Achieve data rates up to 6.25 Gbps, significantly reduce crosstalk and improve PCB routing with Molex's VHDM® H-Series Backplane Connector System, ideal for telecom and datacom system upgrades without costly architecture redesigns

VHDM® H-Series Backplane Connector System

The Very High Density Metric 'H' Series (VHDM® H-Series) connector system is designed for applications that require very high interconnect density and high-speed signal integrity. VHDM H-Series enables an installed base to perform at 6.25 Gbps, enabling system upgrades without costly architecture redesigns. With an identical mating interface and envelope, the VHDM H-Series is fully backwards compatible with existing VHDM slots. Designers can use VHDM H-Series to extend the life of existing platforms, reduce development costs and speed higher performance systems to market.

The signal portion of the VHDM H-Series connector system consists of modules in increments of 10 columns or 25 columns in either 6 rows or 8 rows. The daughter card connector consists of a metal stiffener that combines signal wafers, power modules and guidance modules to make one continuous connector that can be ordered with one custom part number. The maximum length of a single stiffener is 300mm (~12 inches). The power contacts can handle 10.0A of current per blade, efficiently delivering up to 120.0A per 25.00mm (.984") of board edge with multiple mating levels for hot plug applications. Metal guide pins and key slots provide excellent guidance for large PCBs and eliminate the possibility of plugging a daughter card into the wrong slot. For more information on Molex's VHDM product offering, visit: www.molex.com/link/vhdm.html.

6 Row Series

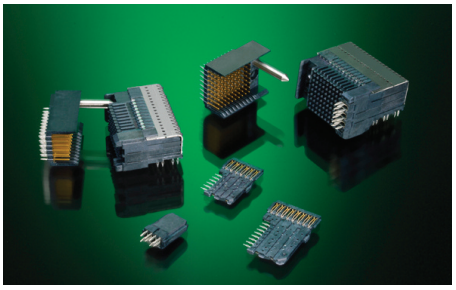
76763 Backplane Header, Open
76761 Backplane Header, Signal End, Guide Left
76762 Backplane Header, Shield End, Guide Right
76760 Daughter Card Receptacle*

8 Row Series

76134 Backplane Header, Open
76135 Backplane Header, Signal End, Guide Left
76136 Backplane Header, Shield End, Guide Right
76021 Daughter Card Receptacle*

FEATURES AND BENEFITS

- Data rates up to 6.25 Gbps, the highest of all VHDM versions enable system upgrade scalability without costly architecture
- Mates with existing VHDM systems to enable backwards compatibility with existing VHDM slots, extends the life of existing platforms, reduces development costs and provides a high system speed to the market
- Ability to combine VHDM® L-Series (1 Gbps), VHDM® (3.125 Gbps), VHDM® H-Series (6.25 Gbps) and VHDM-HSD™ (5Gbps) wafers on the same metal stiffener reduces application costs while improving design flexibility
- Internal ground shields control impedance and minimize cross talk
- Small compliant-pin 0.45mm (.018") PCB hole size improves PCB routing and back drilling while reducing impedance discontinuities
- Modular construction maximizes design flexibility via custom configuration of signal, power and guide modules



VHDM® H-Series Backplane System
Backplane header, daughter card, power module, wafer construction

*Daughter card receptacles are custom configurable and part of the final assembly.

SPECIFICATIONS

Reference Information

Packaging: Trays
UL File No.: E29179
CSA File No: 152514 (LR19980)
Mates With:

Receptacle	Headers
76760	76761
	76762
	76763
	76764
76021	76134
	76135
	76136
	76137

Designed In: Millimeters

Electrical

Signal Contact: 1.0A
Shield Contact (6 Row): 2.0A
Shield Contact (8 Row): 3.0A
Power Blade: 10.0A

Mechanical

Mating Force:
Signal: 40g per signal pin
Shield: 25g per shield chevron
Power: 150g per blade
Durability: 200 cycles

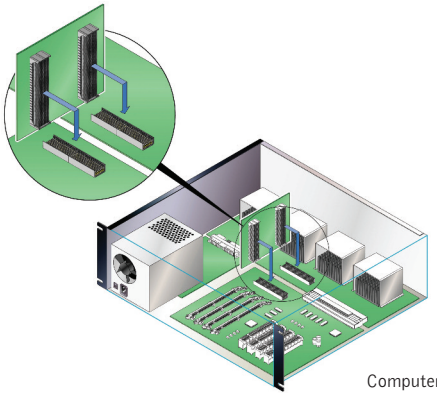
Normal Force:
Signal: 50g min.
Power: 100g min.

Physical

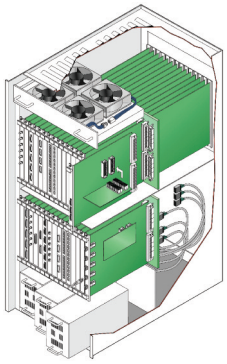
Housing: Liquid Crystal Polymer, UL 94V-0
Contact: Copper (Cu) Alloy
Plating:
Contact Area – 0.76µm (30µ") Gold (Au) min.
Solder Tail Area – Tin (Sn) or Tin/Lead (Sn/Pb)
Underplating – Nickel (Ni)
PCB Thickness: 1.60mm (.063") typical
Operating Temperature: -55 to +85°C

MARKETS AND APPLICATIONS

- Telecommunication equipment
- Hubs, switches, routers
- Central office, cellular infrastructure and multi-platform (DSL, Cable Data) systems
- Medical imaging
- Data networking equipment
- Storage
- Servers
- Test and measurement equipment
- Military



Computer Server



Telecom Router

VHDM® H-Series Backplane Connector System

6 Row Series

76763 Backplane Header, Open
76761 Backplane Header, Signal End, Guide Left
76762 Backplane Header, Shield End, Guide Right
76760 Daughter Card Receptacle*

8 Row Series

76134 Backplane Header, Open
76135 Backplane Header, Signal End, Guide Left
76136 Backplane Header, Shield End, Guide Right
76021 Daughter Card Receptacle*

ORDERING INFORMATION

Components	Configuration	Circuits	Plating	Order No.
6 Row Backplane Headers	Signal End – Guide Left	60	Tin/Lead	76761-1001
		150	Tin/Lead	76761-2501
		60	Tin	76761-9001
		150	Tin	76761-8501
	Shield End – Guide Right	60	Tin/Lead	76762-1001
		150	Tin/Lead	76762-2501
		60	Tin	76762-9001
		150	Tin	76762-8501
	Open	60	Tin/Lead	76763-1001
		150	Tin/Lead	76763-2501
		60	Tin	76763-9001
		150	Tin	76763-8501
6 Row Daughter Card	Wafer	6 Row	Tin/Lead	74031-3001
			Tin	74031-4001
8 Row Backplane Headers	Signal End – Guide Left	80	Tin/Lead	76135-1001
		200	Tin/Lead	76135-2501
		80	Tin	76135-9001
		200	Tin	76135-8501
	Shield End – Guide Right	80	Tin/Lead	76136-1001
		200	Tin/Lead	76136-2501
		80	Tin	76136-9001
		200	Tin	76136-8501
	Open	80	Tin/Lead	76134-1001
		200	Tin/Lead	76134-2501
		80	Tin	76134-9001
		200	Tin	76134-8501
8 Row Daughter Card	Wafer	8 Row	Tin/Lead	74041-2001
			Tin	74041-3001

VHDM is a registered trademark of Amphenol TCS
*Daughter card receptacles are custom configurable (they are a wafer-based construction) and part of the final assembly.

Order No. 987650-4271 Printed in USA/GF/2010.03