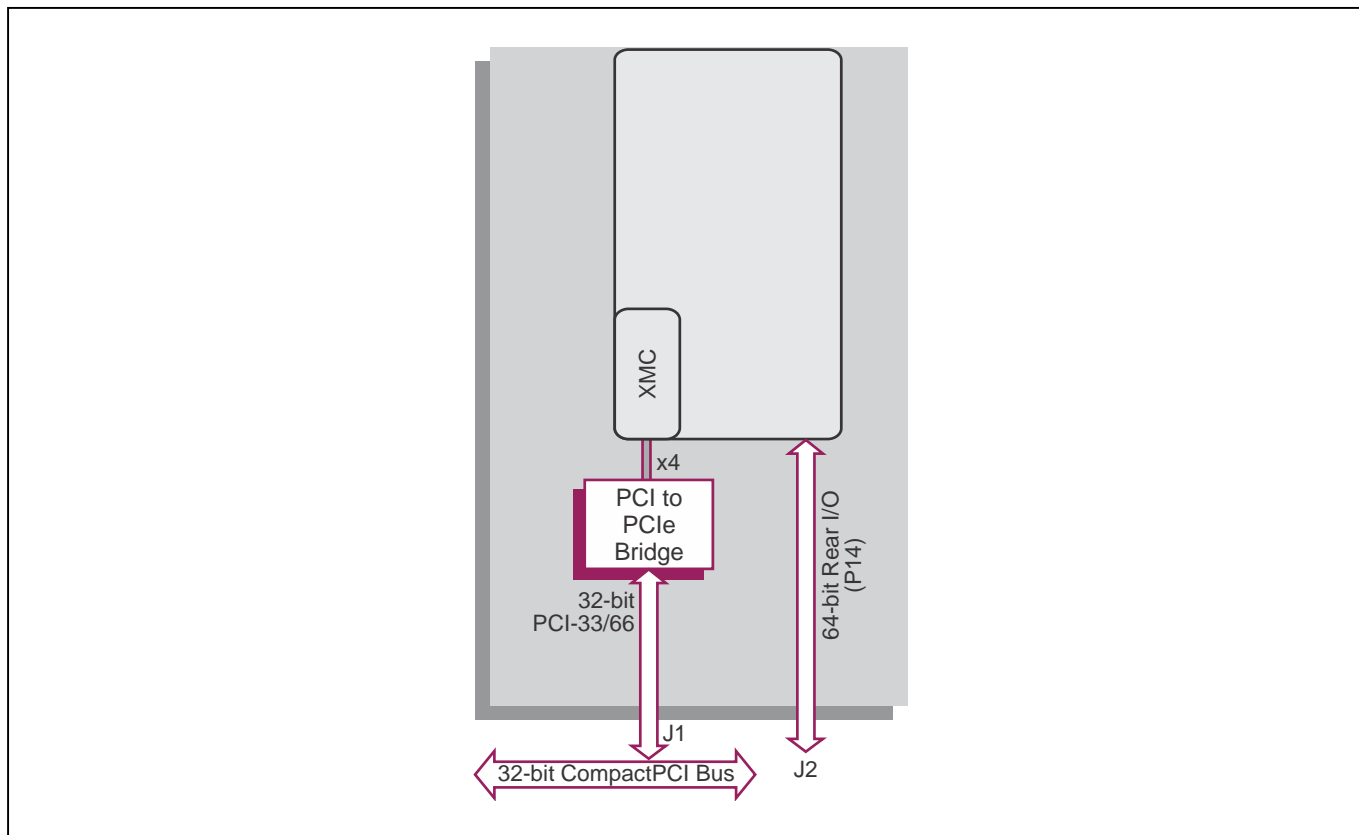


3U CompactPCI® XMC Carrier Board

Key Features

TP CR1/XMC-RC is a rugged conduction-cooled 3U CompactPCI® carrier board with a site for a single XMC module.

- Occupies one CompactPCI® slot
- Rear I/O via PMC P14 connector
- Air-cooled versions with front I/O are also available



3U CompactPCI XMC Carrier

- 3U CompactPCI® XMC Carrier supports:
 - one single size XMC module
 - supports non-Monarch Processor XMC modules
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001 and VITA 42 XMC Switched Mezzanine Card standard

Rugged XMC Carrier

- conduction-cooled to ANSI/VITA 30.1-2002
- conformally coated
- for commercial air-cooled versions - see separate datasheet:
 - rear plug compatible
 - air-cooled: TP CR1/XMC

XMC Interface

- XMC module interface implemented via PLX Technology PEX8114 PCI to PCI Express® bridge:
 - supports x1, x2 or x4 Gen 1 PCI Express
 - logical and electrical layer meets specification PCI Express 1.1
- 64-bit rear I/O via J2 connector:
 - conforms to PICMG 2.3 R1.0 pinouts
 - rear I/O routed as differential pairs
 - PMC P14 connector fitted

CompactPCI Bus Interface

- pinout conforms to PICMG 2.0 R3.0:
 - 32-bit 33/66 MHz PCI bus
 - supports 3.3V and 5V signaling
- CompactPCI bus interfaces to XMC site via a PCI to PCI Express bridge

IPMI

- PICMG 2.9 R1.0 (System Management Specification):
 - implements the IPMB0 interface
- on-board Baseboard Management Controller
- monitors board voltages and status indicators
- supports 8 Kbytes of non-volatile memory

Electrical Specification

- all power supply rails available to XMC site:
 - overall power consumption dependent on the XMC module fitted
 - maximum power for XMC module is 25 Watts
- typical current figures without XMC module fitted:
 - +5V@ 0.1A; voltage +5% / -3%
 - +3.3V@ 0.5A; voltage +5% / -3%
 - +12V@ 0.0A; voltage +5% / -5%
 - -12V@ 0.0A; voltage +5% / -5%

Safety

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

Environmental Specification

- operating temperature (at card edge):
 - VITA 47 Class CC4, -40°C to +85°C
 - conduction-cooled
- non-operating temperature:
 - VITA 47 Class C4, -55°C to +105°C
- operating altitude:
 - -1,000 to 50,000 feet (-305 to 15,240 meters)
- 5% to 95% Relative Humidity, non condensing

Mechanical Specification

- 3U form-factor:
 - 3.9-inches x 6.3-inches (100mm x 160mm)
- single slot
- connectors: IEC-1076-4-101 for J1-J2
- operating mechanical:
 - shock - VITA 47 Class OS2, 40g
 - random vibration - VITA 47 Class V3, 0.1g²/Hz



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