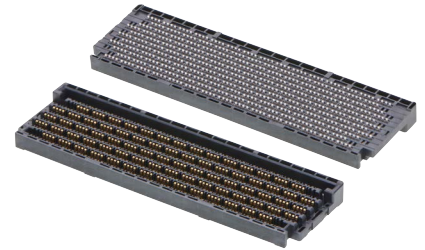


# Mirror Mezz 15x11 OCP Connectors >

Footprint-compatible, hermaphroditic Mirror Mezz 15x11 OCP Connector lowers application costs with stackable mating that supports data speeds up to 224 Gbps per differential pair, for telecommunications, networking and other applications.



15x11 Mirror Mezz OCP Connectors

## FEATURES AND ADVANTAGES

### Reduces mis-mating and assembly errors with robust shrouded housing design

Shrouding encapsulates the pin field, helping protect pins and offering blind-mate guidance to eliminate any possibility of mis-mating

### Reduces costs through use of ball grid array (BGA) attachment

Stitched BGA design offers greater cost savings than insert-molded BGA attachments, reduces lead times and simplifies product matrix

### Eases design challenges by maximizing PCB real estate

High-density connector pin field includes up to 270 differential pairs

### Simplifies assembly operations

Contact tip design offers fine alignment of 0.70mm in blind mating scenarios, making mating operations easier and more reliable

### Improves signal integrity (SI) performance and reliability

“Stubless” contact interface includes two points of contact on each beam for greater reliability and reduces minimum stack height to 5.00mm

### Offers increased reliability and minimizes crosstalk between rows

Opposing beam support helps ensure improved performance with 1.50mm row pitch

Standard	Open Compute Project (OCP)
Speed	Up to 224 Gbps (Mirror Mezz Enhanced) Up to 112 Gbps (Mirror Mezz, Mirror Mezz Pro)
Pin Count	Up to 270 differential pairs (DPs)
Stack Height	5.00, 8.00 or 11.00mm
Mates With	2.50 and 5.50mm connectors
Operating Temperature	-40 to +105°C

### Helps to ensure constant electrical contact and improved reliability

Contact beam structure prevents vibrations and terminal lift to ensure 2-point electrical contact, offers reliable normal force for harsh environments, and ensures sufficient engagement with 1.50mm of nominal contact wipe

### Offers relaxed tolerances and greater architectural flexibility with flex cable links

Accommodates offsets between boards and flexible system components with flex cable links featuring controlled channels and pinned grounds

### Maximizes high-speed performance and clean routing out of the connector footprint

Precise arrangement of wide ground pins and electrically tuned signal contacts improves signal integrity and helps balance the electrical field

### Optimizes use of space in height-constrained applications

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

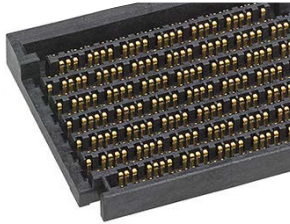
### Lowers costs through hermaphroditic design

Simplifies procurement processes and inventory management while minimizing tooling requirements

### Delivers high-speed data transmission rates for next-generation applications

Mirror Mezz Enhanced Connectors offer 224 Gbps NRZ data speeds and Mirror Mezz Pro Connectors support 112 Gbps data speeds for high-performance applications

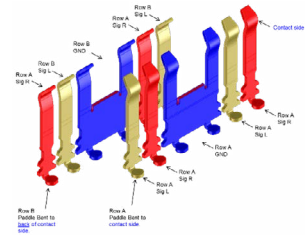
# Mirror Mezz 15x11 OCP Connectors >



*Shrouded Housing Design*



*Stitched Ball Grid Array*



*Ground and Signal Pin Design*

## MARKETS AND APPLICATIONS

### Server and Storage

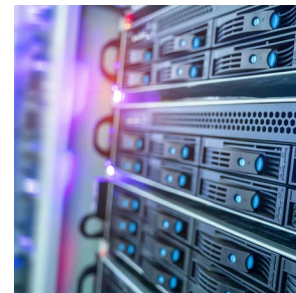
Networking  
Storage  
Servers

### Telecommunications

Infrastructure  
Networking Systems



*Servers*



*Networking Systems*

## 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:  
Mirror Mezz, Mirror Mezz Pro: Up to 270  
differential pairs  
Mirror Mezz Enhanced: Up to 166 differential  
pairs  
Durability: 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: -40 to +105°C