

IC-CMC-VPX6a

6U VPX PMC/XMC Carrier & Processing board

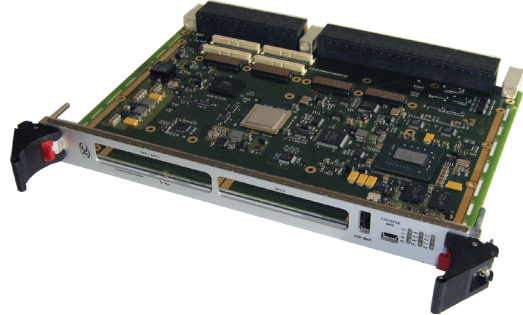
The **IC-CMC-VPX6a** is 6U VPX carrier supporting legacy PMC or XMC boards, but it is also more than that.

Thanks to the embedded Xilinx Kintex-7 FPGA, the **IC-CMC-VPX6a** provides processing capabilities on signals coming either from the XMC slot or the backplane,

By so doing, the **IC-CMC-VPX6a** can optimise the use of a single VPX slot, allowing high cost reduction.

Our **IC-GRA-VPX6a** is an illustration of the capabilities of this carrier (refer to the **IC-GRA-VPX6a** Data Sheet for details).

The modular design of the **IC-CMC-VPX6a** means it can also be used for very specific applications not necessarily detailed here.
Consult us to share your specifications.



Description

The **IC-CMC-VPX6a** is connected to the other boards of a VPX system via a PCIe switch to two or three backplane fabric ports.

P1A and P1B ports can be used as a merged PCIe x8 upstream port or 2 separated PCIe x4 ports.

In contrast to the competition, the **IC-CMC-VPX6a** also provides a PCIe x4 port on the expansion plan (P2A) which can be useful with some OpenVPX backplanes. Mixed with partitioning capability of the PCIe switch, it can be a way to isolate data flows and improve performance.

Main features

FPGA:

- ▶ Xilinx Kintex-7 325T (FBG900)
- ▶ 1 GByte DDR3 SDRAM memory bank
- ▶ 1 user SPI Flash Eeprom

1 * PMC/XMC slot:

XMC

- ▶ One PCIe x8 port to Jn15
- ▶ Jn16 IOs routed to the backplane in accordance with P3w3P4-X38s+X12d+X8d signal assignments (VITA46.9)

PMC

- ▶ conventional PCI 32/64 bits 33/66MHz, and
- ▶ PCI-X 32/64 bits 66/100/133 MHz (3.3V PCI bus signalling)
- ▶ Jn14 IOs routed to the backplane in accordance with P3w1-P64s signal assignments (VITA46.9)

1 * XMC slot:

- ▶ One PCIe x8 port to Jn25
- ▶ Jn26 IOs routed to the backplane in accordance with P5w3P6-X38s+X8d+X12 signal assignments (VITA46.9)

- ▶ 24 LVDS (from FPGA)
- ▶ GTX (from FPGA)

Miscellaneous

- ▶ PIC μ -controller for System Management (per VITA 46.11)
- ▶ Power supply monitoring / Temperature sensor...
- ▶ Status LEDs
- ▶ Engineering kit for debug: JTAG/COP...

Front:

- Console and USB port

Note: some configurations require factory settings



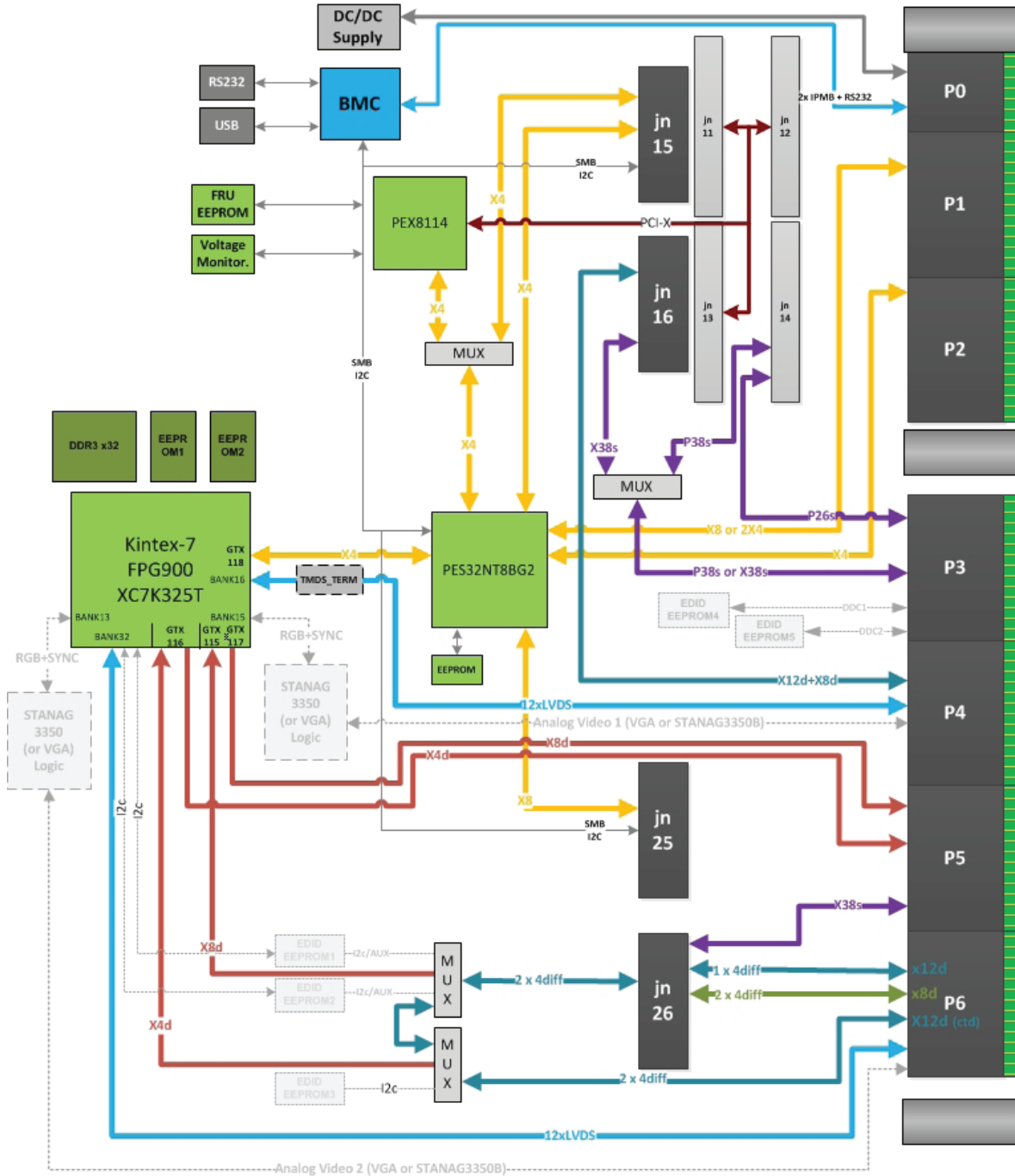
The **IC-CMC-VPX6a** is a 6U x 4HP (1") VPX board compliant with 6U module definitions of the VITA 46.0 standard (0.80 or 0.85" : please consult us), available in air-cooled and conduction cooled versions.

IC-CMC-VPX6a

AMD E8860 / Xilinx Kintex-7 Graphic & Processing board

Drivers / Firmware

Block Diagram



Environnement Specifications:

Please consult the IC-CMC-VPX6a page at www.interfaceconcept.com.

Ordering Information:

Please contact our sales department : tel. +33 (0)2 98 577 176 - email : info@interfaceconcept.com

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