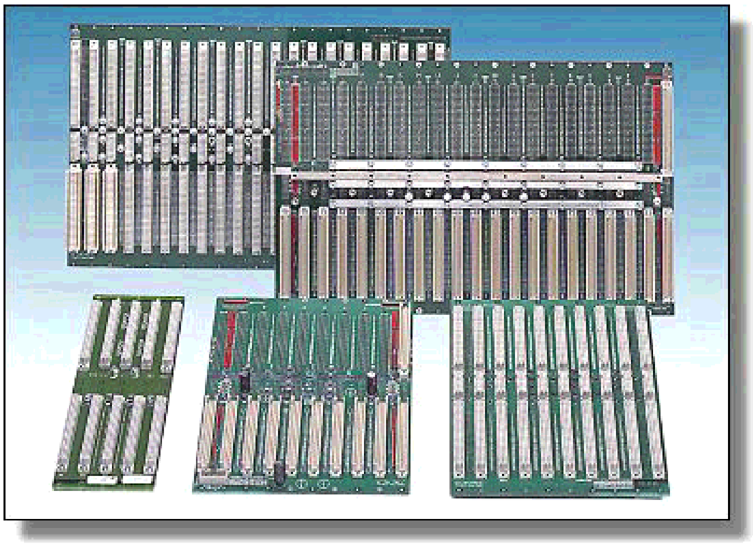
High Performance Backplanes



3U & monolithic 6U for VME, VME64x, VIPA, CERN-V 430

This new, complete line of VMEbus backplanes meeting the IEEE and IEC standards as well as the new VIPA standard for physics has been designed for high performance applications.

Extended power layers in combination with special current rails permit a high power distribution. The standard VME 21 slot monolithic backplane features more than 300A current capability for the 5V, 15A per slot (at 70°C) with 96 pin connector.

All backplanes are outfitted with automatic daisy chain function (ADC) which is integrated at each J1/ P1 level and has been realized either passive mechanically (96 pin connector) or active electronically (160 pin connector).

WIENER backplanes are equipped with an on-board termination either passive (96-pin connectors) or active (160 pin connectors). On board filter capacitors (electrolytic and ceramic) are wide scattered placed. Together with a prudent power layer design this guarantees highest filtering efficiency against power supply and signal noise.

- ***STRIPLINE* technology**
- **high current distribution**
- **Excellent RF shielding**
- **Protected power sense lines on board**
- **Minimized ground shift**
- **Excellent decoupling of bus lines**
- **passive / active automatic daisy chain**
- **on-board termination (passive or active)**
- **controlled characteristic impedance**
- **excellent low crosstalk performance**
- **high efficiant bus decoupling with distributed filter capacitors**

Type	**VME J1**	**VME J2**	**VME**	**VME 430**	**VME 64x**	**VME 64X**	**VIPA**
Connectors	J1	J2	J1-J2	J1-Jaux-J2	J1	J1-J0-J2	J1-J0-J2
Height	3U	3U	6U	6U	3U	6U	6U
Slots available	5, 7, 9, 10,15,21	5, 7, 9, 10,15,21	5, 7, 9, 10,15,21	5, 7, 9, 10,15,21	7, 9, 10, 21	7, 9, 10, 21	7, 9, 10, 21
Layers	8	4	8	8	10	10	18
On-board termination	passive	passive	passive	passive	active	active	active
Automatic daisy-chain	mechan.	mechan.	mechan.	mechan.	active	active	active
3-row connectors	J1	J2	J1-J2	J1-J2-Jaux	-	-	-
5-row connectors	-	optional	optional J2	optional J2	J1-J2	J1-J2	J1-J2
Power distribution each slot (<70°C)	**VME J1**	**VME J2**	**VME**	**VME 430**	**VME 64x**	**VME 64X**	**VIPA**
3,3V	-	-	-	-	-	20A	20A
5V	7,5A	7,5A	15A	15A	10A	18A	18A
+/-12V	2,5A	-	2,5A	2,5A	-	2A	2A
+/-15V	-	-	-	2,5A	-	-	-
-5,2V	-	-	-	15A	-	-	-
-2V	-	-	-	7,5A	-	-	-
Vw, Vx, Vy, Vz	-	-	-	-	-	3A	3A
V1, V2	-	-	-	-	2A	2A	2A
Power Connections	Studs	Studs	Studs	Studs	Bugs	Bugs	Bugs

Sense and control connector:	Flat cable type
Control signals:	AC-Fail and Sys- Reset
Sense protection:	PTC- resistor against short circuit, Inductivity against noise loop
Current rails:	$16mm^2$ per voltage additional if currents higher than 2,5A per slot $32mm^2$ per voltage additional if currents higher than 10A per slot $120mm^2$ common ground rail

Other number of slots and customer specified backplanes on request!

Accessories:

- I/O Backplanes, 3U high, equipped with 96pin or 160pin connectors, two screen layers
- Piggy-Back board to extend a VME J2 backplane to a VXI J2 level, -2V and -5,2V rails.
- Jacking Nuts to adapt and fix VSB boards to the J2 Level.
- Extraction Lever for rear J2 connector shrouds
- Mounting material

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