



VHDM® is optimized for single-ended applications while also supporting differential pair demands in one system.

Molex VHDM connector system is designed for backplane and mezzanine applications that require very high density and high-speed signal integrity. The system supports data rates up to 6.25Gbps in a robust modular construction enabling maximum design flexibility by combining wafers, power and guidance. The connector system is available in five, six and eight row configurations.

VHDM® Single-Ended and Differential Pair Backplane Connector System

Features and Benefits

Combine high-speed single-ended, differential pair and low-speed signals in one connector system

Robust, modular construction integrates signals, power and guidance

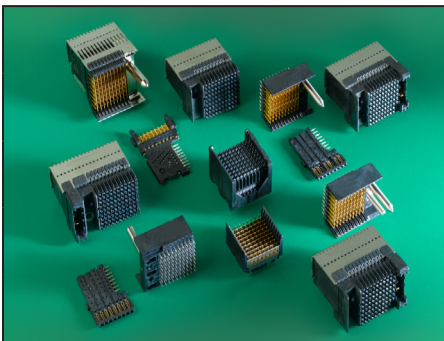
Maximizes design flexibility via wafer modularity

76-101 real signals per linear inch

Telcordia and UL specified

RoHS compliant



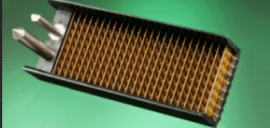
Identical intermatable/interchangeable second source available



Attribute	VHDM H-Series	VHDM	VHDM L-Series	VHDM-HSD
Speed / Data Rate	6.25 Gbps	3.125 Gbps	< 1.0 Gbps	5.0 Gbps
Signal Optimization	Single ended	Single ended	Single ended	Differential
Row Sizes	6, 8	6, 8	6, 8	5, 6, 8
Internal Ground Shield	Yes	Yes	No	Yes

VHDM H-Series – Single-Ended

- Enables data rates up to 6.25 Gbps
- Optimized for single-ended high density applications
- Backward compatible with standard VHDM

	Product	Configuration	Series		Features and Benefits
			6-Row	8-Row	
	VHDM-H Daughtercard	VHDM-H Wafer	74041-3001	74041-4001	<ul style="list-style-type: none"> • Create custom daughtercard connectors to meet your design application • Robust modular construction maximizes design flexibility by combining wafers, power and guidance • Enables system upgrade scalability without costly architecture redesign • Backward compatible with standard VHDM • Superior signal integrity performance • Improves PCB routing while reducing impedance • Broad range of standard backplane headers in 10 and 25 column configuration • Backplane headers are end-to-end stackable • Create custom-loaded backplane headers utilizing standard pin lengths of 4.25, 4.75, 5.15 and 6.25mm
	Daughtercard* (Press-fit)	VHDM-H Daughtercard Connector Assembly	76760	76021	
	VHDM-H Backplane Header (Press-fit)	Open	76763	76134	
		Guide Left	76761	76135	
		Guide Right	76762	76136	
		Custom	76764	76137	

*Final assembly order number will be provided based on custom configurations of VHDM wafers, power modules and/or guide pins. VHDM, VHDM-HSD, VHDM H-Series and VHDM L-Series are trademarks or registered trademarks of Amphenol Corporation.

VHDM – Single-Ended

- Enables data rates up to 3.125 Gbps
- Optimized for Single-Ended High-Speed Applications

	Type	Configuration	Series		Features and Benefits
			6-Row	8-Row	
	VHDM Daughtercard	Wafer	74031-1001	74041-1001	<ul style="list-style-type: none"> • Create custom daughtercard connectors to meet your design application • Robust modular construction maximizes design flexibility by combining wafers, power and guidance • Internal ground shield enable all pins to be used as signals • Daughtercard modular construction enables maximum design flexibility • Integrated high-speed, differential and low-speed applications • Broad range of standard backplane headers in 10 and 25 column configuration • Backplane headers are end-to-end stackable • Create custom-loaded backplane headers utilizing standard pin lengths of 4.25, 4.75, 5.15 and 6.25mm
	Daughtercard* (Press-fit)	VHDM Daughtercard	74030	74040	
		Hybrid VHDM, VHDM L-Series, VHDM-HSD™	75297	75299	
	Backplane Header (Solder-tail)	Open	77440	77444	
		Signal End - Guide Left	77441	77445	
		Shield End - Guide Right	77442	77446	
		Solder Tail Custom	77443	77447	
	Backplane Header (Press-fit)	Open	74057	74060	
		Guide Left	74058	74061	
		Guide Right	74059	74062	
		Custom	74074	74075	
	Right Angle Male* (RAM)	Right Angle Male	74600	75165	<ul style="list-style-type: none"> • Coplanar board-to-board application • Wafer-based construction enables maximum design flexibility
		Hybrid Right Angle Male VHDM L-Series	75286	75346	
	Vertical Receptacle Stacker (Press-fit)	VHDM Wafer	-	75117	<ul style="list-style-type: none"> • Press-fit design enables single-ended or differential routing

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VHDM L-Series – Single-Ended

- < 1.0 Gbps
- Optimized for single-ended low speed applications
- Cost performance optimization

	Type	Configuration	Series		Features and Benefits
			6-Row	8-Row	
	VHDM-L Daughtercard	Wafer	75187-1005	75188-1005	<ul style="list-style-type: none"> • Create custom daughtercard connectors to meet your design application • Robust modular construction maximizes design flexibility by combining wafers, power and guidance • Modular construction • Eliminates internal ground shields for low-cost / low-speed applications • Combines high-speed, low-speed and differential speed applications in one connector system • Broad range of standard backplane headers in 10 and 25 column configuration • Backplane headers are end-to-end stackable • Create custom loaded backplane headers utilizing standard pin lengths of 4.25, 4.75, 5.15 and 6.25mm
	VHDM-L Daughtercard* (Press-fit)	VHDM L-Series Daughtercard	75189	75199	
		Hybrid VHDM and VHDM L-Series	75190	75192	
	VHDM-L Backplane Header (Press-fit)	Open	75194	75197	
		Guide Left	75195	75198	
		Guide Right	75196	75199	

VHDM-HSD™ – Differential Pair

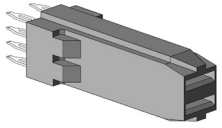
- 5 Gbps
- Optimized for differential pair applications

	Type	Configuration	Series			Features and Benefits
			5-Row	6-Row	8-Row	
	VHDM-HSD Daughtercard	Wafer	74671-1001	74881-1001	74681-1001	<ul style="list-style-type: none"> • Create custom daughtercard connectors to meet your design application • Design optimized for differential high-speed applications • Modular construction maximizes design flexibility by mixing single-ended and differential pair signals • Advance mate enables FMLB grounding applications • Broad range of standard backplane headers in 10 and 25 column configuration • Backplane headers are end-to-end stackable • Create custom-loaded backplane headers utilizing standard pin lengths of 4.25, 4.75, 5.15 and 6.25mm
	VHDM-HSD Daughtercard* (Press-fit)	VHDM-HSD Series	74670	74880	74680	
		Hybrid VHDM and VHDM-HSD	-	74886	74686	
	VHDM-HSD Backplane Header (Press-fit)	Open	74695	74979	74649	
		Guide Left	74696	74980	74650	
		Guide Right	74697	74981	74651	
		Custom	74702	74984	74659	

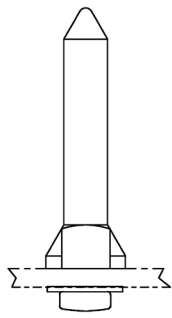
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VHDM Power Modules

- 10.0A per blade

	Type	Series	6-Row	8-Row	Features and Benefits
	Vertical Receptacle (Press-fit)	75888	75888-6000	75888-8000	RoHS Lead Free
	Power Module		20.0A	30.0A	

Free Standing Guide Pin

	Product	Series
	Guide Pin	74076

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