



Combination High Speed Mezzanine

**1.20mm (.047") Pitch
Plateau HS Mezz™
High Speed Mezzanine**

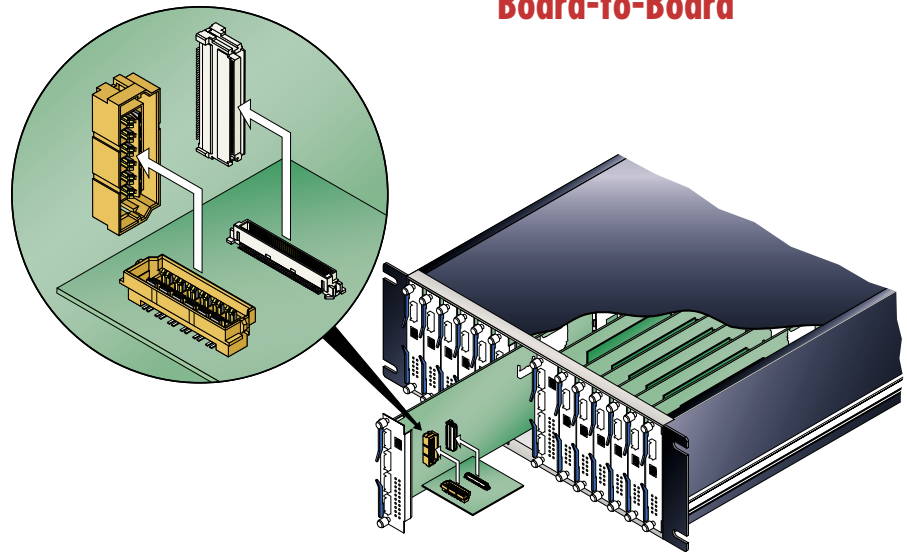
**0.635mm (.025") Pitch
SlimStack™ SMT Stacking
Board-to-Board**

Combining Plateau HS Mezz and SlimStack stacking connectors optimizes performance and cost for high circuit count applications

Molex offers a significant cost reduction over competing products for high-circuit count board-to-board applications with the Combination High Speed Mezzanine solutions. Achieve superior electrical performance and signal speeds up to 10Gbps and beyond utilizing the differential-pair design of the Plateau HS Mezz system. At the same time, double up on circuit density and cost savings with the SlimStack family of mezzanine-style connectors for single-ended speeds up to 3Gbps.

Plateau HS Mezz and SlimStack are well suited to work in tandem for a range of mezzanine applications. Connector designs provide generous lead-ins, allowing for maximum processing and mismatching tolerances.

Combinations of mated heights from 10.00 to 15.00mm (.354 to .591") and packaging styles are also available, including tubes and embossed tape with or without pick-and-place covers.



Features and Benefits

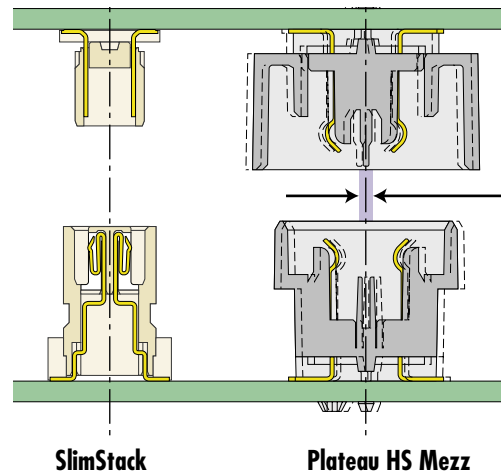
Plateau HS Mezz

- Advanced gold-plated plastic housings with integrated shielding system support high-speed differential signaling in excess of 10Gbps
- Contacts on 1.20mm (.047") centerline pitch arranged in isolated differential pairs on 3.50mm (.138") pitch for controlled impedance
- Multiple stack heights from 10.00 to 25.00mm (.394 to .984") with circuit size ranging from 6 to 36 pairs (12 to 72 circuits)

SlimStack

- Contacts on 0.635mm (.025") centerline pitch support single-ended signal speeds up to 3Gbps
- Gold plated contacts with wide-angled mating surfaces to minimize risk of damage during mating
- Multiple stack heights from 6.00 to 16.00mm (.236" to .630") with circuit sizes ranging from 20 to 240 circuits for high-density design flexibility

Mezzanine card with HS Mezz and SlimStack for a cost effective solution using high-speed and lower-speed requirements.



Combination High Speed Mezzanine arrangement absorbs up to 0.1mm in mis-alignment in X and Y axis when 2 mating pairs are used.

APPLICATIONS

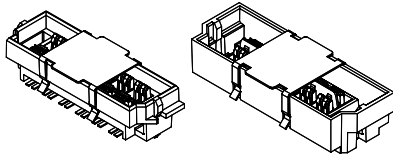
- Switches and Hubs
- Routers
- Servers and Blade Servers
- Workstations
- Storage Devices

SPECIFICATIONS



Combination High Speed Mezzanine

Plateau HS Mezz



Electrical

Upper-End Speed: 10.0Gbps (6.8GHz)

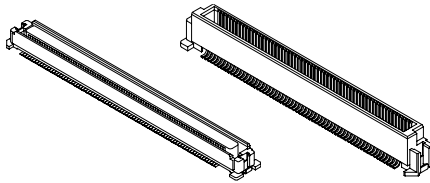
No special S:G pattern needed

Impedance: 100 ± 10 ohms at 50 psec risetime (10/90%) for all stack heights

Crosstalk: Less than 2% @ 50 psec

Current Rating: 1.5A per circuit

SlimStack



Electrical

Upper-End Speed: 3Gbps (2GHz)

Single-ended 1:1 S:G pattern

Impedance: 64 ohms - 16.00mm (.630") stack height

Crosstalk: Less than 8% @ 50 psec

Current Rating: 0.5A per circuit

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Plateau HS Mezz™
High Speed Mezzanine**

**0.635mm (.025") Pitch
SlimStack™ SMT Stacking
Board-to-Board**

ORDERING INFORMATION

Mated Stack Height	Circuit Size		Plateau HS Mezz		SlimStack	
	Plateau HS Mezz	SlimStack	Plug	Receptacle	Plug	Receptacle.
10.00mm (.394")	12, 24, 48, 72	20, 40, 60, 80, 100, 120, 140, 160, 180, 200	75003-0X05	75005-0X04	53553	52760
					53627*	52885*
						52760
						52885*
12.00mm (.472")	12, 24	20 to 180	75003-0X05	75005-0X06	55091	52837
		40 to 80				52901*
13.00mm (.512")	12, 24	20 to 180	75003-0X08	75005-0X04	53481	52837
					53625*	52901*
						52837
						52901*
15.00mm (.591")	12, 24, 48, 72	40 to 140	75003-0X08 75003-0X10	75005-0X06 75005-0X04	53552	52837
					53649*	52901*
						52837
						52901*

*Embossed tape and reel packaging

Plateau HS Mezz Circuit Sizes	
X=3	12 circuit (6 pair)
X=0	24 circuit (12 pair)
X=1	48 circuit (24 pair)
X=2	72 circuit (36 pair)

Americas Headquarters
Lisle, Illinois 60532 U.S.A.
1-800-78MOLEX
amerinfo@molex.com

Far East North Headquarters
Yamato, Kanagawa, Japan
81-462-65-2324
feninfo@molex.com

Far East South Headquarters
Jurong, Singapore
65-6-268-6868
fesinfo@molex.com

Visit our Web site at <http://www.molex.com>

European Headquarters
Munich, Germany
49-89-413092-0
eurinfo@molex.com

Corporate Headquarters
2222 Wellington Ct.
Lisle, IL 60532 U.S.A.
630-969-4550
Fax: 630-969-1352