

XVPX-9425 VPX PMC/XMC Carrier Module



Overview

The Xembedded XVPX-9425 VPX Mezzanine Carrier board provides 25 Watts of power for the on-board PMC/XMC site, accommodating either high-demand PMC I/O or FPGA modules. The XVPX-9425 offers front panel and rear I/O support (Vita 46.10) in a single, standard 3U VPX slot.

The XVPX-9425 is ideal for use in high-performance industrial, COTS, military and telephony VPX systems that require very high performance I/O expansion using PMC or XMC modules. The XVPX-9425 is available in three versions: Air Cooled, Conduction Cooled and REDI cover, Conduction Cooled (Vita 48).

Features

- 3U VPX carrier board with PMC / XMC site that can deliver up to 25W of power
- Fat Pipe (x4) or Double Fat pipe (x8) PCI Express interface is jumper selectable
- The site uses 64-bit, 133/66 MHz PLX Technology with a PCIe to PCI-X Bridge
- PCIe 8 lanes wide and supports PCIe Gen. 2.0
- Supports standard (IEEE1386.1) PMC/XMC modules
- Conforms to VPX specification Vita 46.0, 46.4 and 46.9 and optionally Vita 48
- Front panel or rear PMC/XMC I/O support
- 64 I/O lines (P14) (Vita 46.9) via P2 VPX connector
- 3.3V PCI-X signaling PMC site
- +12V and -12V provided to the PMC site
- FRU information and module temperature monitor





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VPX Interface

- Vita 46.0 Fat pipe (x4) or Double Fat pipe (x8) PCI Express interface is jumper selectable
- FRU EEPROM with Temperature Monitor

PMC/XMC Interface

- One PMC/XMC module in a single VPX slot
- PMC site 32/64 bit, 66/133MHz, up to 1GB/s
- XMC site is PCIe 8 lanes wide and supports PCIe Gen. 2.0
- 3.3V, 5V and +/-12V provided for PMC modules via the VPX backplane
- Front or rear panel I/O support for the PMC site with 64 I/O lines, or 32 differential pairs

Power Requirements

Carrier only power requirements

- +3.3 VDC, .9A typical plus any additional power consumed by PMC/XMC's (4A max)
- +5 VDC, .9A typical plus any additional power consumed by PMC/XMC's (4A max)
- +12VDC and -12VDC provided to PMC site

Order Information

XVPX-9425-00X

- 1 = Air Cooled 0[•]C to 55[•]C (0.8" pitch)
- 2 = Conduction Cooled –40C to +85C (0.85" pitch)
- 3 = CC with REDI Covers -40C to +85C (1.0" pitch)



<u>Environmental</u>

- Form Factor: 3U VPX bus 6.299" (160mm), 3.937" (100.0mm)
- Carrier Interface VPX, Vita 46
- Air Cooled Temperature: 0° to 55° C (Air flow requirement as measured to be greater than 200 LFM)
- **Conduction Cooled Temperature:** -40 to 85° C (Module MUST operate in a fully installed Conduction Cooled rack)
- Conduction-Cooled with REDI (vita 48) covers Temperature: -40° to 85° C (Module MUST operate in a fully installed Conduction Cooled, REDI cover rack)
- Vibration: .05Gs RMS (20 2000 Hz) random, Operating 6Gs RMS per Hz spectrum
- **Shock:** 30Gs each axis, 11ms
- Storage Temperature: -55° to 100° C
- Relative Humidity: 5 to 95 percent, non-condensing
- **MTBF:** MIL Spec 217-F@ 105,000 Hrs.
- Compliance IEEE 1386.1 (CMC Standard) and Vita 46.0, 46.4 and 46.9

NOTE: Specifications for XVPX-9425 only.