

DensiStak™ Board-to-Board Connector

HIGH DENSITY / HIGH SPEED / DUAL-BEAM CONTACT / USCAR-2 COMPLIANT BOARD-TO-BOARD CONNECTOR

Amphenol FCI Basics DensiStak™ connector is designed with its 11 rows 1000+ high density pin count, high speed up to PCIe® Gen 4 with 16Gb/s. Reliable dual-beam contact system, compact size with pitch 0.80mm x 1.25mm, USCAR-2 compliant, and optional shields.

- High Density upto 1034 pos
- High Speed, upto PCIe® Gen 4 with 16Gb/s
- Dual-Beam Contact system
- Compact size
- USCAR-2 compliant



TARGET MARKETS



FEATURES

- High Density 11-Row 1000+ positions
- High speed performance up to 16Gb/s
- Dual-beam contact system
- Compact design with 0.80mm in X direction and 1.25mm in Y direction
- USCAR-2 compliant
- Open-Pin-Field Design
- Surface mount soldering tails
- RoHS compliant, halogen and lead-free
- UL94V-0 high temperature material

BENEFITS

- Provides solution to connect with chips with high speed, low speed and power needs
- Meets PCIe® Gen 4, Ethernet, USB, DP, and MIPI protocols
- Reliable design
- Saves board space
- Supports automotive application
- Design flexibility
- Makes customer soldering easy
- Meets health, safety and environment requirements
- With-stand harsh environment

TECHNICAL INFORMATION

MATERIAL

- Housing: High temperature thermoplastic LCP, Black (UL94V-0)
- Terminal: Copper Alloy
- Shield: Copper Alloy
- Plating: 3µin, 8µin, 15µin, and 30µin GOLD/GXT®

MECHANICAL PERFORMANCE

- Mating and Un-mating Force: 0.2N max. & 0.16N max./contact; 2N max. & 1.5N max./Shield spring
- Durability: 50/100/200/500 cycles per plating options
- Mechanical Shock : SAE/USCAR-2 V2
- Vibration: SAE/USCAR-2 V2

ELECTRICAL PERFORMANCE

- Current Rating: 0.8A per contact; 4A per shield spring
- Insulation Resistance: 100mΩ min.
- Voltage Rating: 100VAC/VDC
- LLCR: 40mΩ max. for contact; 5mΩ max. for shield
- Data Rate: Up to 16Gb/s

PACKAGING

- Tape & Reel

SPECIFICATIONS

- Product Specification: GS-12-1806
- Application Specification: GS-20-0813

ENVIRONMENTAL

- Operating Temperature Range: -55°C to +125°C
- Thermal Shock: SAE/USCAR-2, 100 cycles
- Temperature Life: USCAR2-7, 125C, 1008 hours

APPROVALS AND CERTIFICATIONS

- UL E66906

TARGET MARKETS/APPLICATIONS



Advanced Driver Assistance Systems (ADAS)



Server Storage
Artificial Intelligence (AI)



Industrial Sensing & Instrumentation

PART NUMBERS

Description	Part Numbers
DensiStak™ Header, H2, 0.80mm x 1.25mm, 550 position 11 x 50, 3µin on contact, 8mm stack height	10169063-5002100LF
DensiStak™ Header, H2, 0.80mm x 1.25mm, 616 position 11 x 56, 3µin on contact, 8mm stack height	10169063-5602100LF
DensiStak™ Receptacle, R6, 0.80mm x 1.25mm, 550 position 11 x 50, 3µin on contact, 8mm stack height	10169064-5006100LF
DensiStak™ Receptacle, R6, 0.80mm x 1.25mm, 616 position 11 x 56, 3µin on contact, 8mm stack height	10169064-5606100LF

PART NUMBER SELECTOR

