VPX
(OpenVPX)

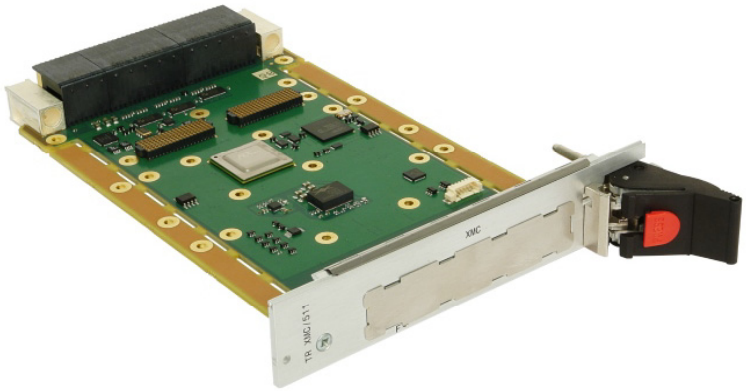
TR XMC/x01
N - Series

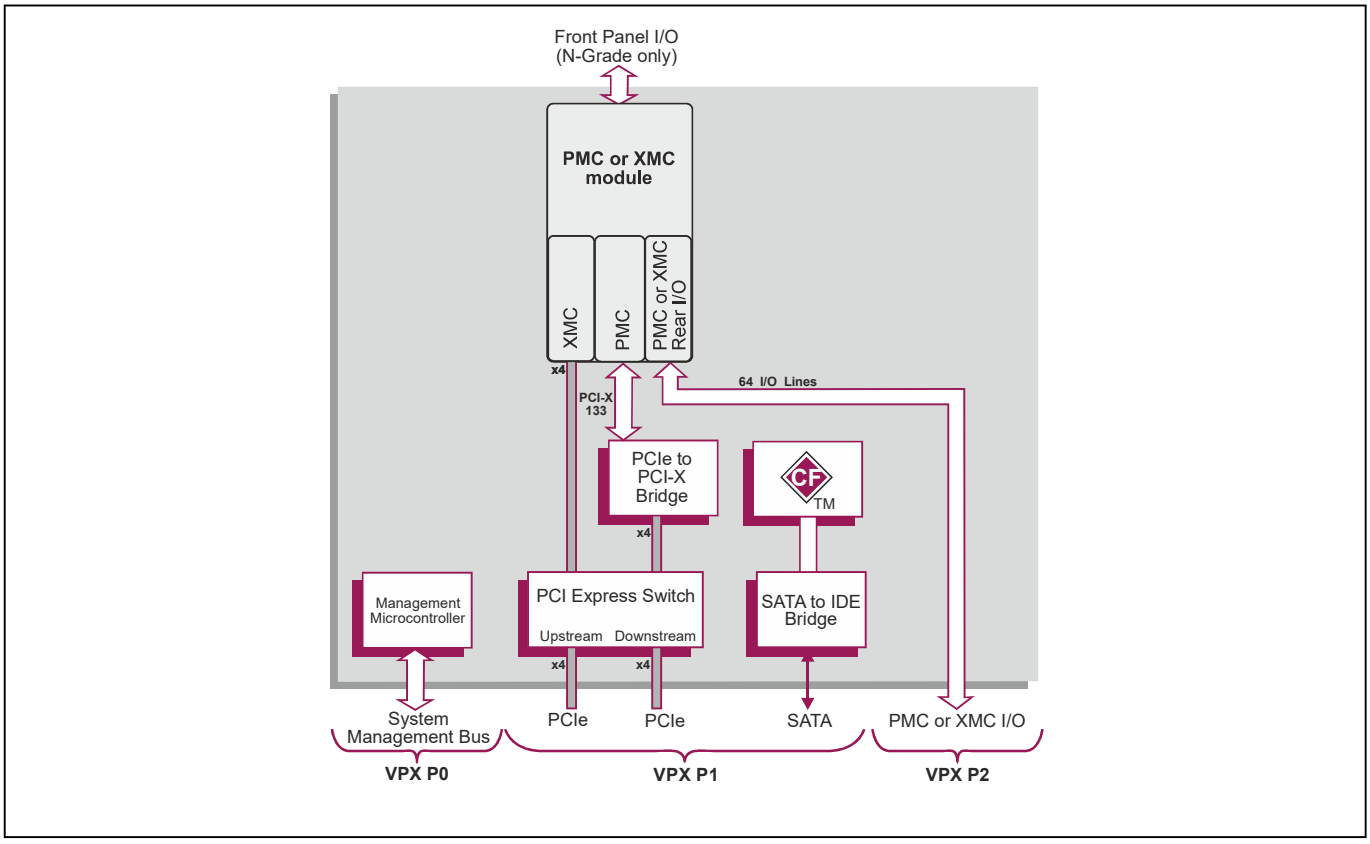
3U VPX XMC/PMC Carrier Board

Key Features

The TR XMC/x01 XMC/PMC carrier board provides a flexible solution for adding modular I/O functionality to a 3U VPX system.

- Support is included for a CompactFlash® card
- Air-cooled and conduction-cooled versions are available
- Supports a range of commercial XMC/PMC modules including SAS, LAN, WAN, Graphics and Communications Controllers





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Specification

VPX XMC or PMC Carrier

- 3U VPX XMC or PMC Carrier supports:
  - one single size XMC or PMC module
  - supports End-Point Processor XMC modules
  - supports non-Monarch Processor PMC modules
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001 and PMC (PCI Mezzanine Card) standard IEEE 1386.1-2001
- compatible with several OpenVPX module profiles
- front panel interface aperture
- optional rear panel transition module
- for rugged VPX-REDI (RCx-Series) versions:
  - conduction-cooled to VITA 48.2
  - -40° C to +85° C at card edge
  - conformally coated
  - see TR XMC/301-RCx datasheet

XMC/PMC Interfaces

- XMC module interface:
  - supports x1, x2 or x4 PCI Express®
- PMC interface supports:
  - 32/64-bit, 33/66MHz PCI
  - 64-bit, 66/100/133MHz PCI-X
- supports front panel I/O
- 64-bit rear I/O via VPX P2 connector:
  - option for rear I/O is via an XMC Pn6 or PMC Pn4 connector
  - P2 pinout conforms to (build option)- X24s+X8d+X12d or P64s (VITA 46.9)
- optional rear transition module

CompactFlash Site

- CompactFlash® Type-I site available:
  - implemented via SATA to EIDE interface connected to VPX P1 wafer 9 or 10
- available via VPX backplane:
  - supports OpenVPX module profile MOD3-STO-2U-16.5.1-1

VPX Backplane Interface

- P0, P1 and P2 support OpenVPX configuration
- configurable PCI Express (PCIe)® fabric interface supports:
  - upstream via a x4 PCIe port
  - downstream via four x1 PCIe ports or a x4 PCIe port
  - PCI Express Gen 1 and Gen 2
- compatible with OpenVPX module (VITA 65) profiles:
  - MOD3-PAY-2F-16.2.7-1
  - MOD3-PAY-2F-16.2.7-2
  - MOD3-PAY-1F4U-16.2.8-1
  - MOD3-PAY-1F4U-16.2.8-3
  - MOD3-PER-2F-16.3.1-2
  - MOD3-PER-2F-16.3.1-3
  - MOD3-PER-1F-16.3.1-1
  - MOD3-PER-1F-16.3.1-2

System Management

- System Management interface:
  - implements the SM0-1 interface
- on-board System Management Controller
- supports 8 Kbytes of non-volatile memory

Electrical Specification

- maximum current, XMC or PMC module is not fitted
- +5V VS3 @ 1.2A, voltage +5% / -2.5%
- +3.3V VS2 @ 1.2A, voltage +5% / -2%
- +3.3V AUX @ 0.2A, voltage +5% / -5%
- +12V AUX and -12V AUX routed to the XMC site

Safety

- PCB (PWB) manufactured with flammability rating of UL 94V-0

Environmental Specification

- operating temperature:
  - VITA 47 Class AC1, 0° C to +55° C
  - air-cooled
- non-operating temperature:
  - VITA 47 Class C1, -40° C to +85° C
- operating altitude:
  - 0 to 15,000 feet (0 to 4,572 meters)
- relative humidity:
  - 5% to 95%, non condensing

Mechanical Specification

- 3U VPX form-factor (VITA 46.0, VITA 48.0)
- 3.9 inches x 6.3 inches (100mm x 160mm)
- optional slot widths:
  - 0.8-inches (VITA 46.0)
  - 1.0-inch (IEEE 1101.10 as per VITA 46.0)
  - 1.0-inch (VITA 48.0 as per VITA 65)
- connectors to VITA 46.0 for P0, P1 and P2
- operating mechanical:
  - shock - VITA 47 Class OS1, 20g
- random vibration - 0.002g²/Hz

Please contact your local Concurrent Technologies sales office for further details on board build options and accessories.

Datasheet Code 1626/0217