

0.80mm Board-to-Board 85Ω– G832MB Series

0.80MM 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 0.80mm pitch connector design is suitable for high performance 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

- 5 to 20mm stack heights
- 20 to 120 position sizes in 20 position increments
- 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
- 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
- Cap: Stainless steel, 0.20mm thickness

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

- Low Level Contact:
 - Initial: 30mΩ max.
 - Final Δ R: 20mΩ max.
- Current Rating: 0.8A 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-7562

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
0.80mm pitch Receptacle, Dual Row, Vertical, SMT	G832MB0XXXXXX2XHR
0.80mm pitch Header, Dual Row, Vertical, SMT	G832MB1XXXXXX2XHR