

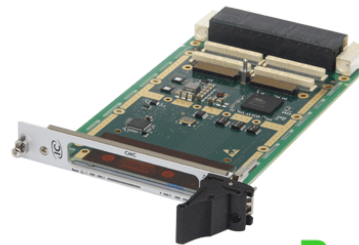
IC-CMC-VPX3a

VPX 3U PMC/XMC carrier board

The **IC-CMC-VPX3a** is a carrier board designed to expand VPX systems capabilities with the large range of PMC/XMC mezzanines.

Thus associated with the **IC-PQ3-XMCa** or the **IC-GRA-XMCb**, designers immediately own a high-performance and low-power PQ3 based solution or an efficient 3D graphic product. Coupled with our serial or SSD PMC/XMC boards, the **IC-CMC-VPX3a** completes the IOs or storage capabilities of VPX system.

Of course, most PMC or XMC modules (from Interface Concept, commercial or custom design) can be supported by the **IC-CMC-VPX3a**.



Description

The **IC-CMC-VPX3a** is designed to carry alternately : one single width XMC board or one single width PMC board.

XMC configuration :

Eight lanes are routed from the VPX backplane to the XMC pn5 connector (x1, x2, x4 or x8 PCI-Express configuration supported).

64 IOs of the Pn6 connector are routed to the VPX P2 connector; cabling scheme compliant with **VITA 46.9 X8d+X12d+X24s** (**X38s+X8d+X12d** possible on demand)

PMC configuration :

Four lanes are routed from the VPX backplane to a PCIe/PCI bridge supporting

- ▶ conventional PCI 32/64 bits 33/66MHz, and
- ▶ PCI-X 32/64 bits 66/100/133 MHz (3.3V PCI bus signalling)

64 IOs of the Pn4 connector are routed to the VPX P2 connector (**P64s**).

Populated with a processor mezzanine board (PMC or XMC), the **IC-CMC-VPX3a** can act as System controller. In that case, the board can monitor power supplies and deliver VPX 25MHz reference clock.

The **IC-CMC-VPX3a** is offered with 2 different powering schemes for the XMC module:

- ▶ A default version that supplies VPWR=5V to the XMC module
- ▶ An alternate version that supplies VPWR=12V to the XMC module

In addition, while the 3.3V supplied to the XMC/PMC modules is by default generated from an on-board DC-DC converter, it is possible to source 3.3V directly from the VPX backplane (VS2). Please contact us.

Main features

Interfaces

Data plane

- ▶ 8 lanes between VPX P1 (ports A&B) and XMC Jn5, or
- ▶ 4 lanes between VPX P1 (ports A) and PCIe/PCI bridge (PMC)

Utility plane :

- ▶ Power supplies,
- ▶ Reset, NVMRO
- ▶ Reference clock

Management plane :

- ▶ IPMC (VITA46.11)

Rear IOs :

- ▶ see below

Miscellaneous :

Five Leds are available on the front panel to report Power On, Reset status, Bridge PCIe/PCI link status and Management Controller status (x2).

The **IC-CMC-VPX3a** is a VPX 3U / 4HP (0.8") board compliant with 3U module definition of the VITA 46.0 standard.

It is available in air-cooled and conduction cooled (without front IO) versions according to VITA 47.

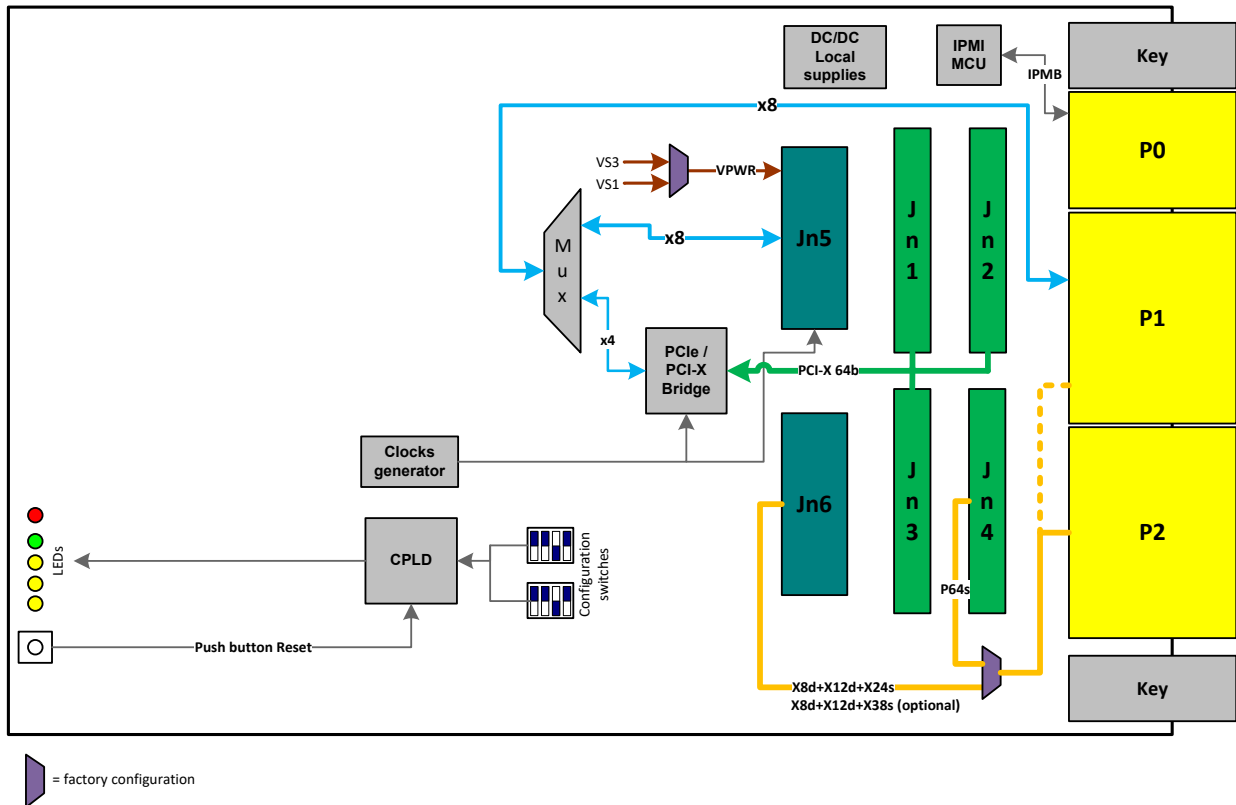


Depending on the PMC/XMC board plugged, the **IC-CMC-VPX3a** can be compatible with several OpenVPX profiles (VITA 65).

IC-CMC-VPX3a

VPX 3U PMC/XMC carrier board

Block Diagram



Interface features

Front connectors :

- ▶ Reset button
- ▶ 5 Leds

P0 connector

- ▶ Power supplies,
- ▶ Reset, NVMRO
- ▶ Reference clock

P1 connector

- ▶ 8 (or 4) lanes linked to the XMC Pn5 connector (or to the PCIe/PCI bridge)

P2 connector

- ▶ 64 IOs of the Pn6 connector routed to P2 (compliant with VITA 46.9 X8d+X12d+X24s - X38s+X8d+X12d possible on demand), or
- ▶ 64 IOs of the Pn4 connector routed to tP2 (P64s).
(Factory setting)

Environnement Specifications:

Please consult the IC-CMC-VPX3a page at www.interfaceconcept.com.

Ordering Information:

Please contact our sales department : tel. +33 (0)2 98 573 030 - email : info@interfaceconcept.com

This document supersedes any earlier documentation relating to the products referred to herein. The information contained in this document is current at the date of publication. It may subsequently be updated or withdrawn without notice.

