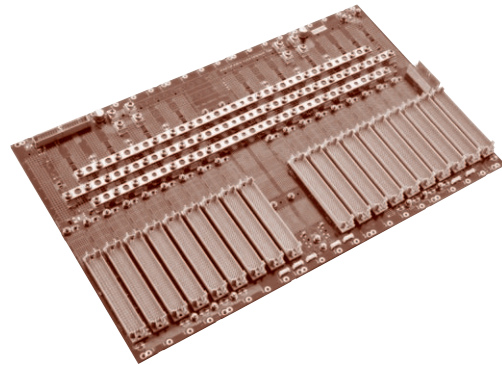
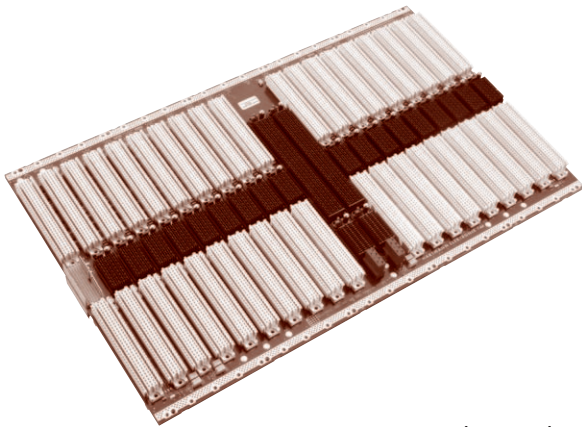




VXS 6 U General and technical information



The VMEbus, based on the IEEE 1014 and IEC 821 standards, has become an established industrial standard worldwide.

The VXS (VMEbus Switched Serial Standard) represents an extension of the VME family according to VITA 41.0. This system is downward-compatible, so that assemblies with 96-pin connectors to DIN 41612 can still be used.

All Hartmann VMEbus boards are based on the HIGH-SPEED DESIGN concept. Low reflection is achieved by means of uniform signal line surge impedance. Shielding of each individual signal line assures minimal coupling and therefore guarantees trouble-free operation even when expanded to the 64-bit mode with the 2e protocol (160Mbyte/s).

The transmission capacity in the VXS range (J0) is 2500 Mbits/s for each pair of cards.

Termination

In order to prevent interference on signal lines which might result from reflection at open line ends, these lines must be terminated.

A distinction is made between passive and active termination. The advantage of active termination is reduced closed-circuit current consumption. Passive termination features better frequency response.

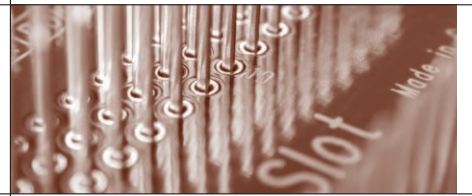
Daisy chaining wiring

For this VXS-Backplane automatic daisy-chaining with a patented bidirectional procedure (Wiener patente no. 102004023737.9 (Germany) und EP1745386 (Europe)) is used.

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Chassis GND connection

There is a solid electrically conductive chassis GND surface in the backplane-to-card rack mounting area. This guarantees EMC-tight mounting of the bus board on the card rack.

HF coupling of card rack and system ground is implemented by capacitors (10nF, 200 V in each slot).

Static charges are discharged with a resistor ($\geq 1 \text{ M}\Omega$).

An additional Chassis-GND connection is provided with a M3 terminal screw.

Power connections

The main operating voltages and GND are supplied via terminal bars and M4 screws for the cables. On request additional M6 screw will be added.

V1/V2 is available via M4 screw terminals. They can be linked together with terminal bars.

The auxiliary operating voltages are supplied via M3 screw terminals. The arrangement of terminal bars ensures an optimal power supply of the modules.

Utility connector

The special signals to the power supply unit are brought out to a separate connector on the backplane. Beside the lines for Voltage Monitoring 8 external connectors for temperature sensors are feed-through to the 40-pin connector.

All lines for Voltage Monitoring are connected with Line Filters. A double-row 40-pin connector with a contact spacing of 2.54 mm is used.

Power Management

Further connectors are available for serial communication with 4 power supplies (PS1-PS4) and a DSP.

AUX_PWR is set to 5 V or 5 V STDBY with a 3-pin feed-through connector.

There are 2 connectors for system management IPMB and SMB.



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General and technical information

IPMB_PWR and SMB_PWR is settable to 5 V or 5 V STDBY with 3-pin feed-through connectors.

Live-Insertion

Live-Insertion signals (LI-IN; LI-OUT) are available via 2-pin feed-through connectors.

Geographical Addressing J1 VME64x

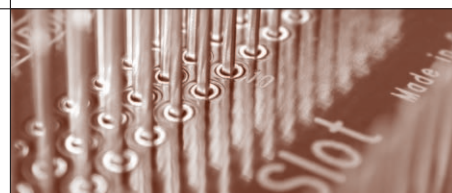
Slot Number	GAP* Pin J1-D9	GA4* Pin J1-D17	GA3* Pin J1-D15	GA2* Pin J1-D13	GA1* Pin J1-D11	GA0* Pin J1-D10
1	Open	Open	Open	Open	Open	GND
2	Open	Open	Open	Open	GND	Open
3	GND	Open	Open	Open	GND	GND
4	Open	Open	Open	GND	Open	Open
5	GND	Open	Open	GND	Open	GND
6	GND	Open	Open	GND	GND	Open
7	Open	Open	Open	GND	GND	GND
8	Open	Open	GND	Open	Open	Open
9	GND	Open	GND	Open	Open	GND
10	GND	Open	GND	Open	GND	Open
11	Open	Open	GND	Open	GND	GND
12	GND	Open	GND	GND	Open	Open
13	Open	Open	GND	GND	Open	GND
14	Open	Open	GND	GND	GND	Open
15	GND	Open	GND	GND	GND	GND
16	Open	GND	Open	Open	Open	Open
17	GND	GND	Open	Open	Open	GND
18	GND	GND	Open	Open	GND	Open
19	Open	GND	Open	Open	GND	GND
20	GND	GND	Open	GND	Open	Open
21	Open	GND	Open	GND	Open	GND

Pin Assignments

Pin	DSP (X1105)	PWR (X1206)	PS1 (X1101)	PS2 (X1102)	PS3 (X1103)	PS4 (X1104)	IPMB (X66)
1	DSP_SCL	+5 V	PS1_SCL	PS2_SCL	PS3_SCL	PS4_SCL	IPMB_SCL
2	GND	AUX_PWR	GND	GND	GND	GND	GND
3	DSP_SDA	+5 V STDBY	PS1_SDA	PS2_SDA	PS3_SDA	PS4_SDA	IPMB_SDA
4	AUX_PWR		AUX_PWR	AUX_PWR	AUX_PWR	AUX_PWR	IPMB_PWR
5	DSP_ALERT		PS1_ALERT	PS2_ALERT	PS3_ALERT	PS4_ALERT	SMB_ALERT

Pin	IPMB_PWR (X68)	SMB (X65)	SMB_PWR (X67)	LI-IN (X101-21)	LI-OUT (X01-10, X13-20)	VXS_PWR (X11_P, X12_P)
1	+5 V	SMB_SCL	+5 V	LI-IN*	LI-OUT*	VPC
2	IPMB_PWR	GND	SMB_PWR	GND	GND	VPC
3	+5 V STDBY	SMB_SDA	+5 V STDBY			VPC
4		SMB_PWR				VPC
5		SMB_ALERT				GND
6						GND

VXS 6 U General and technical information



VMEbus

Pin Assignment Utility connector X5

Pin	1	2	3	4	5	6	7	8	9	10
	+3.3 V Sense	-3.3 V Return	-12 V Sense	-12 V Return	+12 V Sense	+12 V Return	-48 V Sense 2	+48 V Sense 2	+48 V Sense 1	-48 V Sense 1

Pin	11	12	13	14	15	16	17	18	19	20
	NC	NC	NC	NC	NC	NC	NC	NC	+5 V Sense	+5 V Return

Pin	21	22	23	24	25	26	27	28	29	30
	SYSFAIL*	GND	ACFAIL*	GND	SYSRESET*	GND	NC	NC	Temp. 8	Temp. 7

Pin	31	32	33	34	35	36	37	38	39	40
	Temp. 6	Temp. 5	Temp. 4	Temp. 3	Temp. 2	Temp. 1	Temp. Return	NC	NC	NC

NC = not connected

Pin Assignments J1 VME64x

Pin	ROW Z	ROW A	ROW B	ROW C	ROW D - Slot 1	ROW D
1	MPR	D00	BBSY*	D08	VPC	VPC
2	GND	D01	BCLR*	D09	GND	GND
3	MCLK	D02	ACFAIL*	D10	+V1	+V1
4	GND	D03	BG0IN*	D11	+V2	+V2
5	MSD	D04	BG0OUT*	D12	RsvU-1	RsvU-1
6	GND	D05	BG1IN*	D13	-V1	-V1
7	MMD	D06	BG1OUT*	D14	-V2	-V2
8	GND	D07	BG2IN*	D15	RsvU-2	RsvU-2
9	MCTL	GND	BG2OUT*	GND	GAP*	GAP*
10	GND	SYSCLK	BG3IN*	SYSFAIL*	GA0*	GA0*
11	RESP*	GND	BG3OUT*	BERR*	GA1*	GA1*
12	GND	DS1*	BR0*	SYSRESET*	+3.3 V	+3.3 V
13	RsvBus1	DS0*	BR1*	LWORD*	GA2*	GA2*
14	GND	WRITE*	BR2*	AM5	+3.3 V	+3.3 V
15	RsvBus2	GND	BR3*	A23	GA3*	GA3*
16	GND	DTACK*	AM0	A22	+3.3 V	+3.3 V
17	RsvBus3	GND	AM1	A21	GA4*	GA4*
18	GND	AS*	AM2	A20	+3.3 V	+3.3 V
19	RsvBus4	GND	AM3	A19	SMB_SCL	RsvBus5
20	GND	IACK*	GND	A18	+3.3 V	+3.3 V
21	RsvBus6	IACKIN*	IPMB_SCL	A17	SMB_SDA	RsvBus7
22	GND	IACKOUT*	IPMB_SDA	A16	+3.3 V	+3.3 V
23	RsvBus8	AM4	GND	A15	SMB_ALERT*	RsvBus9
24	GND	A07	IRQ7*	A14	+3.3 V	+3.3 V
25	RsvBus10	A06	IRQ6*	A13	RsvBus11	RsvBus11
26	GND	A05	IRQ5*	A12	+3.3 V	+3.3 V
27	RsvBus12	A04	IRQ4*	A11	LIN*	LIN*
28	GND	A03	IRQ3*	A10	+3.3 V	+3.3 V
29	RsvBus13	A02	IRQ2*	A09	LIO*	LIO*
30	GND	A01	IRQ1*	A08	+3.3 V	+3.3 V
31	RsvBus14	-12 V	+5 V STDBY	+12 V	GND	GND
32	GND	+5 V	+5 V	+5 V	VPC	VPC

* low-active



VXS 6 U General and technical information

Pin Assignments J2 VME64x

Pin	ROW Z	ROW A	ROW B	ROW C	ROW D
1	User Defined	User Defined	+5 V	User Defined	User Defined
2	GND	User Defined	GND	User Defined	User Defined
3	User Defined	User Defined	RETRY*	User Defined	User Defined
4	GND	User Defined	A24	User Defined	User Defined
5	User Defined	User Defined	A25	User Defined	User Defined
6	GND	User Defined	A26	User Defined	User Defined
7	User Defined	User Defined	A27	User Defined	User Defined
8	GND	User Defined	A28	User Defined	User Defined
9	User Defined	User Defined	A29	User Defined	User Defined
10	GND	User Defined	A30	User Defined	User Defined
11	User Defined	User Defined	A31	User Defined	User Defined
12	GND	User Defined	GND	User Defined	User Defined
13	User Defined	User Defined	+5 V	User Defined	User Defined
14	GND	User Defined	D16	User Defined	User Defined
15	User Defined	User Defined	D17	User Defined	User Defined
16	GND	User Defined	D18	User Defined	User Defined
17	User Defined	User Defined	D19	User Defined	User Defined
18	GND	User Defined	D20	User Defined	User Defined
19	User Defined	User Defined	D21	User Defined	User Defined
20	GND	User Defined	D22	User Defined	User Defined
21	User Defined	User Defined	D23	User Defined	User Defined
22	GND	User Defined	GND	User Defined	User Defined
23	User Defined	User Defined	D24	User Defined	User Defined
24	GND	User Defined	D25	User Defined	User Defined
25	User Defined	User Defined	D26	User Defined	User Defined
26	GND	User Defined	D27	User Defined	User Defined
27	User Defined	User Defined	D28	User Defined	User Defined
28	GND	User Defined	D29	User Defined	User Defined
29	User Defined	User Defined	D30	User Defined	User Defined
30	GND	User Defined	D31	User Defined	User Defined
31	User Defined	User Defined	GND	User Defined	GND
32	GND	User Defined	+5 V	User Defined	VPC

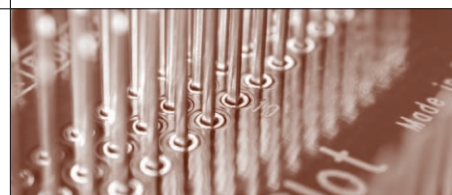
Pin Assignments J0 VXS Payload

Pin	ROW A	ROW B	ROW C	ROW D	ROW E	ROW F	ROW G	ROW H	ROW I
1	PA-RX0+	PA-RX0-	GND	GND	PA-TX0+	PA-TX0+	GND	GND	PA_SCL
2	GND	GND	PA-RX1+	PA-RX1-	GND	GND	PA-TX1+	PA-TX1+	GND
3	PA-RX2+	PA-RX2-	GND	GND	PA-TX2+	PA-TX2+	GND	GND	PA_SDA
4	GND	GND	PA-RX3+	PA-RX3-	GND	GND	PA-TX3+	PA-TX3+	GND
5	RFU	RFU	GND	GND	RFU	RFU	GND	GND	RFU
6	GND	GND	RFU	RFU	GND	GND	RFU	RFU	GND
7	RFU	RFU	GND	GND	RFU	RFU	GND	GND	RFU
8	GND	GND	RFU	RFU	GND	GND	RFU	RFU	GND
9	RFU	RFU	GND	GND	RFU	RFU	GND	GND	RFU
10	GND	GND	RFU	RFU	GND	GND	RFU	RFU	GND
11	RFU	RFU	GND	GND	RFU	RFU	GND	GND	PEN*
12	GND	GND	PB-RX0+	PB-RX0-	GND	GND	PB-TX0+	PB-TX0+	GND
13	PB-RX1+	PB-RX1-	GND	GND	PB-TX1+	PB-TX1+	GND	GND	PB_SCL
14	GND	GND	PB-RX2+	PB-RX2-	GND	GND	PB-TX2+	PB-TX2+	GND
15	PB-RX3+	PB-RX3-	GND	GND	PB-TX3+	PB-TX3+	GND	GND	PB_SCL

VXS

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General and technical information



VMEbus

The pin assignments J0 VXS Payload is used for VXS 4X Infiniband protocol (ANSI/VITA 41.1) and VXS 4X Serial RapidIO protocol (ANSI/VITA 41.2).

Pin Assignments J2 VXS Switch Slot

Pin	ROW A	ROW B	ROW C	ROW D	ROW E	ROW F	ROW G	ROW H	ROW I
1	PP12-RX0+	PP12-RX0-	GND	PP12-TX0+	PP12-TX0-	GND	SP4-TX0+	SP4-TX0-	GND
2	GND	PP12-RX1+	PP12-RX1-	GND	PP12-TX1+	PP12-TX1-	GND	SP4-TX1+	SP4-TX1-
3	PP12-RX2+	PP12-RX2-	GND	PP12-TX2+	PP12-TX2-	GND	SP4-TX2+	SP4-TX2-	GND
4	GND	PP12-RX3+	PP12-RX3-	GND	PP12-TX3+	PP12-TX3-	GND	SP4-TX3+	SP4-TX3-
5	PP14-RX0+	PP14-RX0-	GND	PP14-TX0+	PP14-TX0-	GND	SP4-RX0+	SP4-RX0-	GND
6	GND	PP14-RX1+	PP14-RX1-	GND	PP14-TX1+	PP14-TX1-	GND	SP4-RX1+	SP4-RX1-
7	PP14-RX2+	PP14-RX2-	GND	PP14-TX2+	PP14-TX2-	GND	SP4-RX2+	SP4-RX2-	GND
8	GND	PP14-RX3+	PP14-RX3-	GND	PP14-TX3+	PP14-TX3-	GND	SP4-RX3+	SP4-RX3-
9	PP16-RX0+	PP16-RX0-	GND	PP16-TX0+	PP16-TX0-	GND	RFU	RFU	GND
10	GND	PP16-RX1+	PP16-RX1-	GND	PP16-TX1+	PP16-TX1-	GND	RFU	RFU
11	PP16-RX2+	PP16-RX2-	GND	PP16-TX2+	PP16-TX2-	GND	RFU	RFU	GND
12	GND	PP16-RX3+	PP16-RX3-	GND	PP16-TX3+	PP16-TX3-	GND	RFU	RFU
13	PP18-RX0+	PP18-RX0-	GND	PP18-TX0+	PP18-TX0-	GND	RFU	RFU	GND
14	GND	PP18-RX1+	PP18-RX1-	GND	PP18-TX1+	PP18-TX1-	GND	RFU	RFU
15	PP18-RX2+	PP18-RX2-	GND	PP18-TX2+	PP18-TX2-	GND	RFU	RFU	GND
16	GND	PP18-RX3+	PP18-RX3-	GND	PP18-TX3+	PP18-TX3-	GND	RFU	RFU

Pin Assignments J3 VXS Switch Slot

Pin	ROW A	ROW B	ROW C	ROW D	ROW E	ROW F	ROW G	ROW H	ROW I
1	PP2-RX0+	PP2-RX0-	GND	PP2-TX0+	PP2-TX0-	GND	SP2-TX0+	SP2-TX0-	GND
2	GND	PP2-RX1+	PP2-RX1-	GND	PP2-TX1+	PP2-TX1-	GND	SP2-TX1+	SP2-TX1-
3	PP2-RX2+	PP2-RX2-	GND	PP2-TX2+	PP2-TX2-	GND	SP2-TX2+	SP2-TX2-	GND
4	GND	PP2-RX3+	PP2-RX3-	GND	PP2-TX3+	PP2-TX3-	GND	SP2-TX3+	SP2-TX3-
5	PP4-RX0+	PP4-RX0-	GND	PP4-TX0+	PP4-TX0-	GND	SP2-RX0+	SP2-RX0-	GND
6	GND	PP4-RX1+	PP4-RX1-	GND	PP4-TX1+	PP4-TX1-	GND	SP2-RX1+	SP2-RX1-
7	PP4-RX2+	PP4-RX2-	GND	PP4-TX2+	PP4-TX2-	GND	SP2-RX2+	SP2-RX2-	GND
8	GND	PP4-RX3+	PP4-RX3-	GND	PP4-TX3+	PP4-TX3-	GND	SP2-RX3+	SP2-RX3-
9	PP8-RX0+	PP8-RX0-	GND	PP8-TX0+	PP8-TX0-	GND	PP6-TX0+	PP6-TX0-	GND
10	GND	PP8-RX1+	PP8-RX1-	GND	PP8-TX1+	PP8-TX1-	GND	PP6-TX1+	PP6-TX1-
11	PP8-RX2+	PP8-RX2-	GND	PP8-TX2+	PP8-TX2-	GND	PP6-TX2+	PP6-TX2-	GND
12	GND	PP8-RX3+	PP8-RX3-	GND	PP8-TX3+	PP8-TX3-	GND	PP6-TX3+	PP6-TX3-
13	PP10-RX0+	PP10-RX0-	GND	PP10-TX0+	PP10-TX0-	GND	PP6-RX0+	PP6-RX0-	GND
14	GND	PP10-RX1+	PP10-RX1-	GND	PP10-TX1+	PP10-TX1-	GND	PP6-RX1+	PP6-RX1-
15	PP10-RX2+	PP10-RX2-	GND	PP10-TX2+	PP10-TX2-	GND	PP6-RX2+	PP6-RX2-	GND
16	GND	PP10-RX3+	PP10-RX3-	GND	PP10-TX3+	PP10-TX3-	GND	PP6-RX3+	PP6-RX3-



VXS 6 U General and technical information

Pin Assignments J4 VXS Switch Slot

Pin	ROW A	ROW B	ROW C	ROW D	ROW E	ROW F	ROW G	ROW H	ROW I
1	PP9-RX0+	PP9-RX0-	GND	PP9-TX0+	PP9-TX0-	GND	PP5-TX0+	PP5-TX0-	GND
2	GND	PP9-RX1+	PP9-RX1-	GND	PP9-TX1+	PP9-TX1-	GND	PP5-TX1+	PP5-TX1-
3	PP9-RX2+	PP9-RX2-	GND	PP9-TX2+	PP9-TX2-	GND	PP5-TX2+	PP5-TX2-	GND
4	GND	PP9-RX3+	PP9-RX3-	GND	PP9-TX3+	PP9-TX3-	GND	PP5-TX3+	PP5-TX3-
5	PP7-RX0+	PP7-RX0-	GND	PP7-TX0+	PP7-TX0-	GND	PP5-RX0+	PP5-RX0-	GND
6	GND	PP7-RX1+	PP7-RX1-	GND	PP7-TX1+	PP7-TX1-	GND	PP5-RX1+	PP5-RX1-
7	PP7-RX2+	PP7-RX2-	GND	PP7-TX2+	PP7-TX2-	GND	PP5-RX2+	PP5-RX2-	GND
8	GND	PP7-RX3+	PP7-RX3-	GND	PP7-TX3+	PP7-TX3-	GND	PP5-RX3+	PP5-RX3-
9	PP3-RX0+	PP3-RX0-	GND	PP3-TX0+	PP3-TX0-	GND	SP1-TX0+	SP1-TX0-	GND
10	GND	PP3-RX1+	PP3-RX1-	GND	PP3-TX1+	PP3-TX1-	GND	SP1-TX1+	SP1-TX1-
11	PP3-RX2+	PP3-RX2-	GND	PP3-TX2+	PP3-TX2-	GND	SP1-TX2+	SP1-TX2-	GND
12	GND	PP3-RX3+	PP3-RX3-	GND	PP3-TX3+	PP3-TX3-	GND	SP1-TX3+	SP1-TX3-
13	PP1-RX0+	PP1-RX0-	GND	PP1-TX0+	PP1-TX0-	GND	SP1-RX0+	SP1-RX0-	GND
14	GND	PP1-RX1+	PP1-RX1-	GND	PP1-TX1+	PP1-TX1-	GND	SP1-RX1+	SP1-RX1-
15	PP1-RX2+	PP1-RX2-	GND	PP1-TX2+	PP1-TX2-	GND	SP1-RX2+	SP1-RX2-	GND
16	GND	PP1-RX3+	PP1-RX3-	GND	PP1-TX3+	PP1-TX3-	GND	SP1-RX3+	SP1-RX3-

Pin Assignments J5 VXS Switch Slot

Pin	ROW A	ROW B	ROW C	ROW D	ROW E	ROW F	ROW G	ROW H	ROW I
1	PP17-RX0+	PP17-RX0-	GND	PP17-TX0+	PP17-TX0-	GND	RFU	RFU	GND
2	GND	PP17-RX1+	PP17-RX1-	GND	PP17-TX1+	PP17-TX1-	GND	RFU	RFU
3	PP17-RX2+	PP17-RX2-	GND	PP17-TX2+	PP17-TX2-	GND	RFU	RFU	GND
4	GND	PP17-RX3+	PP17-RX3-	GND	PP17-TX3+	PP17-TX3-	GND	RFU	RFU
5	PP15-RX0+	PP15-RX0-	GND	PP15-TX0+	PP15-TX0-	GND	RFU	RFU	GND
6	GND	PP15-RX1+	PP15-RX1-	GND	PP15-TX1+	PP15-TX1-	GND	RFU	RFU
7	PP15-RX2+	PP15-RX2-	GND	PP15-TX2+	PP15-TX2-	GND	RFU	RFU	GND
8	GND	PP15-RX3+	PP15-RX3-	GND	PP15-TX3+	PP15-TX3-	GND	RFU	RFU
9	PP13-RX0+	PP13-RX0-	GND	PP13-TX0+	PP13-TX0-	GND	SP3-TX0+	SP3-TX0-	GND
10	GND	PP13-RX1+	PP13-RX1-	GND	PP13-TX1+	PP13-TX1-	GND	SP3-TX1+	SP3-TX1-
11	PP13-RX2+	PP13-RX2-	GND	PP13-TX2+	PP13-TX2-	GND	SP3-TX2+	SP3-TX2-	GND
12	GND	PP13-RX3+	PP13-RX3-	GND	PP13-TX3+	PP13-TX3-	GND	SP3-TX3+	SP3-TX3-
13	PP11-RX0+	PP11-RX0-	GND	PP11-TX0+	PP11-TX0-	GND	SP3-RX0+	SP3-RX0-	GND
14	GND	PP11-RX1+	PP11-RX1-	GND	PP11-TX1+	PP11-TX1-	GND	SP3-RX1+	SP3-RX1-
15	PP11-RX2+	PP11-RX2-	GND	PP11-TX2+	PP11-TX2-	GND	SP3-RX2+	SP3-RX2-	GND
16	GND	PP11-RX3+	PP11-RX3-	GND	PP11-TX3+	PP11-TX3-	GND	SP3-RX3+	SP3-RX3-

Backplane Keying

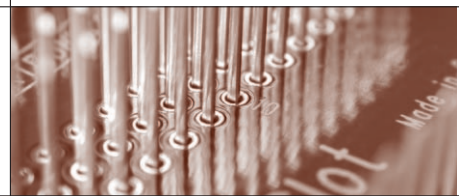
Payload slots (IEC Key K0) and
Switch slots (IEC Key K1):

KeyCode	Protocol	Color
1567	InfiniBand 4X	Brilliant Blue
3568	Serial RapidIO 4X	Pale Orange

Switch Slots (IEC Key K2):

KeyCode	Color	Protocol
2578	Reseda green	Switch board has no connector in User-IO area

VXS 6 U Technical data



VMEbus

	VME64x J1	VXS J0, Switch Slot
Base material	Fiberglass epoxy acc. to DIN 40802 (type FR408 or NE4000-13)	
Layer structure	Optimized for best HF behavior. Outer layers designed as shielding areas.	
Ohmic resistance of signal lines	< 1.0 Ω	
PCB thickness	5.0 mm	
Surge impedance Z of signal lines	60 Ω	100 Ω
Basic power consumption, both ends terminated	Active: < 0.1 A Passive: < 1.4 A	
• Power supply connection: screw-type terminal M3 and M4	X	
• Permissible current loading of a screw-type connection M4	30 A	
• Permissible current loading of assembly per slot	at +3.3 V	12.5 A
	at +5 V	9.0 A
	at +12 V	1.5 A
	at -12 V	1.5 A
	at +48 V	3.0 A
	at -48 V	3.0 A
	at +5 VSTDBY	1.5 A
Termination	passive 3.3 V, passive 5 V or active	
Installation height	6 HE/6 U	
Slot spacing	4 TE/4 HP	
Connectors	Press-fit quality class 2	
	160 pins IEC 61076-4-113	MultiGig RT2
Operating temperature range	• Active termination -40 °C ... +85 °C • Passive termination 3.3 V -40 °C ... +85 °C • Passive termination 5 V -40 °C ... +70 °C	
Relative humidity	95 %, non-condensing	



VXS

6 U

1 VME64x slot, 6 VXS slots and 1 switch slot

VXS-Backplanes with 1 VME64x slot, 6 VXS slots and 1 switch slot are available in following standard variants. This variant can be installed horizontally.

Order numbers

B18106132I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand active
B18106142I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand active with Rear I/O on VXS J0
B18106132R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO active
B18106142R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO active with Rear I/O on VXS J0
B18106133I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand passive 3.3 V
B18106143I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand passive 3.3 V with Rear I/O on VXS J0
B18106123R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 3.3 V
B18106143R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 3.3 V with Rear I/O on VXS J0
B18106135I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand passive 5 V
B18106145I	VXS 6 Slot + 1*Switch + 1*VME64x InfiniBand passive 5 V with Rear I/O on VXS J0
B18106135R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 5 V
B18106145R	VXS 6 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 5 V with Rear I/O on VXS J0

VXS

6 U

1 VME64x slot, 9 VXS slots and 1 switch slot



VXS-Backplanes with 1 VME64x slot, 9 VXS slots and 1 switch slot are available in following standard variants:

Order numbers

B18109132I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand active
B18109142I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand active with Rear I/O on VXS J0
B18109132R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO active
B18109142R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO active with Rear I/O on VXS J0
B18109133I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand passive 3.3 V
B18109143I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand passive 3.3 V with Rear I/O on VXS J0
B18109123R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 3.3 V
B18109143R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 3.3 V with Rear I/O on VXS J0
B18109135I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand passive 5 V
B18109145I	VXS 9 Slot + 1*Switch + 1*VME64x InfiniBand passive 5 V with Rear I/O on VXS J0
B18109135R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 5 V
B18109145R	VXS 9 Slot + 1*Switch + 1*VME64x Serial RapidIO passive 5 V with Rear I/O on VXS J0



VXS 6 U 1 VME64x slot, 18 VXS slots and 2 switch slots

VXS-Backplanes with 1 VME64x slot, 18 VXS slots and 2 switch slots are available in following standard variants:

Order numbers

B18118232I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand active
B18118242I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand active with Rear I/O on VXS J0
B18118232R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO active
B18118242R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO active with Rear I/O on VXS J0
B18118233I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand passive 3.3 V
B18118243I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand passive 3.3 V with Rear I/O on VXS J0
B18118223R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO passive 3.3 V
B18118243R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO passive 3.3 V with Rear I/O on VXS J0
B18118235I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand passive 5 V
B18118245I	VXS 18 Slot + 2*Switch + 1*VME64x InfiniBand passive 5 V with Rear I/O on VXS J0
B18118235R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO passive 5 V
B18118245R	VXS 18 Slot + 2*Switch + 1*VME64x Serial RapidIO passive 5 V with Rear I/O on VXS J0

Switch Port to Payload Slot Channel Mapping (A+B) for these VXS-Backplanes (1 VME64x slot, 18 VXS slots and 2 switch slots):

Channel A/B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Slot	10	13	9	8	14	15	7	6	16	17	5	4	18	19	3	2	20	21