

PRELIMINARY SPECIFICATIONS (See online catalog for latest info)

HKX Electrical Specifications

- Data Rate: Up to 10 Gbps
- Differential Impedance: 100 ohms
- Differential Insertion Loss: -9 dB up to 10 GHz (20 Gbps)
- Far End Crosstalk: -34 dB up to 5 GHz
- Near End Crosstalk: -32 dB up to 5 GHz
- Signal Contacts: 2 amp
- Power Wafer: 12 amps per wafer at 30°C T-Rise
- Compliant Pin to Plated Through Hole Resistance: 1 milliohm max
- Dielectric Withstanding Voltage: 500 volts RMS
- Insulation Resistance: 1000 megaohms

HKX Mechanical Specifications

- Signal and Ground Contact:
 - Insertion force per contact: 1.6 oz max, 0.9 oz typical
 - Extraction force per contact: 1.2 oz max, 0.7 oz typical
 - Durability: 500 cycle minimum
- Number of contacts: 9 per wafer
- Number of wafers: 40 for 3U; CU - custom configuration upon request.
- Contact resistance: <8 milliohms per contact
- Wafer pitch: 1.8 mm
- Slot pitch: 20.30 mm

HKX Environmental Specifications

- Temperature: -55°C to 125°C
- Temperature Life: 1000 hours at 125°C

Printed Circuit Board Specifications

- Minimum Backplane and Daughtercard Thickness: 2.36mm and 1.53 mm
- Daughtercard pattern finished hole size: 0.56 +/- 0.05mm
- Backplane pattern finished hole size: 0.56 +/- 0.05mm
- Backplane hole pattern: 1.8mm X 1.8 mm (9-holes per row)
- Daughtercard hole pattern: 1.8mm X 1.35mm (7-holes per row)

HKX Materials and Finishes

Backplane, Signal and Ground Contacts:

- Brass per ASTM B16 /B16M-10, C36000
- Gold per MIL-DTL-45204 Type II, Class 1.27, Code C over Nickel, 0.000050 min., per SAE AMS QQ-N-290 over Copper per SAE AMS 2418

Socket Contacts:

- Brass per ASTM B16 /B16M-10, C36000
- Contact wires - Gold per MIL-DTL-45204 Type II, Class 1.27, Code C over Nickel, 0.000050 min., per SAE AMS QQ-N-290 over Copper per SAE AMS 2418
- All else - Gold per MIL-DTL-45204 Type II, Class .75, Code C over Nickel, 0.000050 min., per SAE AMS QQ-N-290 over Copper per SAE AMS 2418

Differential, Power, and Single-ended Daughtercard Wafer Groundplanes:

- Brass per ASTM B16 /B16M-10, C36000
- Gold per MIL-DTL-45204 Type II, Class 0.50, Code C over Nickel, 0.000050 min., per SAE AMS QQ-N-290 over Copper per SAE AMS 2418

Backplane Insulators and Daughtercard Wafer Insert Mold Material: LCP 30% Glass Filled

Backplane Guide Pin and Hardware: CRES 300 series PER ASTM A582/A582M

Daughtercard Connector Header, Keying Components and Hardware: CRES 300 series PER ASTM A582/A582M