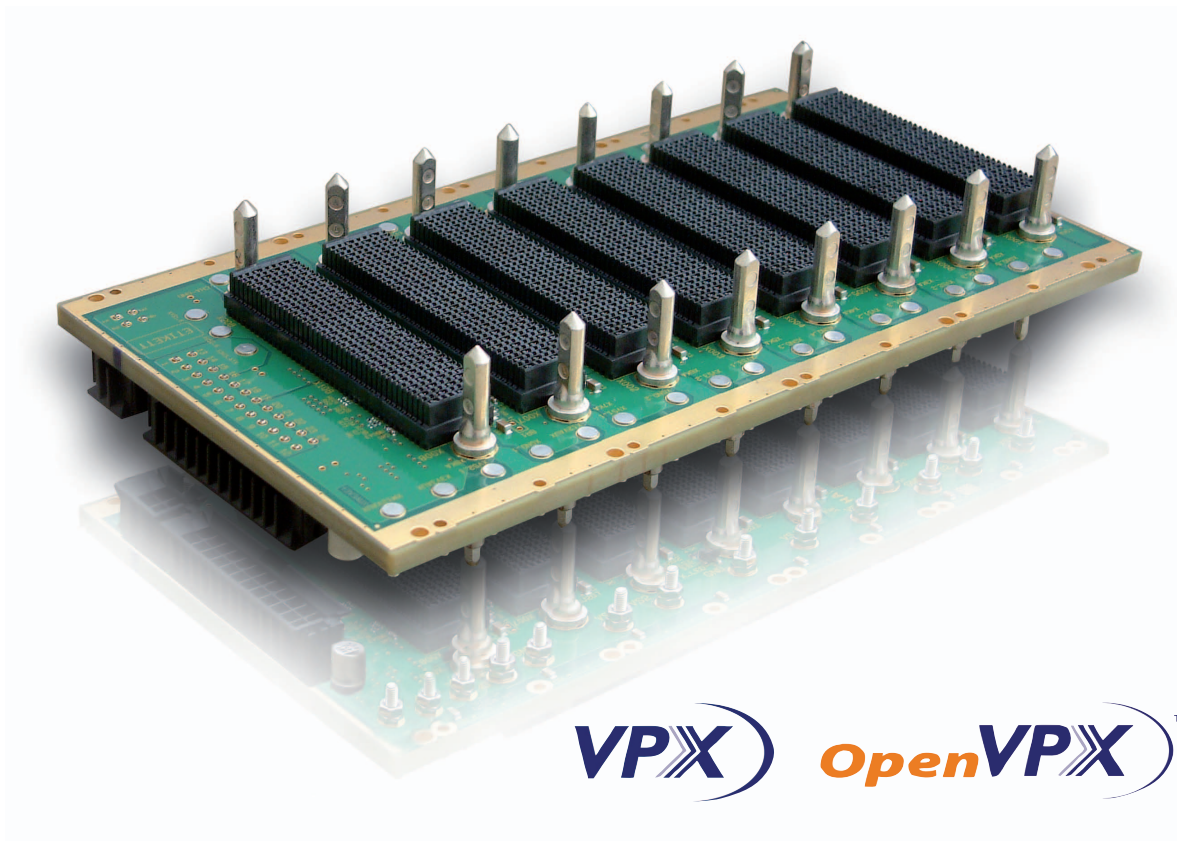


# » 3U VPX Centralized Backplanes «



## 3U 8-Slot Centralized Technology

- » Compliant to VITA 46.0 Baseline Application
- » Supports VITA 46.4 PCI Express® Gen2
- » Supports VITA 46.10 with RTM Connectors
- » Operating Temperatures: -40° to +85°C

## 3U 8-Slot VPX Centralized Backplanes

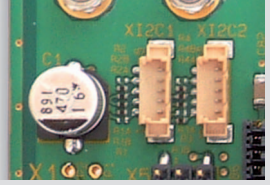
### Features

- » M4 screws and ATX (24-pole, 4-pole) connectors for power entry.
- » 5 HP from slot to slot (25.40mm).
- » System management interface on the backplane (I<sup>2</sup>C1, I<sup>2</sup>C2).
- » 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.
- » 3 centralized 8-slot technologies available:
  - Single star x4 (figure 1 page 3)
  - Dual star x4 (figure 2 page 3)
  - Single star x2 (figure 3 page 4)

### 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	



### NVMRO (BR1 Jumper)

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

BR1	Signal
1	NVMRO
2	GND



### 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

### +3V3 AUX

+3V3 AUX is not used to supply backplane pullup resistors. These resistors are supplied from an equivalent resistor divider from +5V.

### Current Capability

(By using ATX connector see values in brackets)

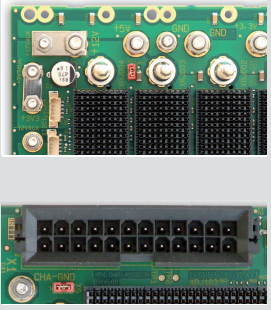
+12V	40 A	(10 A)
+3.3V	80 A	(20 A)
+5V	80 A	(25 A)
-12V AUX	5 A	
+12V AUX	5 A	
+3.3V AUX	5 A	

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

### Power connection (X1+X2 or M4 screw)

The main operating voltages and GND are supplied with M4 screw terminals or connector X1 (fits to ATX connector). 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.

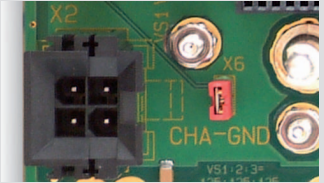
X1	Signal	X1	Signal
1	+3.3V	13	+3.3V
2	+3.3V	14	-12V
3	GND	15	GND
4	+5V	16	PS_ON
5	GND	17	GND
6	+5V	18	GND
7	GND	19	GND
8	PWR_OK	20	Res
9	+5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	GND



If jumper X6 is closed ATX power supply starts automatically.

### X2 Signal

X2	Signal
1	GND
2	GND
3	+12V
4	+12V

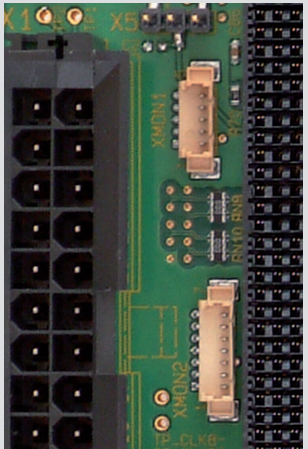


### XMON1 & XMON2 Signal

XMON1	Signal
1	SYSRESET
2	NVMRO
3	GND
4	MASKRESET7
5	MASKRESET8

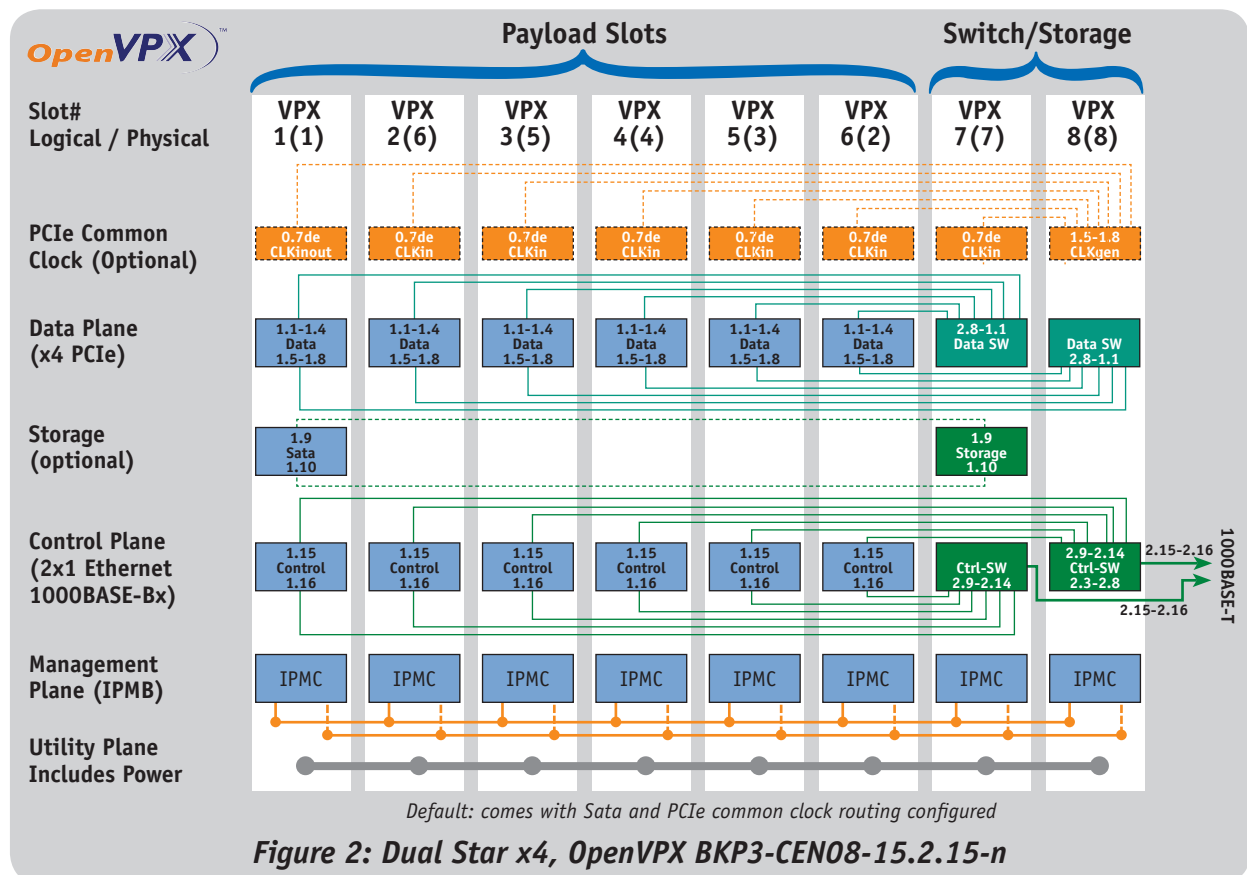
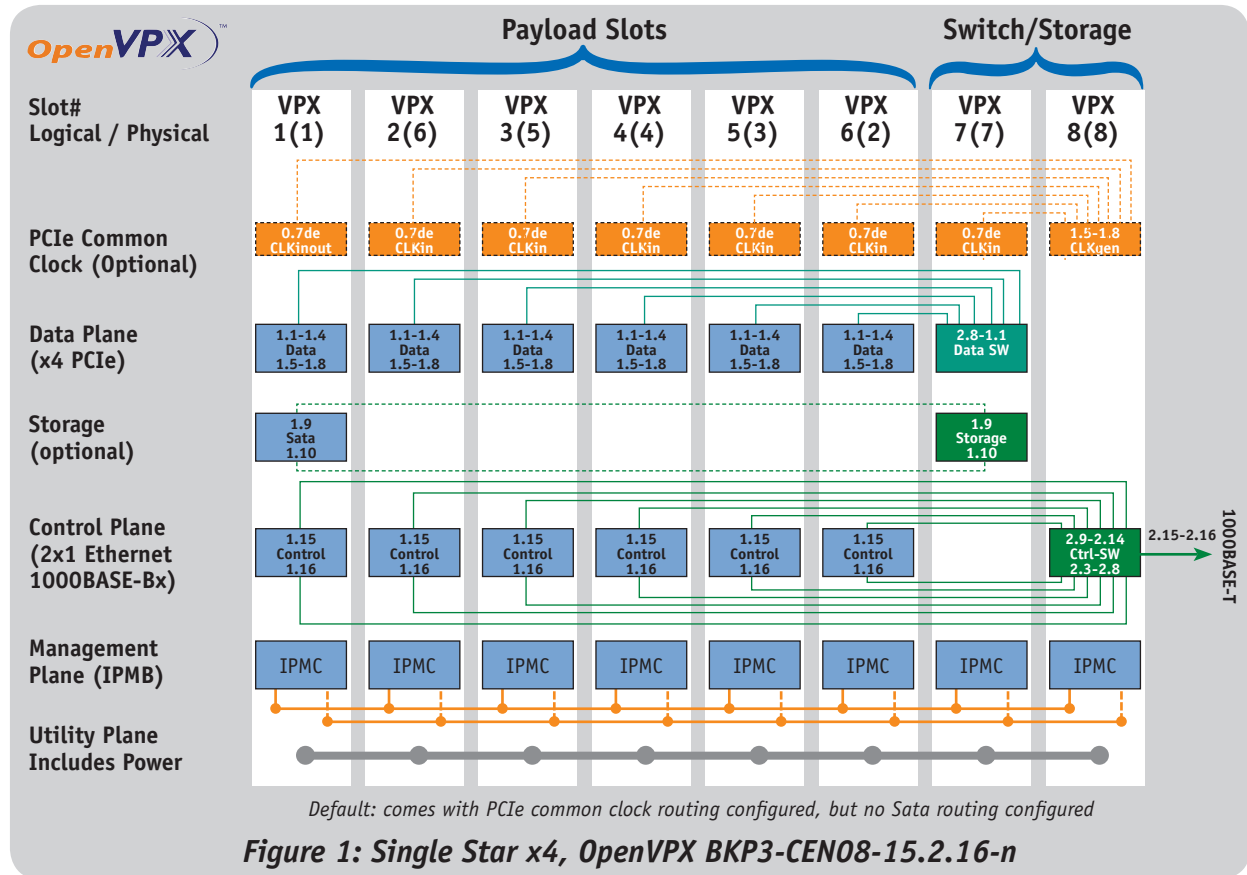
  

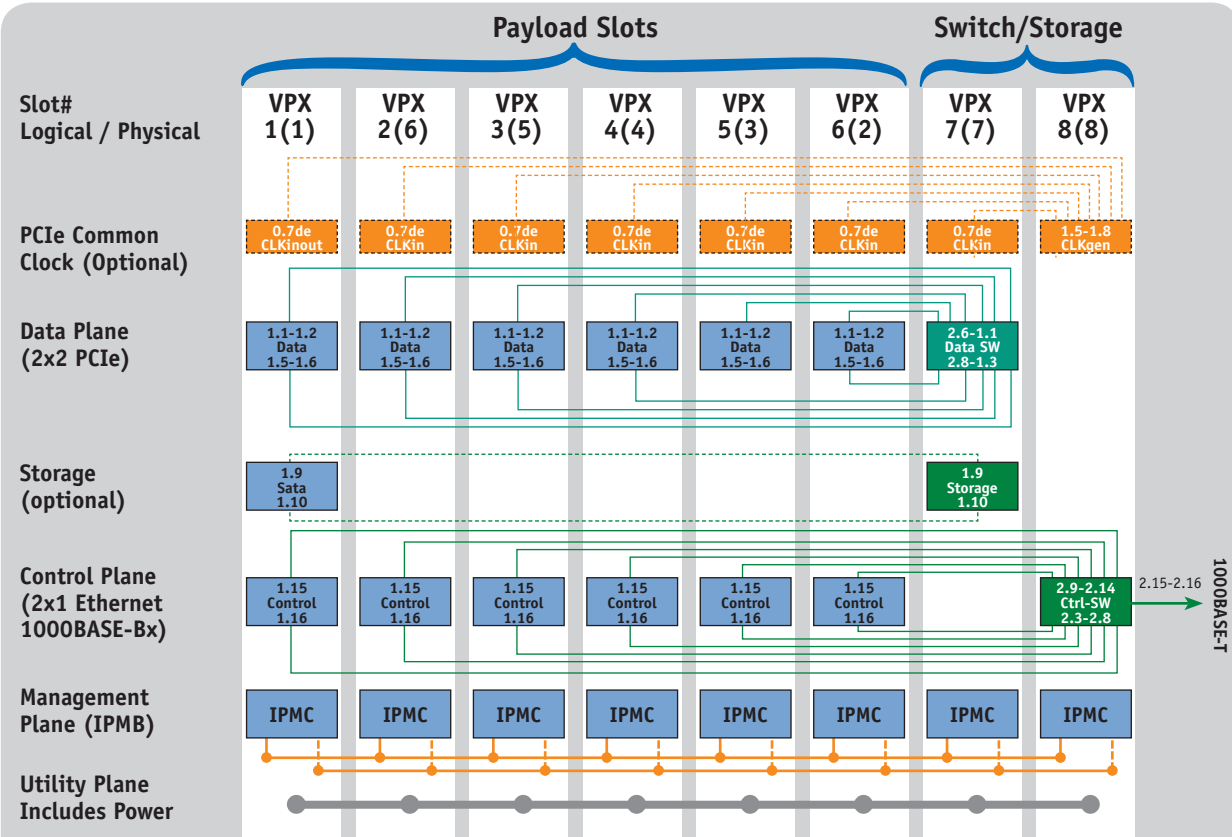
XMON2	Signal
1	MASKRESET1
2	MASKRESET2
3	MASKRESET3
4	GND
5	MASKRESET4
6	MASKRESET5
7	MASKRESET6



### LEDs Management (LED Jumper)

Two white LEDs are available to illuminate the rear side of the backplane. The LEDs are located close to the keying pins of slot 3. If jumper LED is closed, the LEDs are switched on.





Default: comes with PCIe common clock routing configured, but no Sata routing configured

Figure 3: Single Star x2

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 8-Slot 1.0" pitch	PCB Size = H: 128.5 mm - W: 229.36 mm - T: 5.4 mm / Weight: 800g

Ordering Information

Article	OpenVPX Nomenclature	Part.-No.	Description
<a href="#">IFDP08-11N-3U</a>	BKP3-CEN08-15.2.16-n	IFDP08-11N-3UVPXV1SI	3U, 1.0" Pitch, Single Star x4 Topology, all rear I/O connectors equipped
<a href="#">IFDP08-11N-3U</a>	BKP3-CEN08-15.2.16-n	IFDP0811N3UVPXV1SI.1	3U, 1.0" Pitch, Single Star x4 Topology, rear I/O connectors on first slot only
<a href="#">IFDP08-11N-3U</a>	BKP3-CEN08-15.2.15-n	IFDP08-11N-3U-VPX2	3U, 1.0" Pitch, Dual Star x4 Topology, all rear I/O connectors equipped
<a href="#">IFDP08-11N-3U</a>		IFDP08-11N-3UVPXV3SI	3U, 1.0" Pitch, Single Star x2 Topology, all rear I/O connectors equipped

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