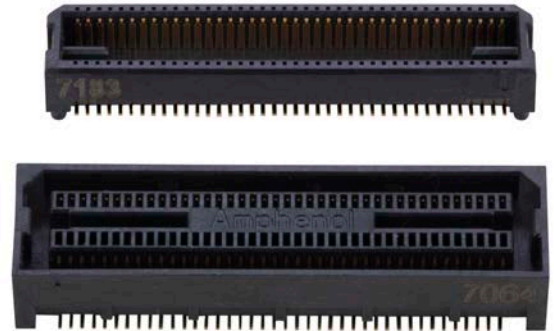
0.60MM PITCH, 85Ω BOARD-TO-BOARD SOLUTION

Amphenol high speed board-to-board connectors provide high contact force reliability ensuring strong connectivity, forced insertions, and removals.

Broad range of stacking heights and pin counts are offered to provide maximum design flexibility.

Amphenol 0.60mm pitch connector design is suitable for high density applications.

- Superior signal integrity (SI) performance
- High contact force ensures mating reliability
- Polarization key at pin edge to prevent misalignment
- All stack heights meet PCIe Gen 3, 8GT/s
- Gold flash plating protects against corrosion

NEW


TARGET MARKETS



FEATURES

- 6 and 8mm stack heights
- 4, 5 and 7mm stack heights available upon request
- 40 to 120 position sizes available upon request
- Polarization key, and coined feature at pin edge
- Snap-in and catch operation
- 85Ω differential impedance
- Gold flash (8, 15, 30μin) gold plating for reliable mating
- 0.10mm max. coplanarity for SMT process
- All stack heights meet PCIe Gen 3, 8GT/s electrical requirements

BENEFITS

- Wide range of options for different application needs
- High contact force ensures reliable mating performance
- Strengthens lead-in and improves contact wipe during connector mating
- Superior tactile sense
- Robust mating operation ensures strong connection
- Optimized high speed performance at all stack heights
- Improves contact resistance and prevents corrosion
- Caps, mylar and PCB locator pegs options available for correct board orientation
- Superior signal integrity (SI) performance

TECHNICAL INFORMATION

MATERIAL

- Housing: High Temperature Thermoplastic, UL 94V-0, other color options available
- Contact: Copper Alloy, 0.15mm thickness
- Plating: Selective gold-plated on contact area, 100u" min. matte tin plated on soldering tail, 50u" min. nickel under-plated overall

MECHANICAL PERFORMANCE

- Insertion Force: 0.9N (90 gf) max. per contact
- Withdrawal Force: 0.1N (10 gf) min. per contact
- Durability: 100 mating cycles
- Vibration: No disturbance >1μs
- Mechanical Shock: No disturbance >1μs

ELECTRICAL PERFORMANCE

- Contact Resistance:
 - Initial: 30mΩ max.
 - Final Δ R: 20mΩ max.
- Current Rating: 0.3A per contact
- Temperature Rise: T30°C max.
- Insulation Resistance: 1000mΩ min.
- Differential Impedance: 85±10 Ω
- Voltage Rating: 100VAC/ DC

PACKAGING

- Tape and Reel
- Tube available upon request

SPECIFICATION

- Amphenol Product Specification: PS-7578

ENVIRONMENTAL

- Operating Temperature: -40°C to 125°C
- Shipping and Storage Temperature: -40°C to 125°C
- Thermal Shock: No damage Δ R: 20mΩ max.
- Cyclic Temperature and Humidity: No damage Δ R: 20mΩ max.
- Temperature Life: No damage Δ R: 20mΩ max.
- Mixed Flowing Gas: No damage Δ R: 20mΩ max.
- Thermal Disturbance: No damage Δ R: 20mΩ max.
- Solderability: 95% of immersed area, No voids and pin holes
- Soldering Heat: No damage

TARGET MARKETS/APPLICATIONS



IP Phone
Telecom/Datacom equipment



High End Computers
Router
Servers
Test Card and Card Extenders



Test and Measurement Equipment

PART NUMBERS

Description	Part Numbers
0.60mm pitch Receptacle, Dual Row, Vertical, SMT	G830MA0080XX14HR
0.60mm pitch Header, Dual Row, Vertical, SMT	G830MA10801X14HR

CMIOBTG830MA071EA4

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