

# METRAL® RIGHT ANGLE HEADER AND VERTICAL RECEPTACLE

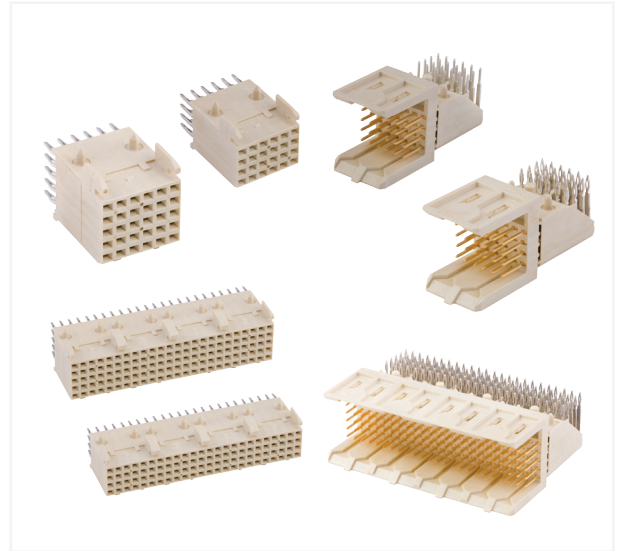
## OVERVIEW

Metral® product family offers the widest range of backplane connector solutions which includes right angle header and vertical receptacle series. The connectors are designed in accordance with IEC 61076-4-104 and Telcordia GR-1217-CORE.

Metral® right angle headers and vertical receptacles offer high contact density of 250 contacts per 100mm connector length and a contact pitch of 2mm. They are available in 4 and 5 row versions.

Metral® vertical receptacles can be used with vertical headers for mezzanine application.

Metral® backplane connectors meet Futurebus+ standards to support applications in data, industrial and instrumentation, medical and telecom markets.



## FEATURES

- Modular and scalable, available in 1, 2, 4 and 8 modules
- 250 contacts per 100mm connector length
- Press-fit, Solder-to-Board and Pin-in-Paste terminations
- Varying pin length enables first-mate, last-break capability
- 4 and 5 row versions available
- Dual beam contact design for receptacles
- Locating pegs option available

## BENEFITS

- Flexible modular length without any loss of contact position
- High signal density
- Caters to different application requirement
- Allows sequential connection of pins for design flexibility and offers protection
- Caters to different connector sizes
- Provides electrical reliability and withstands vibration
- Enables accurate positioning of connector on PCB, holds connector in place



## TECHNICAL INFORMATION

### MATERIALS

- Housing : High temperature thermoplastic; UL 94V-0
- Contact: Copper Alloy
- Plating: Performance-based plating

### ELECTRICAL PERFORMANCE

- Dielectric Withstanding Voltage: 1000V rms
- Insulation Resistance: 5000MΩ min.
- Current Rating: 1A (all contacts powered)

### ENVIRONMENTAL

- Operating Temperature: -55°C to +125°C

### SPECIFICATIONS

- Product Specifications: GS-12-445, 446, 447, 448

### MECHANICAL PERFORMANCE

- Mating Force: 0.45N max. per pin
- Unmating Force: 0.15N min. per pin

### APPROVALS AND CERTIFICATIONS

- IEC 61076-4-104
- GR-1217-CORE

### PACKAGING

- Tube for Press-fit and Solder-to-Board terminations
- Tape and Reel for Pin-in-Paste termination

### TARGET MARKETS/APPLICATIONS

- Data
- Industrial & Instrumentation
- Medical
- Telecom

## PART NUMBERS

Right Angle Header (RAH)		Module	Termination	Vertical Receptacle (VR)	
Row				Row	
4	5			4	5
HM1L41LDP000H6PLF	HM1L51LDP000H6PLF	1	Press-fit	85757-1101LF	85761-1101LF
HM1L42LDP000H6PLF	HM1L52LDP000H6PLF	2	Press-fit	85758-1101LF	-
HM1L43LDP000H6PLF	HM1L53LDP000H6PLF	4	Press-fit	85759-1101LF	85763-1101LF
HM1L44LDP000H6PLF	HM1L54LDP000H6PLF	8	Press-fit	-	-
HM1L41LAP000H6PLF	HM1L51LAP000H6PLF	1	Solder -to-Board	HM1S41TSR000H6PLF	HM1S51TSR000H6PLF
HM1L42LAP000H6PLF	HM1L52LAP000H6PLF	2	Solder -to-Board	HM1S42TSR000H6PLF	HM1S52TSR000H6PLF
HM1L43LAP000H6PLF	HM1L53LAP000H6PLF	4	Solder -to-Board	HM1S43TSR000H6PLF	HM1S53TSR000H6PLF
HM1L44LAP000H6PLF	HM1L54LAP000H6PLF	8	Solder -to-Board	HM1S44TSR000H6PLF	HM1S54TSR000H6PLF
HM1L41LFP000H6PLF	HM1L51LFP000H6PLF	1	Pin-in-Paste		

Note: Vertical receptacles with Solder-to-Board termination available upon request

BPLMETRALRAHVR0615EA4

# Mouser Electronics

Authorized Distributor

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[85757-1101](#) [HM1L41ADP000H6PLF](#) [85758-1101](#) [HM1L41CDP000H6PLF](#) [HM1L41DAP000H6PLF](#)  
[HM1L41DDP000H6PLF](#) [HM1L41LAP000H6PLF](#) [HM1L41LDP000H6PLF](#) [HM1L41ZDP424H6PLF](#)  
[HM1L42AAP000H6PLF](#) [HM1L42ADP000H6PLF](#) [HM1L42DAP000H6PLF](#) [HM1L42DDP000H6PLF](#)  
[HM1L42ZDP421H6PLF](#) [HM1L42ZDP444H6PLF](#) [HM1L43AAP000H6PLF](#) [HM1L43ADP000H6PLF](#)  
[HM1L43DDP000H6PLF](#) [HM1L43LAP000H6PLF](#) [HM1L43ZAP459H6PLF](#) [HM1L44AAP000H6PLF](#)  
[HM1L44ADP000H6PLF](#) [HM1L44LAP000H6PLF](#) [HM1L51AAP000H6PLF](#) [HM1L51DAP000H6PLF](#)  
[HM1L51DDP000H6PLF](#) [HM1L51LAP000H6PLF](#) [HM1L51LDP000H6PLF](#) [HM1L51LDP367H6PLF](#)  
[HM1L52ADP000H6PLF](#) [HM1L52DAP000H6PLF](#) [HM1L52LAP000H6PLF](#) [HM1L52LDP000H6PLF](#)  
[HM1L52ZDP411H6PLF](#) [HM1L53AAP000H6PLF](#) [HM1L53ADP000H6PLF](#) [HM1L53DAP000H6PLF](#)  
[HM1L53DDP000H6PLF](#) [HM1L53LAP000H6PLF](#) [HM1L53LDP000H6PLF](#) [HM1L54AAP000H6PLF](#)  
[HM1L54ADP000H6PLF](#) [HM1L54CDP000H6PLF](#) [HM1L54DDP000H6PLF](#) [HM1L54LAP000H6PLF](#)  
[HM1L54LDP000H6PLF](#) [HM1S41FER000H6PLF](#) [HM1S41FER400H6PLF](#) [HM1S41TRR000H6LF](#)  
[HM1S42TRR000H6LF](#) [HM1S44TSR000H6LF](#) [HM1S51FER400H6PLF](#) [85757-1201](#) [85759-1101](#) [85760-1101](#) [85761-](#)  
[1120](#) [85761-1121](#) [85761-1122](#) [85761-1123](#) [85761-1124](#) [85763-1101](#) [85763-1102](#) [85763-1201](#)  
[HM1L41BAP000H6PLF](#) [HM1L41BDP000H6PLF](#) [HM1L41ZAP329H6PLF](#) [HM1L42BAP000H6PLF](#)  
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[HM1L53BDP000H6PLF](#) [HM1S43FER000H6PLF](#) [HM1S51FER000H6PLF](#) [HM1S52FER000H6PLF](#) [58363-101LF](#)  
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[HM1S41TRR400H6LF](#) [HM1S51TRR400H6PLF](#) [85822-101LF](#) [85758-1101LF](#) [85761-1101LF](#) [HM1L41AAP000H6PLF](#)  
[HM1L51ADP000H6PLF](#) [72017-112LF](#) [85757-1101LF](#) [85757-1103LF](#) [85757-1201LF](#) [85759-1101LF](#) [85761-1025LF](#)