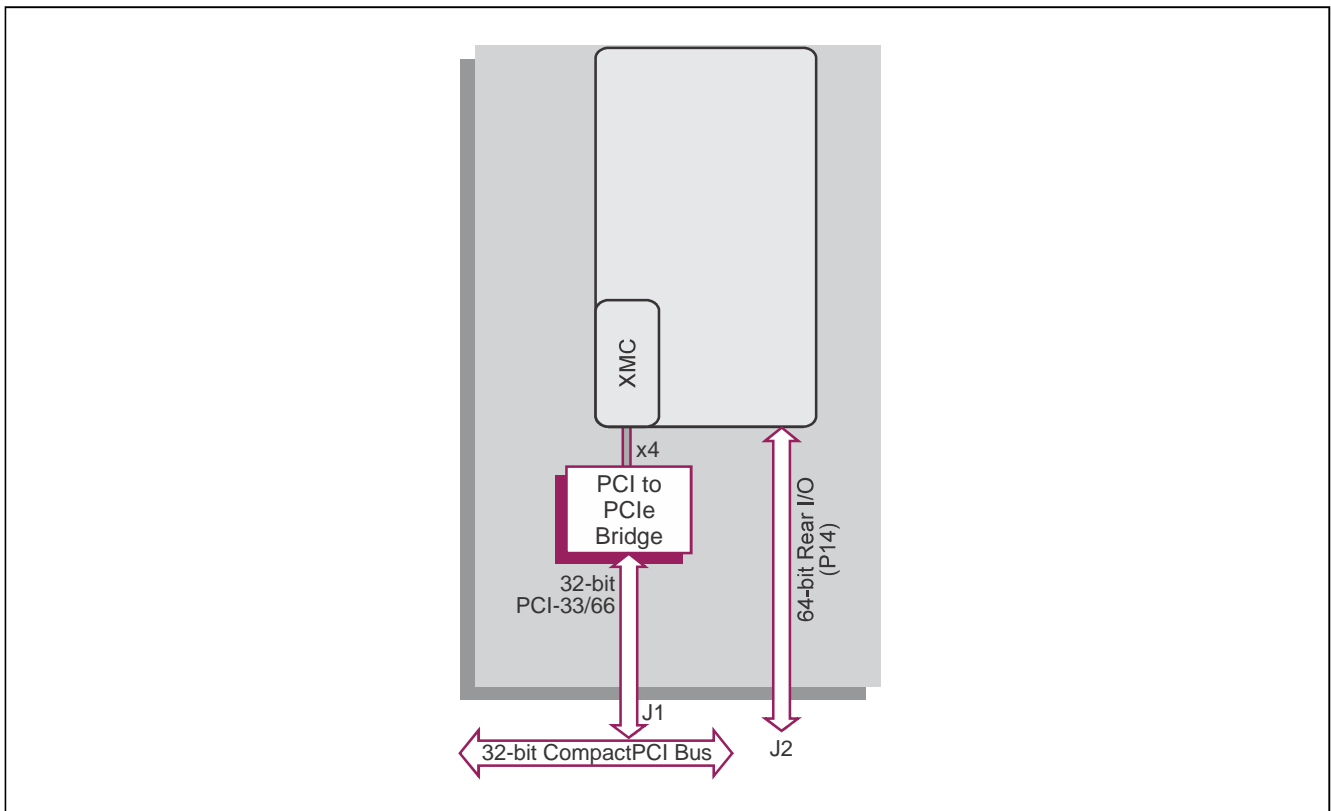
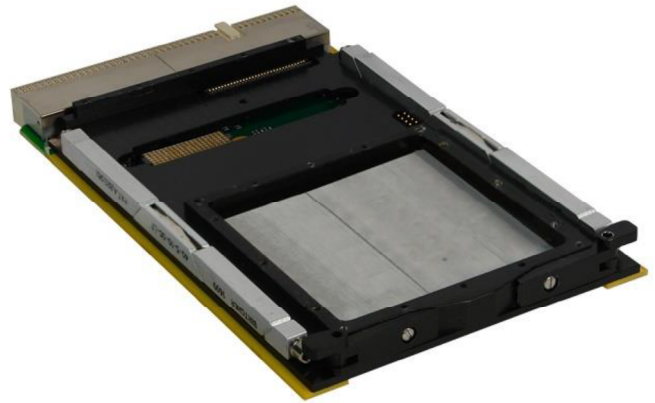


## 3U CompactPCI® XMC Carrier Board

### 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, 0.1g<sup>2</sup>/Hz