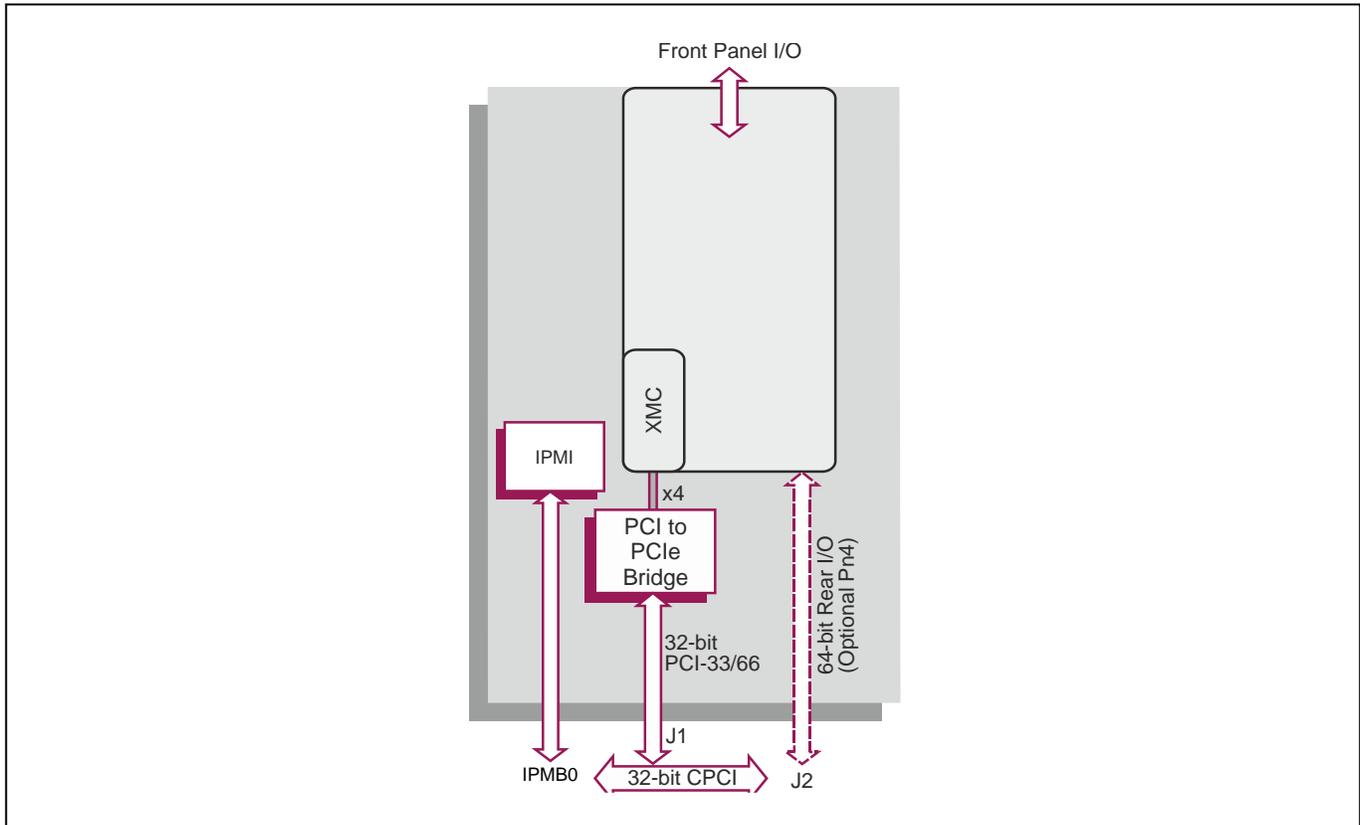


3U CompactPCI® XMC Carrier Board

Key Features

TP CR1/XMC is a 3U CompactPCI® carrier board that provides a site for a single XMC module.

- Occupies one slot
- Extended temperature and rugged conduction-cooled versions 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 PMC (PCI Mezzanine Card) standard IEEE 1386.1-2001
- for rugged versions, see separate datasheets:
 - rear plug compatible
 - rugged: TP CR1/XMC-RC
 - 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
- front panel I/O
- 64-bit rear I/O via J2 connector:
 - conforms to PICMG 2.3 R1.0 pinouts
 - rear I/O routed as differential pairs
 - optional PMC Pn4 connector
 - optional Rear Transition Module

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 temperatures:
 - 0°C to +55°C (N-Series)
 - -25°C to +70°C (E-Series)
 - -40°C to +85°C (K-Series)
- non-operating temperature: -40°C to +85°C
- 5% to 95% Relative Humidity, non condensing:
 - K-Series includes humidity sealant

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
- shock: 20g, 11ms, ½ sine (operating)
- vibration: 5Hz-2000Hz at 2g, 0.38mm peak displacement (operating);

