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# Mirror Mezz Connectors >

The Mirror Mezz family of hermaphroditic mezzanine connectors delivers superior signal integrity (SI) performance and data speeds to address ever-increasing data transmission requirements for telecommunications, networking and other high-density applications, including Open Compute Project (OCP)-compliant systems.

### **ADVANTAGES AND FEATURES**

#### Delivers high-speed data transmission rates for nextgeneration applications

Connectors offer up to 224Gbps data speeds, supporting high-performance applications such as artificial intelligence (AI) and machine learning (ML).

### Lowers costs through hermaphroditic design

The self-mating design simplifies the bill of materials (BOM) and inventory management while minimizing tooling requirements.

### Reduces lead times and simplifies the product matrix

Mirror Mezz products are designed with low-profile ball grid array (BGA) attachment.

### Improves design flexibility with 15x11 OCP-compliant design

The connector is recommended by OCP for 15x11 mezzanine boardto-board interconnect applications, ensuring interoperability for OCPstandard systems.



## Eases design challenges by maximizing PCB real estate

The high-density connector pin field includes up to 270 differential pairs.

### Optimizes use of space in heightconstrained applications

Cross-mating or self-mating of 2.50and 5.50mm-height connectors permits ultra-low and medium stack heights of 5.00, 8.00 or 11.00mm.

### Maximizes high-speed performance and signal integrity

The "stubless" contact interface and precise arrangement of wide ground pins with electrically tuned signal contacts improves SI and helps balance the electrical field.







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## Mirror Mezz Connectors

### **MARKETS AND APPLICATIONS**

#### Server and Storage

Networking equipment Storage systems Server racks Open Accelerator Infrastructure (OAI) equipment

**Telecommunications** Telecommunications infrastructure Networking equipment

#### Automotive

Electronic control units Domain control units Zonal control units







Storage Systems

Networking Equipment

Electronic Control Units

### **SPECIFICATIONS**

#### **Reference Information**

Packaging: Tape and reel Mates With: 2.50- and 5.50mm-height connectors can self- or cross-mate Designed in: Millimeters RoHS: Yes Halogen Free: Yes

#### **Electrical**

Voltage (max.): 29.9V AC RMS Current (max. per contact): Mirror Mezz, Mirror Mezz Pro: 1.0A Mirror Mezz Enhanced: 0.75A Low-Level Contact Resistance: 30 milliohms max. (initial) 10 milliohms max. (delta) Dielectric Withstanding Voltage: 500V DC Insulation Resistance: 1,000 megohms Impedance: 90 ohms

### Mechanical

Pitch: 4.00mm between differential pairs, 1.50mm between rows Circuits: Up to 270 differential pairs Durability (max.): 100 cycles Mate Force (max. per pin): Mirror Mezz, Mirror Mezz Pro: 0.35N Mirror Mezz Enhanced: 0.5N Gatherability: 1.20mm (Y-axis) and 1.00mm (X-axis) Average Unmating Force (min.): 0.045N per pin

### **Physical**

Housing: LCP Contact: Copper Alloy Plating: Contact Area—Gold Solder Tail Area—Tin Underplating—Nickel Operating Temperatures: Mirror Mezz, Mirror Mezz Pro: -40 to +105°C Mirror Mezz Enhanced: -40 to +85°C

### www.molex.com