

Quad-Row Board-to-Board Connectors >

Standard Quad-Row and Quad-Row Max Connectors are high-density board-to-board products that deliver significant space savings for a range of applications where space is at a premium. Meeting the demands of designers who require compact connector solutions, these connectors allow for easy mating, secure contact and superior reliability in challenging environments. Quad-Row Connectors achieve robust, high-power connectivity in an exceptionally miniature package.

ADVANTAGES AND FEATURES

Offers space savings

The 0.175mm-pitch, low-profile design minimizes connector footprint and height in compact electronic devices.

Offers high pin count of 12 to 160 pins

The integrated high-pin-count design helps reduce the number of components and PCB footprint.

Supports easy mating and unmating

The low insertion force design minimizes mating force, helping prevent incomplete connector engagement while reducing stress on the PCB and FPC during assembly.

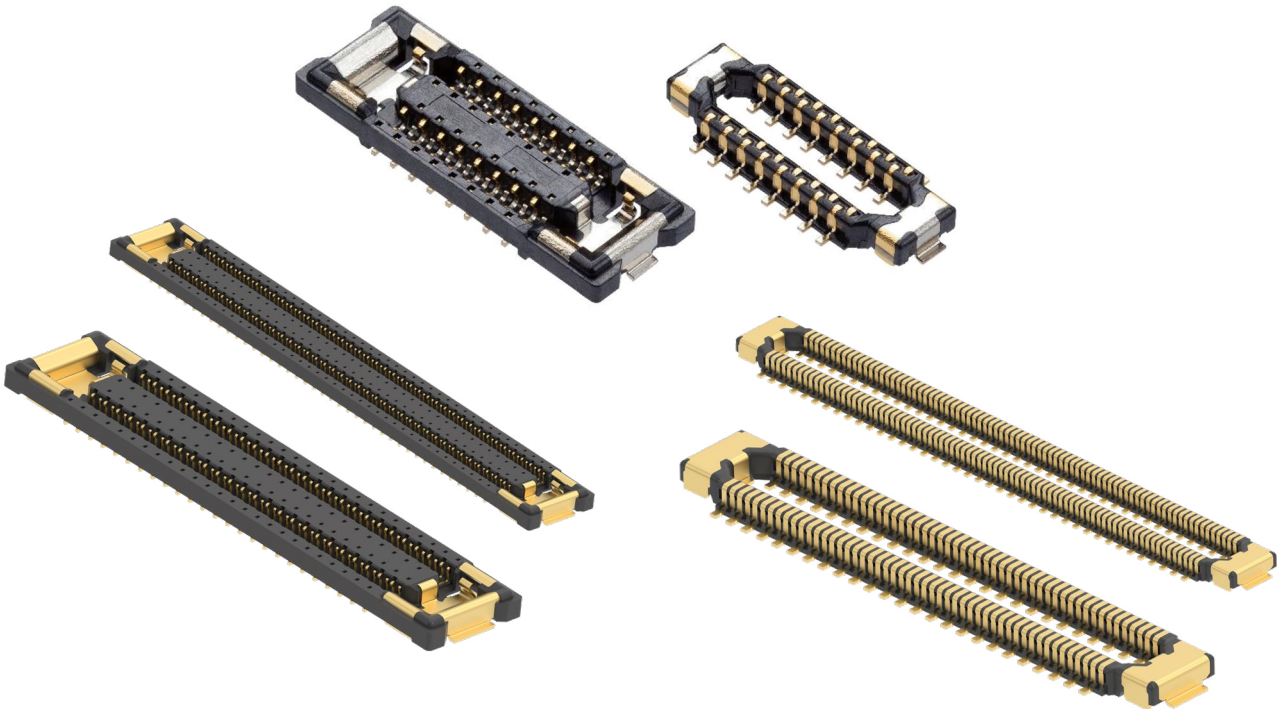
Current	0.3A signal; 3.0/4.0/9.0A nail
Number of Circuits	12 to 160
Pitch	0.175mm
Height	0.50, 0.60, 0.80mm

Supports increased power delivery

The nail-power delivery (3.0/4.0/9.0A) terminals can carry higher current through a compact connector design, reducing the need for larger connectors or additional power contacts.

Delivers robustness and protection with interior cover

Armored and insert-molded nails reduce assembly errors and improve product reliability.



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MARKETS AND APPLICATIONS

Defense

Aircraft avionics
Unmanned vehicles

MedTech

Patient-monitoring systems
Therapeutic and surgical equipment

Mobile devices

AR/VR devices
Drones
IoT and smart home devices
Portable audio and navigation equipment
Smartphones
Tablet PCs

Wearables

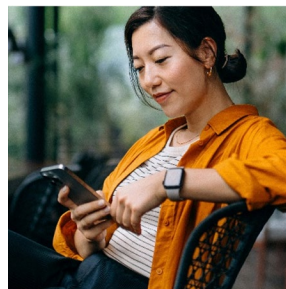
Smart glasses
Smartwatches



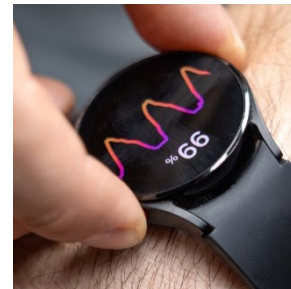
Aircraft Avionics



Patient-Monitoring Systems



Smartphones



Smartwatches

SPECIFICATIONS

Reference Information

Packaging: Embossed tape with cover
Designed in: Millimeters
RoHS: Yes
Halogen Free: Low halogen
Glow Wire Capable: Yes

Electrical

Voltage (max.): 50V
Current (max.): 0.3A signal; 3.0/4.0/9.0A nail
Contact Resistance:
Signal contact—35 milliohms
Nail contact—20 milliohms
Dielectric Withstanding Voltage: 250V
Insulation Resistance: 100 Megohms

Mechanical

Pitch: 0.175mm
Mated Height: 0.50, 0.60 and 0.80mm
Width: 2.00/2.40mm
Length (Receptacle): Pitch (N/2-1)+3.10mm
Length (Quad-Row Max): Total pitch + 3.40mm
Structure Type: Vertical type
Circuit Size: 12 to 160
Durability (max.): 30 cycles

Physical

Housing: LCP UL 94 V-0
Contact: Copper alloy
Plating:
Contact area—gold
Solder tail area—gold
Underplating—nickel
Operating Temperatures: -40 to +85°C