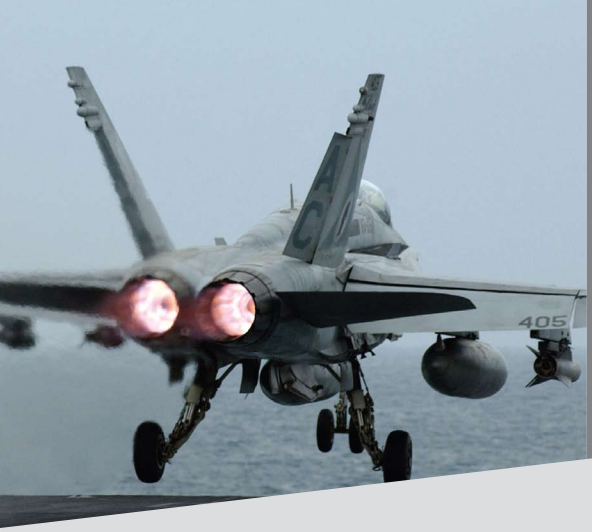
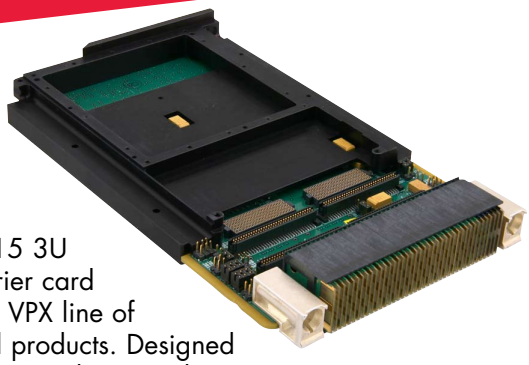


Fact Sheet

VPX3-215

3U VPX/VPX-REDI ExpressReach PMC/XMC Carrier Card



- 3U form factor as per VITA 46.1
- Supports a single XMC mezzanine module
- Supports x8 lanes PCI Express® (PCIe) to XMC as per VITA 42.4
- Supports XMC I/O to backplane
- Support for x8 PCIe ports to backplane
- Complies with VITA 46.9 mapping
- Available in air-cooled and conduction-cooled formats

The switchless VPX3-215 3U VPX ExpressReach carrier card is a member of the 3U VPX line of embedded ruggedized products. Designed to integrate with Curtiss-Wright Controls Embedded Computing XMC mezzanine cards (XMCs). This fully ruggedized carrier card expands functionality of its' host single board computer (SBC) by providing the ability to expand I/O capability without requiring additional SBCs.

Small form factor products allow systems developers to take advantage of COTS solutions for a new range of space and weight constrained applications that cannot accommodate the 6U standard. The challenge of high density computing is to pack the greatest functionality into the smallest standard form factor, with the lowest power possible while retaining as much flexibility as possible. While small in size, the 3U products offer impressive processing power and I/O capability to handle large applications.

The VPX3-215 has been designed to handle XMC mezzanine cards providing a host SBC to easily expanded its' I/O capability. This version of the VPX3-215 provides and XMC site with 64-bits of I/O mapped as 20 differential pairs along with 24 single-ended signals.

The VPX3-215 is offered in commercial, rugged air-cooled and conduction-cooled versions. It provides with primary and secondary thermal interfaces and a mid-plane for mezzanine cooling.

Learn More
Sales Info: sales.cwcembedded.com
Sales Email: sales@cwcembedded.com

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Fact Sheet

VPX3-215

Mezzanine Support

- Single XMC site with PN5-PN6 connectors
- 64-bits of PMC I/O routed as per VITA 46.9 D20X24S
- High performance XMC site supporting up to x8 PCIe link as per VITA 42.4
- XMC site supports +5V and +/- 12V

I/O Configuration

- XMC I/0
  - 64-bits of XMC I/O routed as per VITA 46.9
    - 20 differential, impedance controlled pairs 24 single-ended signals
  - Up to 8-lane fabric port routed as per VITA 46.9

Other Features

- 3.3V, 12V or +5V operation
- Power management features thru the use of a I2C IPMI interface
- Available in a range of ruggedization levels
  - Air-cooled level 0 and 100, and conduction-cooled level 100 and 200 per VITA 46.0 (.8" pitch)
  - Conduction-cooled per VITA 48.2, Type 1 card (.85" pitch with top and bottom covers, compatible with 1.0" pitch usage) upon customer request
- Circuit card assembly is done to class 3 standards of IPC-A-610C, Acceptability of Electronic Assemblies
- Standard conformal coating is acrylic
- PWB meets UL 94 V-0 flammability rating

Figure 1: VPX3-215 Block Diagram