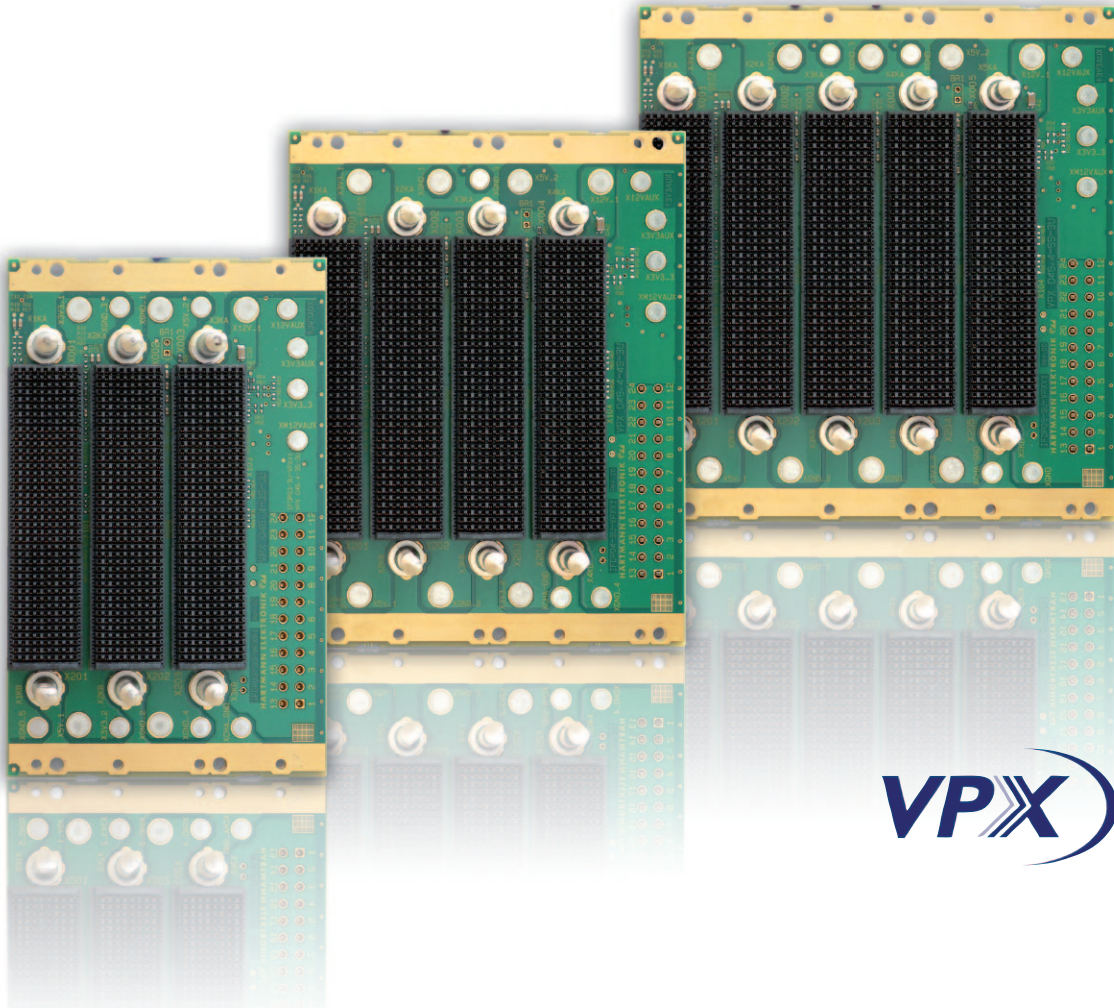


# » 3U VPX Distributed Backplanes «



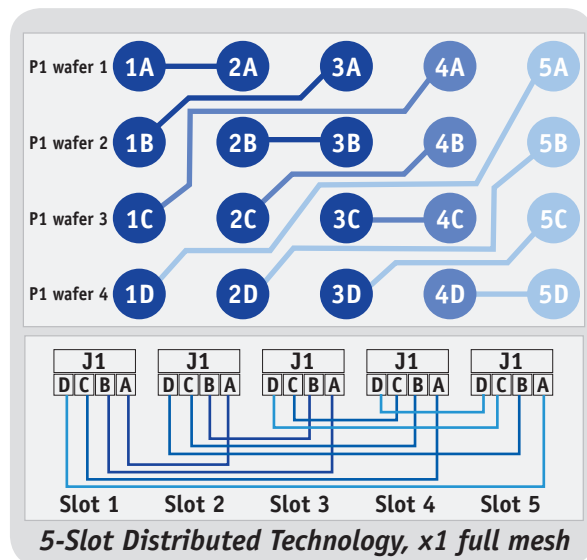
## 3U 3-Slot, 4-Slot or 5-Slot Distributed Technology

- » Compliant to VITA 46.0 Baseline Application
- » Supports VITA 46.4 x1 PCI Express®
- » Supports VITA 46.10 with RTM Connectors
- » Operating Temperatures: -40° to +85°C

# 3U 3-Slot, 4-Slot or 5-Slot VPX Distributed Backplanes

## Features

- » M4 screws and ATX 24-pole connector for power entry.
- » 4 HP from slot to slot (20.32mm).
- » System management interface on the backplane (I<sup>2</sup>C1, I<sup>2</sup>C2).
- » Flexible keying and alignment mechanism,
  - with JTAG connector on first slot,
  - with geographical address pins.
- » Reference clock.
- » Non-Volatile Memory Read Only signal set by jumper BR1.
- » Battery backup option setting by jumper X5. VBAT external or connected to 3.3 AUX.
- » System reset.
- » P1 reserved signals.



## Current Capability

(By using ATX connector see values in brackets)

+12V	40 A	(10 A)
+3.3V	80 A	(20 A)
+5V	80 A	(25 A)
-12V AUX	5 A	
+12V AUX	5 A	
+3.3V AUX	5 A	

Consider: max. 36A/ Slot acc. VITA 46.0 allowed

## System Management IPMB (I<sup>2</sup>C1, I<sup>2</sup>C2 connector)

There are 2 connectors (5 poles) for system management I<sup>2</sup>C1, I<sup>2</sup>C2.

I <sup>2</sup> C1	Signal	I <sup>2</sup> C2	Signal
1	SCL1	1	SCL2
2	GND	2	GND
3	SDA1	3	SDA2
4	+3.3V_AUX	4	+3.3V_AUX
5		5	

## VBAT (X5 connector)

Normally a battery voltage with approximately 3V is available at pin VBAT of connector VPX-J1. The voltage is externally accessible with connector X5. The battery should be connected to pin 1 and 2 or internally using 3.3V\_AUX by closing a jumper between pin 2 and 3.

X5	Signal
1	GND
2	VBAT
3	+3.3V_AUX

## NVMRO (BR1 Jumper)

If jumper BR1 is closed NVMRO is set to memory writeable.

BR1	Signal
1	NVMRO
2	GND

## JTAG (connector XJT1)

For test and programming a JTAG connector (6-pole) is implemented (XJT1).

XJT1	Signal
1	GND
2	TCK
3	TMS
4	TRST-
5	TDI
6	TDO

## Power connection (X1 or M4 screw)

The main operating voltages and GND are supplied with M4 screw terminals or connector X1 (fits to ATX connector without locking mechanism). The auxiliary operating voltages are supplied via M3 screw terminals. Optimal daughter board supply and trouble-free operation are ensured by the arrangement of the feed modules on the backplane.

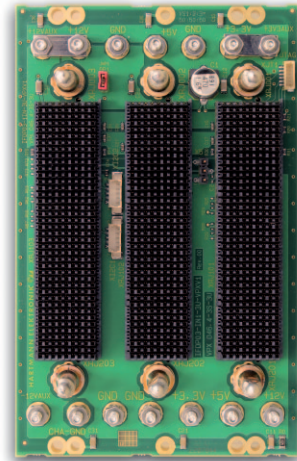
X1	Signal	X1	Signal
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	GND	15	GND
4	+5V	16	PS_ON
5	GND	17	GND
6	+5V	18	GND
7	GND	19	GND
8	PWR_OK	20	Res
9	+5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND

If jumper X6 is closed ATX power supply starts automatically.

### Technical Information

<b>Environmental</b>	
Temperature Range	Operating: -40°C +85°C / Storage: -55°C +85°C
<b>Safety</b>	
Flammability Rating	UL94-V0
<b>Standard Compliance</b>	
VITA 46.0-2007	VPX Baseline Standard
VITA 46.4-VDSTU	PCI Express® on VPX Fabric Connector
VITA 46.10-2009	Rear Transition Module for VPX
<b>Physical</b>	
3U 5-Slot 0.8" pitch	PCB Size = H: 128.5 mm - W: 120.7 mm - T: 5.4 mm
3U 4-Slot 0.8" pitch	PCB Size = H: 128.5 mm - W: 100.6 mm - T: 5.4 mm
3U 3-Slot 0.8" pitch	PCB Size = H: 128.5 mm - W: 80.0 mm - T: 5.4 mm
3U 3-Slot 1.0" pitch	PCB Size = H: 128.5 mm - W: 80.0 mm - T: 5.4 mm

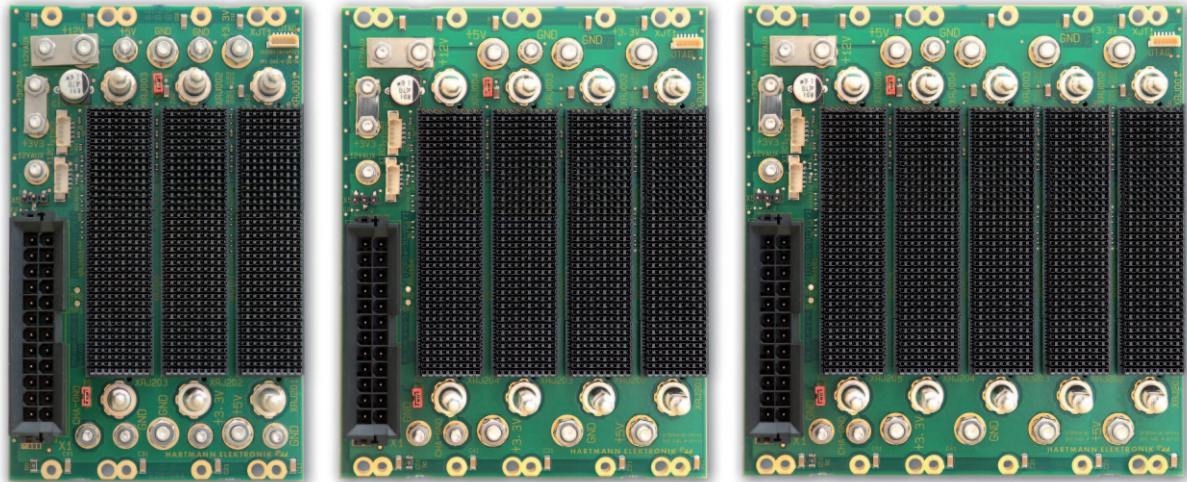
### 3U VPX Backplanes, 1"



### Ordering Information

Article	Part.-No.	Description
IFDP03-3U	IFDP03-3U-VPXV1	3U, 0.8" Pitch, 3-Slot Distributed Technology
IFDP04-3U	IFDP04-3U-VPXV1	3U, 0.8" Pitch, 4-Slot Distributed Technology
IFDP05-3U	IFDP05-3U-VPXV1	3U, 0.8" Pitch, 5-Slot Distributed Technology
IFDP03-1IN-3U	IFDP03-1IN-3U-VPXV1	3U, 1.0" Pitch, 3-Slot Distributed Technology, no ATX Supply Connector

### 3U VPX Backplanes, 0.8", 3-slot, 4-slot and 5-slot Rear Side



### CORPORATE OFFICES

#### Europe, Middle East & Africa

Oskar-von-Miller-Str. 1  
85386 Eching/Munich  
Germany  
Tel.: +49 (0)8165/ 77 777  
Fax: +49 (0)8165/ 77 219  
info@kontron.com

#### North America

14118 Stowe Drive  
Poway, CA 92064-7147  
USA  
Tel.: +1 888 294 4558  
Fax: +1 858 677 0898  
info@us.kontron.com

#### Asia Pacific

17 Building, Block #1, ABP.  
188 Southern West 4th Ring Road  
Beijing 100070, P.R.China  
Tel.: + 86 10 63751188  
Fax: + 86 10 83682438  
info@kontron.cn



#VPX Distributed Backplanes# 02092012MB  
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