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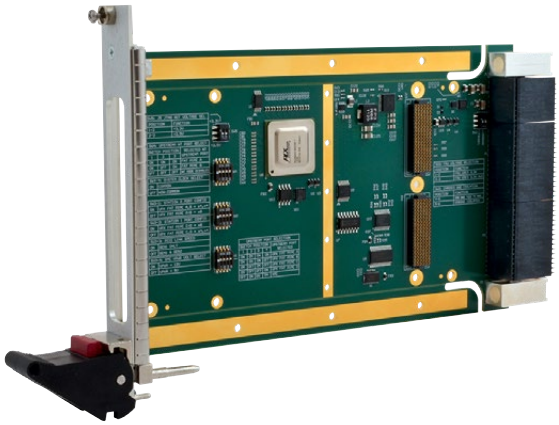
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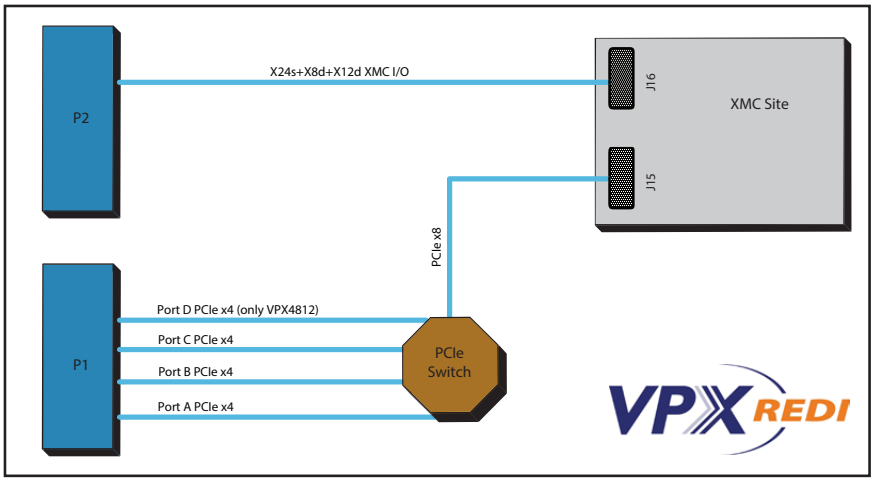
Find the *Acromag / Xembedded / Xycom VPX4812* at our website: *Click HERE*

VPX Carrier Cards

VPX4812 / VPX4814 VPX Carrier Cards for XMC Modules

CE 2 YEAR WARRANTY RoHS Compliant





Air-cooled, conduction-cooled and REDI versions ◆ 3U Single XMC slot ◆ PCIe x8 Gen 2 interface

Description

These 3U mezzanine carrier cards provide a simple and cost-effective solution for interfacing a XMC module to a VPX computer system. The carrier card routes power and bus signals to a plug-in mezzanine module through the VPX card slot connector. Industrial I/O and configurable FPGA modules from Acromag or other vendors are supported.

The VPX4812 can be used as a VPX switch card allowing a host CPU to communicate with up to 3 downstream cards in addition to the XMC card. Each VPX port can be configured to be x4 or x8.

The VPX4814 is a peripheral XMC carrier board designed to be used in a system that uses a VPX AcroExpress CPU.

These carriers are ideal for high-performance industrial, defense, scientific research, and telephony systems requiring high-speed I/O expansion. The VPX4812 and VPX4814 is available in three versions: air-cooled, conduction-cooled and a Ruggedized Enhanced Design Implementation (REDI VITA 48).

Key Features & Benefits

- PCIe bus 8-lane Gen 1 or 2 interface
- Supports standard XMC modules (IEEE 1386.1)
- Conforms to VPX VITA 46.0, 46.4, and 46.9 specifications and optionally VITA 48
- Supports front or rear panel XMC I/O
- Rear I/O is compliant to VITA 46.9 X24s+X8d+X12d
- +12V and –12V provided to XMC site
- Monitors FRU information and module temperature



Conduction-cooled version



VPX REDI VITA 48 version

Acromag THE LEADER IN INDUSTRIAL I/O

844-878-2352 ■ solutions@acromag.com ■ www.acromag.com ■ 30765 Wixom Rd, Wixom, MI 48393 USA

Bulletin #8400-775H

VPX Carrier Cards

VPX4812 / VPX4814 VPX Carrier Cards for XMC Modules

Performance Specifications

General

Form Factor
3U VPX bus 6.3" (160mm) x 3.94" (100.0mm).

Front Panel
The VPX4821-LF has a 1.0" VITA 48.1 front panel. Contact the factory for IEEE 1101.10 1.0" and 0.8" options.

Bus Compliance
VITA 46.0, 46.4, 46.9, 48 and 65.
MIL Spec 217-F @ 105,000 hours.

VPX Carrier Interface

VPX4812
Compatible VITA 65 module / slot profiles:

MOD3-SWH-4F-16.4.5-2 / SLT3-SWH-4F-14.4.4

MOD3-PER-1F-16.3.2 / SLT3-PER-1F-14-3.2.

FRU EEPROM with temperature monitor.

VPX4814
AcroExpress™ VPX6600 system compatible.

Compatible VITA 65 module / slot profiles:

MOD3-PER-1F-16.3.2 / SLT3-PER-1F-14-3.2.

FRU EEPROM with temperature monitor.

Compatible with sytems that use UTP control plane interfaces.

XMC Interface

One IEEE 1286.1 XMC module in single VPX slot.

XMC site is PCIe Gen. 2.0 and 8 lanes wide.

3.3V and ±12V provided for XMC modules via the VPX backplane.

Front I/O is supported on air-cooled only.

Rear I/O is supported via XMC P16 and is compliant to VITA 46.9 X24s+X8d+X12d.

Power Requirements

Carrier-Only Power Requirements
+3.3V DC: 0.2A typical plus any additional power consumed by XMC (4A max).

+5V DC: 0.8A typical (4A max).

+12V DC and –12V DC provided to XMC site from VPX backplane.

Environmental

Air-Cooled Operating Temperature
-40 to 70°C (air flow requirement to be greater than 200 LFM).

Conduction-Cooled Operating Temperature
-40 to 85°C (board must operate in a fully-installed conduction-cooled rack).

REDI (VITA 48) Operating Temperature
-40 to 85°C (board MUST operate in a fully-installed conduction-cooled, REDI supported rack).

Storage temperature
Air-cooled: -40 to 85°C.
Conduction-cooled/REDI: -40 to 105°C.

Relative humidity
5% to 95% non-condensing.

MTBF
1,595,069 hrs. at 25°C.

1,225,286 hrs. at 40°C.

Shock
Operating:
Designed to comply with VITA 47 Class OS1, 20g, 11ms half sine and terminal sawtooth shock pulses.

Vibration
Operating:
Designed to comply with VITA 47 Class V1.

Ordering Information

Carrier Cards - Go

VPX4812-LF
VPX carrier card, 3U, one XMC slot.

VPX4812-CC-LF
Conduction-cooled version of VPX4812.

VPX4812-REDI-LF
Ruggedized enhanced design implementation (REDI VITA 48) version of VPX4812.

VPX4814-LF
AcroExpress® VPX6600 system compatible.
VPX carrier card, 3U, one XMC slot.

VPX4814-CC-LF
Conduction-cooled version of VPX4814.

VPX4814-REDI-LF
Ruggedized enhanced design implementation (REDI VITA 48) version of VPX4814.

Accessories

TRANS-V112-LF
Rear transition module.

5028-564
JTAG development cable

Software Development Tools

See www.acromag.com for more information.

Related Products

XMC boards

ISO9001
AS9100
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