

Durastack Board-to-Board Connectors

Device engineers require connectors that save PCB real estate and simplify manufacturability. DuraStack Board-to-Board Connectors feature insert-molded armor nails and an interior cover for increased board retention, strength and wide alignment. This simplifies assembly and maintenance to help device engineers design more into less space without compromising reliability.

ADVANTAGES AND FEATURES

Helps expand customization possibilities

The wide range of pin options in the connectors helps meet diverse design requirements, enabling flexible integration across various applications.

Improves yield rate

The insert-molded interior cover enhances the strength of the nail to help prevent damage during assembly.

Provides increased space-savings

The small form factor enables miniaturization of the devices by minimizing the connector footprint and pitch, which affords additional PCB real estate.

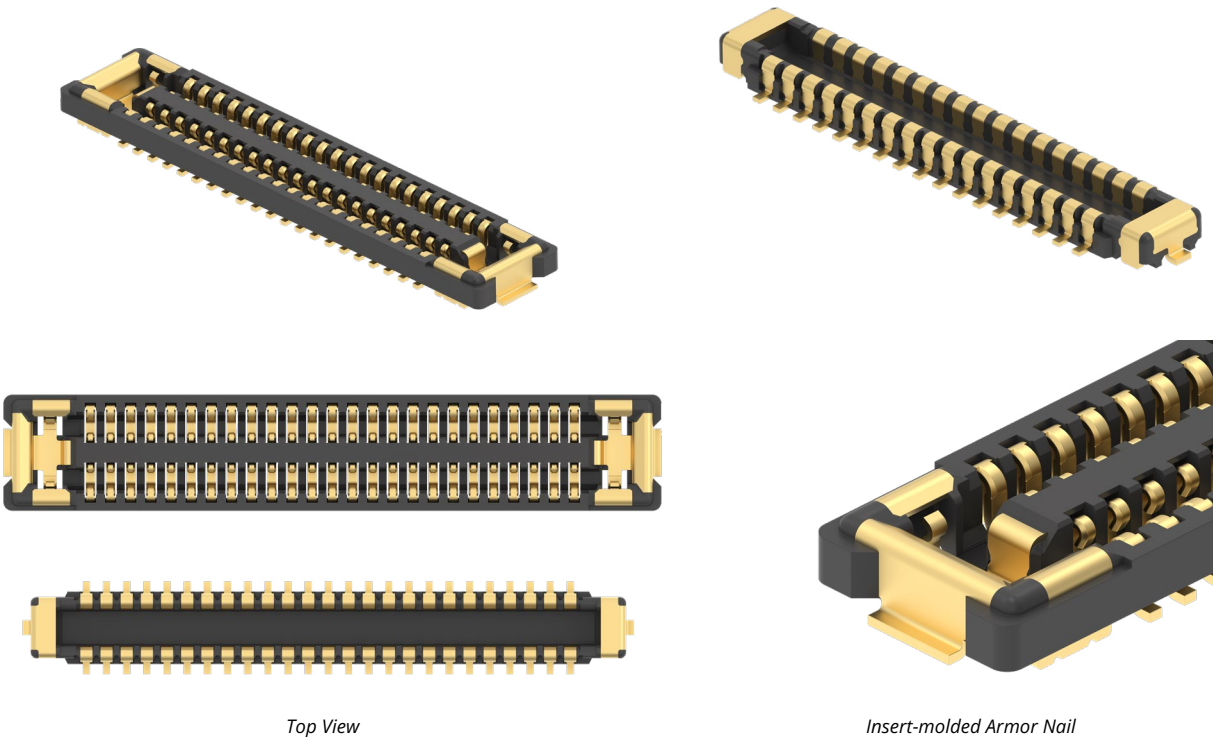
Height	0.80mm	
Number of Circuits	42, 50 and 60	
Pitch	0.35mm	
Voltage	50V	
Current (max.)	Signal	0.3A
	Power	5A

Enhances reliability

The insert-molded armor nail provides additional retention for the PCB, helping it resist movement in devices subject to shock and vibration.

Improves manufacturing efficiency and product quality

The wide alignment helps prevent mis-mating, reducing downtime and production costs.



Top View

Insert-molded Armor Nail

Durastack Board-to-Board Connectors >

MARKETS AND APPLICATIONS

Appliances

Refrigerators
Smart home devices
TVs
Washing machines

Automotive

Advanced driver assistance systems
Engine control units
Infotainment systems

Industrial automation

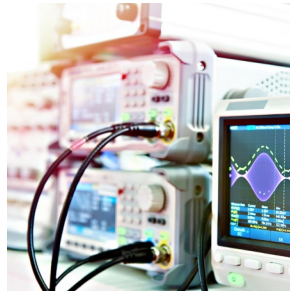
Factory automation equipment
Robotic arms

Medtech

Diagnostic equipment
Patient-monitoring devices

Mobile Devices

PCs
Portable computing devices
Smartphones



Test and Measurement Systems



*Patient-Monitoring
and Imaging Equipment*



Hubs and Servers

Networking

Routers
Switches
Wireless access points

Wearables

Fitness trackers

SPECIFICATIONS

Reference Information

Packaging: Embossed tape on reel
Designed in: Millimeters
RoHS: Yes
Halogen Free: Low halogen

Electrical

Voltage (max.): 50V
Current (max.):
Signal Contact—0.3A
Power Nail— 5.0A
Contact Resistance (max.):
Signal contact—30 milliohms
Power contact—15 milliohms
Insulation Resistance (min.): 100 Megohms
Dielectric Withstanding Voltage: 250V AC

Mechanical

Pitch: 0.35mm
Mated Height (213184 and 213185 Series):
0.80mm
Width: 2.00mm
Length: $\{(\text{circuit}/2-1) \times \text{pitch}\} + 3.02\text{mm}$
Circuit Size (213184 and 213185 Series):
42 to 60 pins
Durability (max.): 30 times
Alignment: 0.40mm (pitch) and 0.35mm (span)

Mechanical

Housing: LCP, UL94V-0, black
Contact: Copper alloy
Plating:
Contact area—gold
Solder tail area—gold
Underplating—nickel
Insertion Force (max.):
Initial—52.5N
After 30 times—75N
Withdrawal Force (min.):
Initial—7.49N
After 30 times—10.7N
Temperature Rise (max.): 30°C
Operating Temperatures: -40 to +85°C