

# **0.80mm Board-to-Board 85** $\Omega$ - G832MB Series

# 0.80MM PITCH, 85 $\Omega$ 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

# <image>

### **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: 30m $\Omega$  max.
- Final  $\Delta$  R: 20m $\Omega$  max.
- Current Rating: 0.8A per contact
- Temperature Rise: T30°C max.
- Insulation Resistance: 1000m $\Omega$  min.
- Differential Impedance: 85±10  $\Omega$
- 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  $\Delta$  R: 20m $\Omega$  max.
- Cyclic Temperature and Humidity: No damage  $\Delta$  R: 20m $\Omega$  max.
- Temperature Life: No damage  $\Delta$  R: 20m  $\Omega$  max.
- Mixed Flowing Gas: No damage  $\Delta$  R: 20m $\Omega$  max.
- Thermal Disturbance: No damage  $\Delta$  R: 20m $\Omega$  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	G832MB1XXXXX2XHR

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Board to Board & Mezzanine Connectors category:

Click to view products by Amphenol manufacturer:

Other Similar products are found below :

 589158040000018
 MDF7C-18P-2.54DSA(55)
 FCN-230C068-11
 FCN-268F012-G/BD
 FCN-268F036-G/BD
 FCN-268M012-G/OD
 FCN-234P048-G/O

 FCN-235D050-G/C
 210-93-314-41-105000
 2-22603-0
 MDF7-40DP-2.54DSA(55)
 AXG720047
 MIT-114-03-F-D-K
 55323-1519
 DF33-2P 

 3.3DSA(24)
 YFT-20-05-H-03-SB-K
 503308-3040
 026-6203-PDB
 027-6203-PDB
 069159702701000
 10123981-102LF
 101A10019X

 55650-0588-C
 68682-310LF
 68684-306
 75140-7012
 87471-650
 YTW-30-07-H-Q-410-140
 FCN-268F024-G0D
 10124054-515LF
 68685 

 603
 8-1616154-3
 MIS-019-01-F-D
 FCN-268M024-G/3D
 FCN-268M036-G/BD
 20021832-06016C1LF
 KX15-20KLDL-E1000E

 AXE810124
 FCN-214J100-G/0
 FCN-230C068-E/S
 AXE816124
 AXE720127
 354184