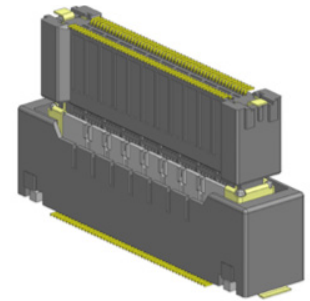**molex**

High-Speed 0.50mm-Pitch Floating Board-to-Board Connector ❯

With a small footprint, data rates up to 20 Gbps and a robust and clean design, the Molex High-Speed 0.50mm-Pitch Floating Board-to-Board Connector is ideal for electronic control units (ECUs) and domain control units (DCUs) in advanced driver assistance systems (ADASs) and autonomous driving (AD) applications
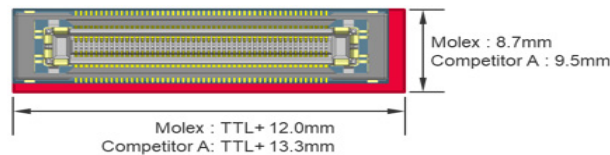

Mated High-Speed 0.50mm-Pitch Floating Board-to-Board Connector

FEATURES AND ADVANTAGES

A footprint of 215.30mm^2
Delivers one of the smallest footprints in the market. Mitigates space constraints on PCBs

Molex : 8.7mm
Competitor A : 9.5mm

Molex : TTL+ 12.0mm
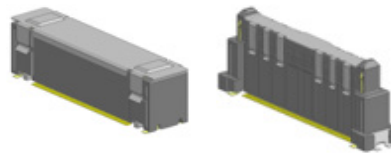Competitor A: TTL+ 13.3mm

Up to 20 Gbps data rate
Provides faster data speeds than PCIe 4. Offers low latency performance

Mating Guide
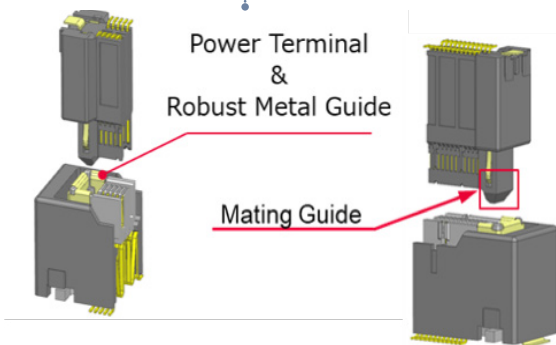Makes mating easier and potentially lowers the risk of mis-mating

Power Terminal & Robust Metal Guide

Mating Guide

Full terminal covers
Keeps dirt and debris away from terminals to ensure reliable connectivity

Wide floating range
Offers ±0.60mm float in the x axis, ±0.80mm in the y axis and ±0.80mm in the z axis. Facilitates automated assembly

Stack height from 16.00 to 32.00mm and from 60 to 200 circuits
Delivers design flexibility

MARKETS AND APPLICATION

Automotive
Electronic control units (ECUs)
Digital control units (DCUs)
Advanced-driver assistance systems (ADAS)

ADAS Applications

Driver Safety Features

molex

High-Speed 0.50mm-Pitch Floating Board-to-Board Connector ❯

TARGET SPECIFICATIONS

Features	Items	Specifications
Environmental	Classification	LV214
	Temp. classification	-40 to 125˚C
Mechanical	Floating / rigid side size	8.70 by 42.10mm (60 Circuits)
	Floating (X, Y, Z)	+/- 0.80mm (X, Y axes), +/- 0.60mm (Z axis)
	Alignment	+/- 1.30mm
Electrical	Rated voltage	12V / 0.5A
	Rated current	100V / 3.0A
	Data type and rate	16 Gbps
	Dust-proof design	Full terminal covers
Configuration	Pitch	0.50mm
	Circuits	60 / 80 / 120 / 160 / 200
	Stacking height	16.00 / 18.00 / 20.00 / 22.00 / 30.00mm

www.molex.com/link/highspeedbtob.html

Note: Molex reserves the right to delay or cancel production of the depicted product without additional notice. Please contact your Molex customer service representative for product availability.