



**1.00mm (.039") Pitch
iCool™**

Low Profile VRM Connector

87786, 87787, 87810

**EdgeCard Connector
Vertical, Through Hole, SMT
Right Angle, Through Hole**



Low profile VRM connectors for 1U servers handle up to 130 amps of VRM 10.0 and 10.1

Today's high performance microprocessors require highly regulated DC-to-DC power conversion located near the processor. The Molex low profile VRM (Voltage Regulator Module) connector is specifically designed to handle high output currents at high slew rates. This connector was designed in conjunction with a high performance power silicon manufacturer who also designed a low profile module for this connector in 1U applications. Major VR makers are currently implementing modules for this connector.

Features and Benefits

- Includes 20 signal contacts for VR control and 72 power contacts for 12 volt input current and up to 130.0A of VO output and return
- Open housing allows for air flow to cool the contacts much like a heat sink
- Low loop inductance design is ideal for high slew rates characteristic of today's high performance VRs
- Through hole pin field is designed for easy route through of signals between processor and chip set
- Four fork locks secure the connector to PCB to resist shock and vibration
- Unique reverse angle latch notch feature retains the VR securely during shock testing

SPECIFICATIONS

Reference

Product Specification:
Vertical - PS-87786-008
Latchless - PS-87810-008
Right Angle - PS-87818-006

Packaging: Tray
UL File No.: Pending
CSA File No.: Pending
Used With: VRM module
Designed In: Millimeters

Electrical

Voltage: 48 volt
Current:
Still air: 30°C rise, 160.0A VO output and return
400 lfm: 30°C rise, 300.0A VO output and return
Contact Resistance:
Power Contacts: 5 mΩ max.
Signal Contacts: 10 mΩ max.

Mechanical

Mechanical Shock: 50G with 40g heat sink for latched versions
Mating Force: 25Kgf max.
Unmating Force: 3.5Kgf max.
Durability: 25 cycles

Physical

Housing: High Temp Thermoplastic
Contact: Copper Alloy
Plating: Gold over Nickel in contact area
Operating Temperature: -10 to +105°C

APPLICATIONS

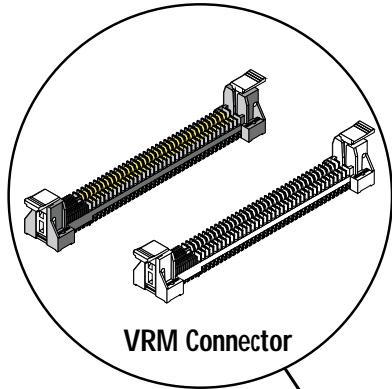
- Specifically target 1U servers but applicable to all servers
- Small form factor PC's
- Workstations



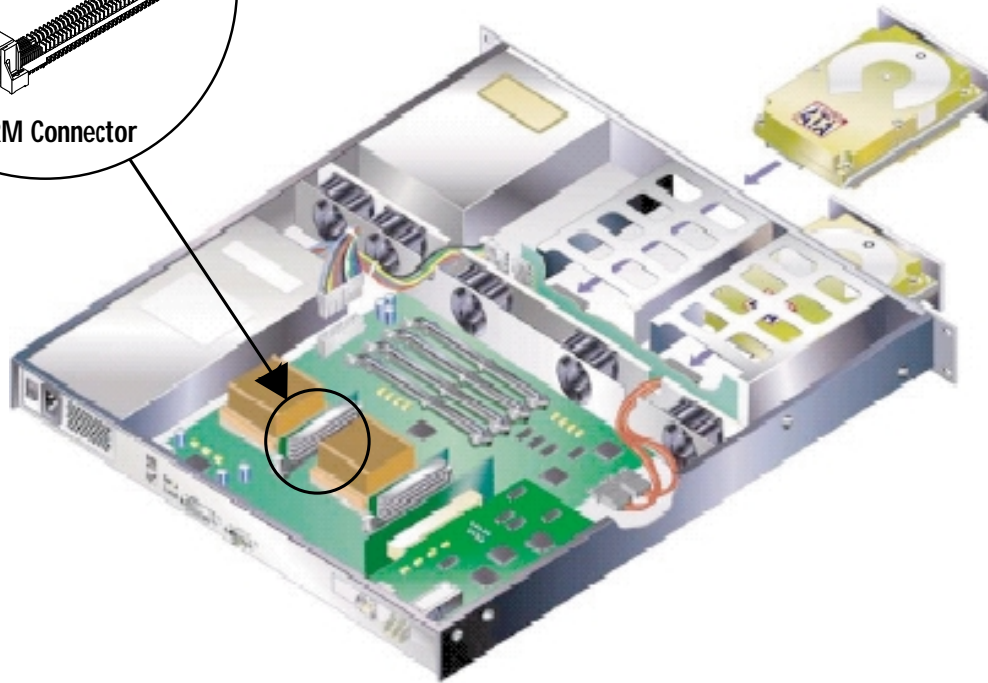
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VRM Connector



Order No.	Description	Size
87786-0001	VRM Connector, Vertical, SMT with Latches	20 signal, 72 power
87787-0001	VRM Connector, Vertical, Through Hole with Latches	20 signal, 72 power
87810-0001	VRM Connector, Vertical, Through Hole (no Latches)	22 signal, 88 power
87818-0001	VRM Connector, R/A, Through Hole with Latches	20 signal, 72 power

Custom sizes possible, please contact Molex Sales.

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