

Amphenol ABSI VME Datasheet

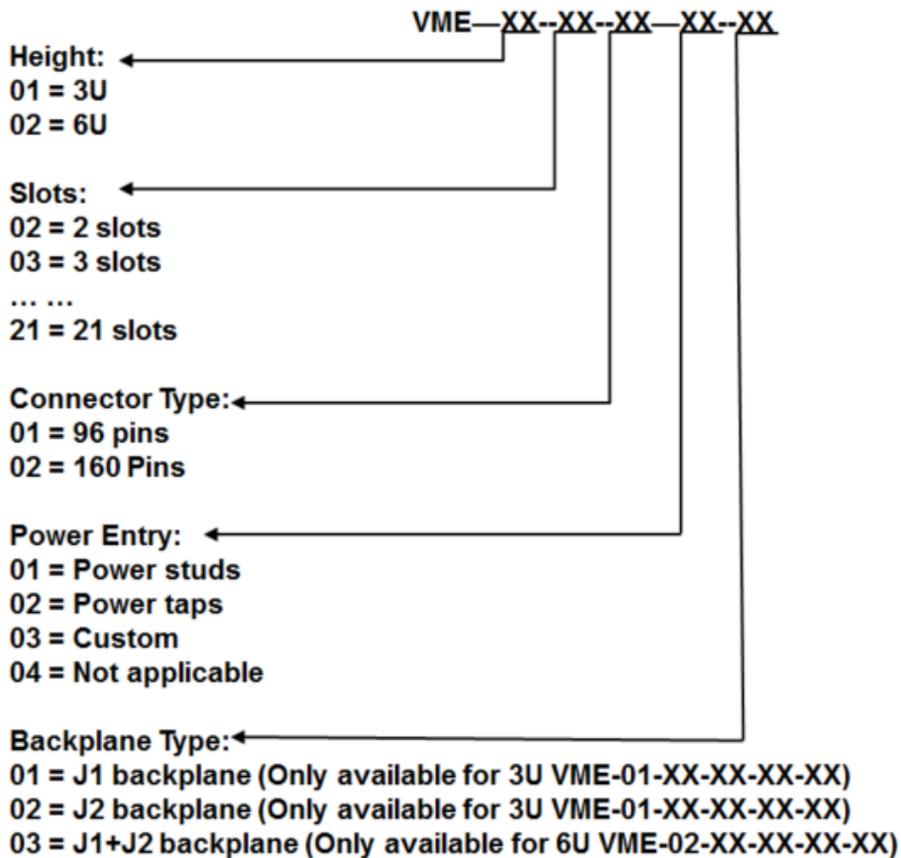


Amphenol ABSI VME Backplanes

Amphenol ABSI's VME high performance backplanes are available in both 3U & 6U form factors. All VME backplanes are compliant to VITA VME specifications. ABSI can customize the VME backplane against our customer's specific requirements.

Amphenol ABSI VME backplane order configuration part number table.

The following configuration table provides the part numbering structure applicable to the full range of VME backplanes on offer from Amphenol ABSI. We can engage with you on any VME backplane requirement that you may have. Please contact us for further details.



Configuration part number example

VME-01-06-01-03-02 specifies a 3U , 6 slot VME J2 backplane, configured with 96pin connectors and customer specific custom power entry requirements.

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Description

The VME backplane supports 19" rack applications. The maximum form factor expands to a 21slot backplane. The VME system slot 1 is on the left side of chassis, with all other bus slots extending to the right hand side of the system slot. The Amphenol ABSI VME backplane is provided across 3 specific applications.

(Application connect to backplane by pin (optional to use 160 pin) DIN41612 connectors.)

J1 backplane:

3U height (Eurocard form factor). The J1 backplane contains all of the address, data and control buses. It provides all of the signal paths required for basic operation. The J1 backplane can be used independently in VME applications.

J2 backplane:

An optional second PCB is available under the VMEbus system, referenced as the J2 backplane. It provides additional DIN41612 connectors and signal paths required for wider data and address buses. The J2 backplane is 3U high. In the 19" rack system, the J2 backplane is installed below the J1 backplane in the lower portion of the sub rack. It provides 64 user defined IOs and the creation of end to end connections.

The J2 backplane is an extension of the J1 backplane.

6U (J1+J2) backplane:

The 6U backplane is an integrated backplane that includes both J1 and J2 connections within a single printed circuit board. The 6U backplane has a continuous plane power plane. The power distribution performance in the 6U backplane is better than the J1 and J2 backplane combination. Where a new system intends to use a J2 backplane Amphenol ABSI would strongly recommend the selection of the 6U backplane

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Amphenol ABSI VME Features:

- Compliant to VITA 1.1-1997 (S2011) Specification
- 2 to 21 slots configuration
- Daisy chain routing
- 4 HP slot pitch
- IEC 61076-4-113 & IEC 603-2 Style C connectors
- Support Rear IOs
- Screws/studs for power entry
- PCB material FR-4, UL recognized 94-VO
- RoHS compliant

PCB information:

- 8 layers board
- Slot pitch 0.8"
- Independent power and ground layers for power distribution
- Signal impedance Z0 55 Ohms +/-10%
- FR4 material

Connector Type:

Two connector types are used on the VME backplane, one for 96 pin configurations and one for 160 pin configurations. The 160 pin connector as defined in the IEC 61076-4-113 connector specification is an expanded 96 pin connector that is complementary to the IEC 603-2 Style C connector. The 160 pin connector contains 5 rows of contacts. The 96 pin connector has 3 rows of contacts, representative of the center 3 rows of contacts in the 160 pin connector.

Within the 160 pin connector, Row A; Row B and Row C are identical in form, fit and function to the 96 pin IEC 603-2 Style C connectors, used in original VME and VME64 applications.

Row Z and Row D adds 64 pins to the outer shell of the connector providing a total of 160 pins. The 160 pin connector is compatible with the 96 pin connector. Boards with 160 pin connectors can plug into backplanes using 96 pin connectors and boards with 96 pin connectors can plug into backplanes using 160 pin connectors. The 96 pin connector is available across numerous manufacturers from Amphenol AICC, Harting, Ept, Erni, etc while the 160 pin connector is only available from Harting 02021602201



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Power entry solution

Amphenol ABSI VME backplanes have a few power entry solutions to meet our customer's configuration requirements. Choose between power tags, screws or studs as the power input. We also offer industry standard power entry options on VME backplanes to meet your power entry requirement.

Power tags example ERNI 214787:

Press-fit power tags is an option on the VME backplane. Each power tap can carry 40A current.



Power Studs example PEM KFH-632-8-ET

Use of press-fit studs is also an option on VME backplane. Each power tap can carry 30A current.



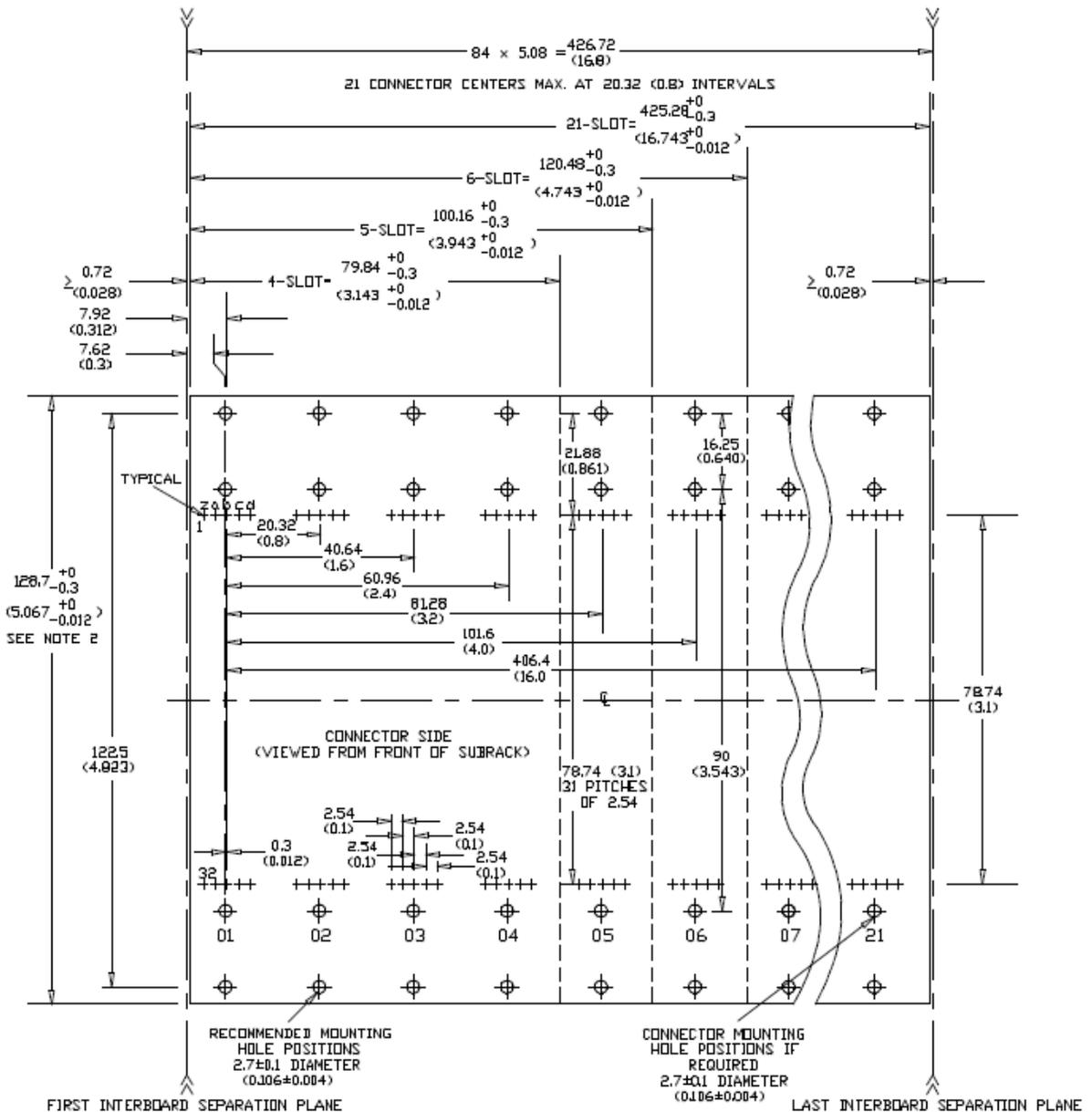
Custom

Our customers can also specify a custom power entry solution that they will use.

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3U Backplane Size



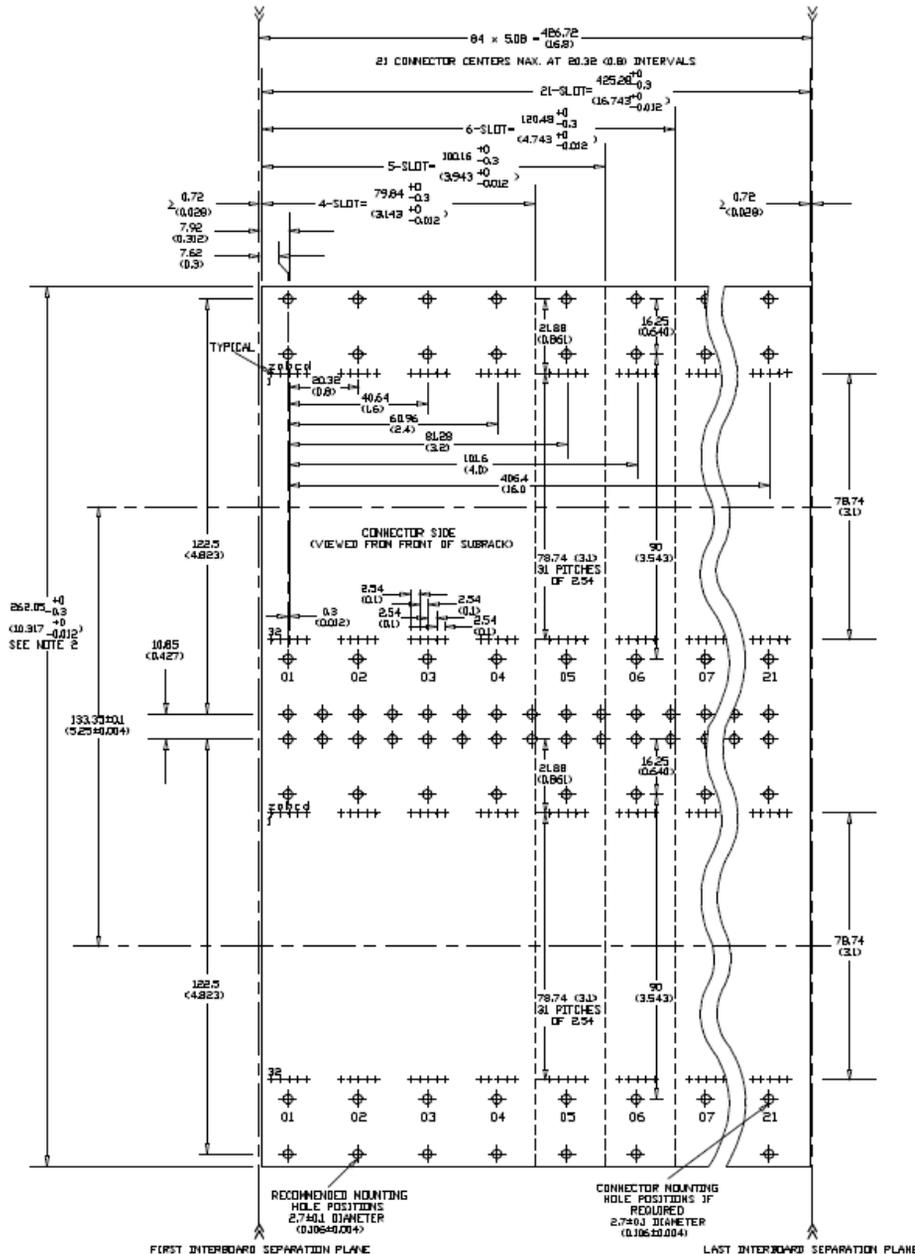
NOTE:

1. All dimensions are shown in millimeters. Inch dimensions are shown in parentheses.
2. The overall height of a J1 or a J2 backplane may be 130.0 ± 0.3 (5.118 ± 0.012)

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6U Backplane Size



NOTE:

1. All dimensions are shown in millimeters. Inch dimensions are shown in parentheses.
2. The overall height of a J1/J2 backplane may be 260.0 ± 0.3 (10.236 ± 0.012).

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Amphenol ABSI

Amphenol ABSI is an industry leader of backplane and system solutions. Amphenol ABSI has been a leading designer and manufacturer of backplanes for more than 30 years.

Amphenol ABSI deliver:

- Industry leading interconnect technology
- Advanced printed circuit capabilities and partnerships
- Innovative backplane system design and manufacturing
- Integrated design / applications engineering services
- Flexible, global support and supply chain management
- Most extensively tooled Backplane Supplier in the industry
- Industry leading Mechanical and SI test solutions
- Lowest cost solution on highest performance backplane

