



Microminiature High-Speed Stacking Connectors

Molex has the widest range of microminiature board-to-board stacking solutions in the market. The SlimStack™ product family can achieve signal speeds up to 20Gbps+ for applications and markets that require faster speeds and good data integrity.

Excellent Signal Integrity Performance

Engineers today are looking for the connector that gives best electrical signal integrity performance data as it relates to: 1) insertion loss, 2) return loss 3) impedance and 4) cross talk. SlimStack high-speed connectors achieve less than the industry accepted -3dB insertion loss and connectors perform at -0.5dB at the 20 Gbps speeds.

Good Mechanical and Electrical Reliability

- Housing fitting nails
- End wall cover nails
- Bottom stitch design
- Dual contact
- Stable contact resistance
- Low losses

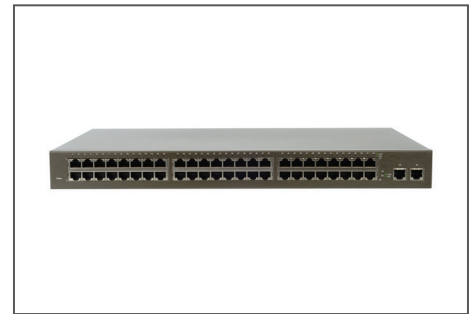
Proven Leader in the Market

SlimStack Microminiature Connectors have been used in the electronics market for more than 20 years and are a known leader in microminiature solutions. Available in 0.35, 0.40, 0.50 and 0.635mm pitch, SlimStack can support your needs to transmit high-speed data signals for many of the latest industry standards such as SATA, USB, MiPi, PCIe, HDMI, and the newest Thunderbolt protocol.

SlimStack™ Microminiature High-Speed Board- to-Board Solutions



Data Servers

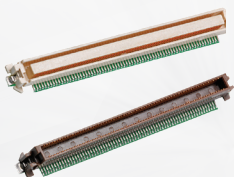


Hi-Speed Switching

FASTER THAN A SPEEDING BULLET > MORE POWERFUL THAN A STICK HEADER CONNECTOR

2.5 TO 3.0 GBPS

- Serial ATA
- PCI Express Generation 1
- USB 2.0



SlimStack
0.635mm Pitch
6.00 to 16.00mm Height

5.0 TO 6.0 GBPS

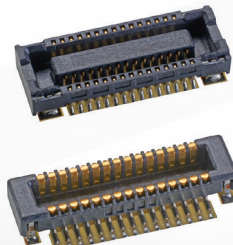
- Serial ATA
- PCI Express Generation 2
- USB 3.0
- mipi alliance



SlimStack
0.50mm Pitch
1.50 to 6.00mm Height

8.0 GBPS

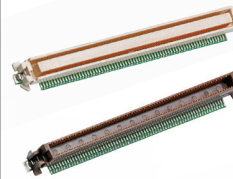
- PCI Express Generation 3



SlimStack
0.35/0.40mm Pitch
0.60 to 1.50mm Height

10.0 GBPS

- High-Speed USB
- HDMI 1.4
- DisplayPort 1.1



SlimStack
0.35/0.4mm Pitch



Array-Beam
1.27mm Pitch
0.60 to 4.00mm Height

18.0 TO 21.0 GBPS

- Thunderbolt
- DisplayPort 1.2



SlimStack
0.35/0.40mm Pitch
0.60 to 1.50mm Height

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Pitch (mm)	Height (mm)	Family	Receptacle	Plug	SATA 2.0	USB 3.0	SATA 3	MIPI M-Phy	PCIe 3	USB 3.1	DP 1.1*	HDMI 2.0	TB 2**
	x	Bandwidth			3.0 Gbps	5.0 Gbps	6.0 Gbps	6.0 Gbps	8.0 Gbps	10.0 Gbps	10.8 Gbps	18.0 Gbps	20.0 Gbps
		Impedence			100 Ohm	90 Ohm	100 Ohm	100 Ohm	85 Ohm	90 Ohm	100 Ohm	100 Ohm	100 Ohm
0.35	0.60, SSB6	SlimStack	504618	504622	X	X	X	X	X	X	X	X	X
	0.70, ST7		504008	504011	X	X	X	X	X	X	X	X	X
	0.80, SSB8		504638	504642	X	X	X	X	X	X	X	X	X
0.40	0.70		503304	503308	X	X	X	X	X	X	X	X	X
	0.80, B8		503772	503776	X	X	X	X	X	X	X	X	X
	0.80, ST8		504208	504248	X	X	X	X	X	X	X	X	X
	1.00		502426	502430	X	X	X	X	X	X	X	X	X
	1.50		51338	55909	X	X	X	X	X				
	2.00			501745	X	X	X	X					
	4.00		54684	501017	X	X	X	X					
0.50	1.50		54722	55560	X	X	X	X					
	2.00		54363	55650	X	X	X	X					
	2.50		54102	53885	X	X							
	3.00		52991	53748	X	X							
	4.00	53916		X	X								
	6.00	501497	501493	X	X								
0.635	6.00	52885	52885	55091	X								
	7.00			53625	X								
	8.00			53647	X								
	9.00			53649	X								
	10.00	52901	52901	53627	X								
	12.00			55091	X								
	13.00			53625	X								
	14.00			53647	X								
	15.00			53649	X								
16.00	53627	X											
1.27	4.00	Array Beam	503821	503825	X	X	X	X	X	X			

*DP=Displayport, includes eDP, myDP

**TB=Thunderbolt

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