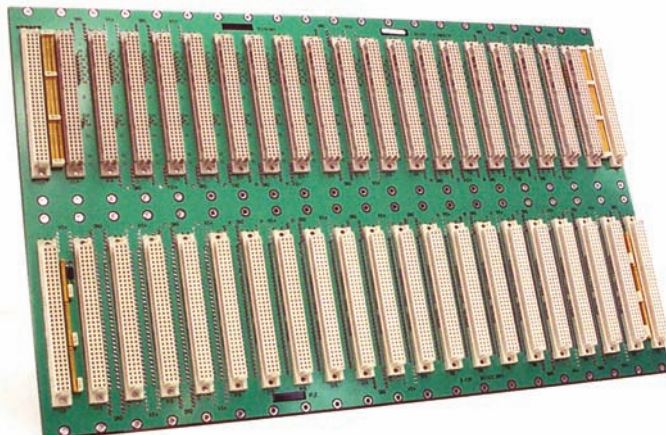




Vectorbord® Backplanes

VME J1/J2

VME64 96-Pin



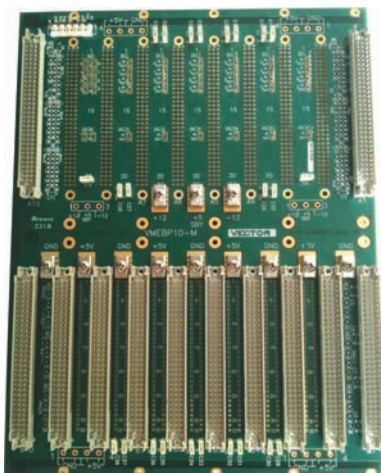
Top View: VMEBP20P00: 20-Slot with inboard termination

POWER RATING

| Voltage | Per slot rating @ 25°C to | 60°C |
|-------------|------------------------------|------|
| +5V | 9.0 Amps | 6A |
| +12V | 1.5 Amps | 1A |
| -12V | 1.5 Amps | 1A |
| +5V Standby | 1.5 Amps | 1A |

SPECIFICATIONS

| | |
|---------------------|---|
| Data Transfer Rate: | Up to 40 Mbytes/Sec. |
| Cross Talk: | |
| Signal to Signal | 360mV due to six closest lines in simultaneous transition using AS type drivers |
| Power to Signal | 4mV per volt of power plane noise |
| Delay: | 25 ns (AS type driver to AS type receiver) |
| Overshoot: | 260 mV max |
| Voltage Rating: | 100 Volts |
| Altitude Rating: | 10,000 feet |
| Operating Temp: | -25°C to +125°C |
| Connector Type: | Press-fit DIN 41612 Class II |
| Housing Material: | Thermoplastic polyester 94V-O UL rated |
| Insertion Force: | 36 pounds typical (3.0 oz per pin) |
| Withdrawal Force: | 24 pounds typical (2.0 oz per pin) |



VMEBP10 with shrouds on P2

J1/J2 Monolithic 6U VMEbus Backplanes 3 to 21-Slot

Vector Monolithic Series backplanes are designed to meet VMEbus specification Rev. C1 and Rev. D. All termination is placed inboard of the two end connectors to allow the maximum number of slots (21) in a 19" RETMA rack.

The combining of the J1 and J2 in an 8-layer single construction permits the copper layers for power and ground to be continuously distributed. Decoupling capacitors are provided at the ends and may be added at slot intervals at any time as needed.

The resulting improved power distribution as well as signal shielding in ground layers creates a high performance back-plane with low signal cross talk. Controlled impedance in both J1 and J2 sections and low propagation delay also results. Holes and pads coated with .0003" minimum 63/37 to 60/40 tin-lead solder.

Connectors:

Press-fit 96-Pin DIN connectors (per DIN 41612, Class II) are used. The end connectors have gold or tin plated wire wrap tails and shrouds installed for interconnection to other back-planes or instruments.

Standard:

Pins are provided and installed for jumper use.

Auto Bus Grant(ABG):

This option calls for replacement of standard connectors with 96-pin connectors with automatic switching capability mechanically built in. They eliminate the need for manual jumpering entirely.

Power To Board:

There are two types of power connectors by which power is brought to the board:

- 1) The "P" series which uses a 10-pin power block or "bug" and #6-32 hardware, or
- 2) The "M" series which uses a combination of power bugs and Mate-N-Lok connectors.

"P" Series:

Power bugs are press fit and accept wire power bugs connections directly. Power, +5V, +12V, -12V and +5SBY, may be distributed by individual wire or by bus bar installation.

"M" Series: Mate-N-Lok Power Connectors

Power is attached to the board by a combination of power bugs and Mate-N-Lok connectors.

Layer Designation

| | | Finished Copper |
|--------|---------|--------------------|
| Power | Layer 1 | 3 oz. |
| Ground | Layer 2 | 1 oz. |
| Signal | Layer 3 | 1 oz. |
| Ground | Layer 4 | 1 oz. |
| Signal | Layer 5 | 1 oz. |
| Ground | Layer 6 | 1 oz. |
| Signal | Layer 7 | 1 oz. |
| Ground | Layer 8 | 3 oz. |



Vectorbord® Backplanes

VME J1/J2



ELECTRONICS & TECHNOLOGY, INC.

VME Monolithic J1/J2 Backplane

Ordering Options

Four Configurations for power connectors: Power Bugs ("P" Series)
Mate-N-Lok ("M" Series), combinations of Mate-N-Lok and Power Bugs ("S" Series), and no connectors.

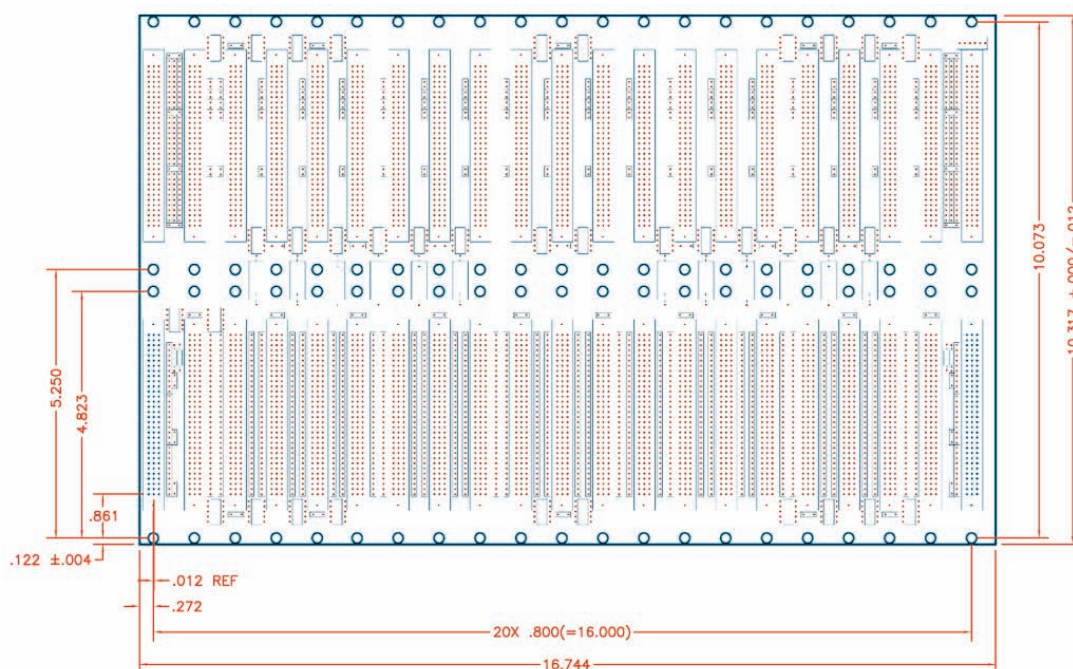
I/O mounting area adjacent to J1 connectors: with gold or tin plated, double-tailed (accessible from both sides of backplane) wire-wrap pins installed at factory, or with no pins installed.

Decoupling capacitors: factory installed at power to ground positions only, at ground to chassis positions only, at both power to ground and ground to chassis positions, or with no pins installed.

VME Monolithic J1/J2 Backplane Standard 10.32"H (262.13mm), 6U Ordering Information

| VME BP | 10 | = | P | 0 | 0 |
|--------------------------------|----|--------------------|-----------------------------|--------------------|--|
| No of slots | | | Power Connectors | | Capacitors |
| 03 = 3-slot 2.34"L (59.4mm) | | | O = No Connectors | | 0 = No Caps |
| 05 = 5-slot 3.94"L (100.2mm) | | | M = Mate-N-Lok | | 1 = Caps installed at power to ground positions only |
| 07 = 7-slot 5.54"L (140.8mm) | | | P = Power Bugs | | 2 = Caps installed at ground to chassis positions only |
| 10 = 10-slot 7.94"L (201.8mm) | | | S = Mate-N-Lok & Power Bugs | | 3 = Caps installed at both power & ground positions |
| 12 = 12-slot 9.54"L (242.4mm) | | | | Pins for I/O to J2 | |
| 14 = 14-slot 11.14"L (283.1mm) | | | | O = No pins | |
| 17 = 17-slot 13.54"L (344.0mm) | | | | 1 = Pins installed | |
| 20 = 20-slot 15.94"L (405.0mm) | | | | | |
| 21 = 21-slot 16.74"L (425.3mm) | | | | | |
| | | Connector Options | | | |
| | | - = Standard | | | |
| | | A = Auto Bus Grant | | | |

SLOT POSITIONS



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FRONT SHOWN

800-423-5659

Backplanes



Backplane Mounting Hardware

Each Set includes:

M2.5 X 12MM Screw

#3 Lockwasher

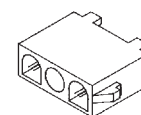
M2.5 (DIN#125) Flat Washer

HD56-1 42 sets

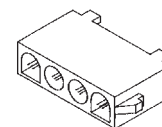
HD56 12 sets



10-Pin
Power Bug
(2.5 amps/pin)



+12, +5SBY, -12V
(10 amps/pin)



+5, +5, GND GND
(10 amps/pin)

17