

BergStak HS™ 0.80mm Board-to-Board Connector

FLEXIBLE SOLUTION FOR HIGH SPEED APPLICATION

BergStak HS™ connector family is known for its fast data transmission, high signal quality, and time-proven reliability under extended periods of application. BergStak HS™ 0.80mm connector family with 0.80mm pitch enables high-speed data applications with up to PCIe® Gen 5 32Gb/s.

- Free pin use of 5mm stack height
- Can use same layout as BergStak
- Meet SAS 4.0 and PCIe® Gen 5 standards
- Environment friendly with RoHS and low-halogen compliance



TARGET MARKETS



FEATURES

- High speed performance up to 32Gb/s
- 120 positions, with options from 40 to 140
- 5mm stack height, with options for 5mm and 12mm
- Available in single GND and double GND
- UL94V-0 high temperature LCP material
- Scoop-proof housings
- Lead-free and RoHS compliant

BENEFITS

- Meets SAS 4.0 and PCIe® Gen 5 standards
- Application flexibility
- Design flexibility
- With-stand harsh environment
- Enables easy manual assembly
- Meets environmental, health and safety requirements

TECHNICAL INFORMATION

MATERIAL

- Housing: Glass filled LCP (UL94V-0, MSL level 1)
- Contact Base Metal
 - Receptacles: Copper alloy, high spring
 - Headers: Copper alloy
- Plating:
 - Solder area finish in matte pure tin over nickel
 - Contact area plating gold

ELECTRICAL PERFORMANCE

- Current Rating: 0.8A per contact
- Contact Resistance: 50mΩ max.
- Signal Integrity for SAS 4.0
 - Data Rate: up to 24Gb/s
 - Multiline Crosstalk: < 0.5% at 20ps (20–80%)
 - Differential Impedance: 100Ω
 - Single Ended Impedance: 50Ω
- Signal Integrity for PCIe® Gen 5
 - Data Rate: Up to 32Gb/s
 - Multiline Crosstalk: < 0.5% at 15ps (20–80%)
 - Differential Impedance: 85Ω
 - Single Ended Impedance: 42.5Ω

MECHANICAL PERFORMANCE

- Durability: 100 cycles
- Mating Force: 0.9N max. /contact
- Un-mating Force: 0.1N min. /contact
- Gauge Retention Force: >0.1N

ENVIRONMENTAL

- Mixed Flow Gas: Duration 7 days
- Vibration Sinusoidal: 11.95g
- Temperature Life : 105 °C, 120 hour

PART NUMBERS

Description	Part Numbers
BergStak HS™ 0.80mm Header 120P	10147614–121406LF
BergStak HS™ 0.80mm Receptacle 120P	10147613–121406LF

APPROVALS & CERTIFICATION

- UL E66906

SPECIFICATIONS

- Amphenol Product Specification: GS-12-1499

PACKAGING

- Tape & Reel

TARGET MARKETS/APPLICATIONS



Server
Storage



Industrial automation
PLC



Medical