

## 3U CompactPCI PMC Carrier Board



### APPLICATIONS

The TP CRx/PMC 3U PMC carrier board provides a flexible solution for designers wishing to add PMC I/O functionality to a CompactPCI® system. The bridgeless carrier is available as two options, with either a 32-bit or a 64-bit PCI bus. Each option can accommodate one single width PMC module conforming to the IEEE 1386 Common Mezzanine Card standard. A wide range of commercial and proprietary designed PMC modules can

be supported such as SCSI, LAN, WAN, Graphics and Communications Controllers. Front panel access is supported and I/O signals from the PMC site are routed to the CompactPCI J2 connector allowing access from the rear of the system. The TP CRx/PMC is also available in ruggedized conduction-cooled and ruggedized air-cooled versions.

### HIGHLIGHTS

- PMC Carrier available as two options:
  - 64-bit PCI bus to operate with 64-bit CompactPCI backplanes
  - 32-bit PCI bus to operate with 32-bit CompactPCI backplanes
- 64-bit PCI bus option supports:
  - one single size PMC module
  - 32/64-bit, 33/66 MHz modules
  - I/O via front panel with option for 21 rear I/O signals via J2 connector
  - 5 Volt or 3.3 Volt signalling
- 32-bit PCI bus option supports:
  - one single size PMC module
  - 32-bit, 33/66 MHz modules
  - I/O via front panel and 64 rear I/O signals via J2 connector
  - 5 Volt or 3.3 Volt signalling
- 3.3 Volt, 5 Volt, +12 Volt and -12 Volt provided for PMC modules via CPCI backplane
- Extended temperature options also available:
  - 0°C to +55°C (N-Series)
  - -25°C to +70°C (E-Series)
  - -40°C to +85°C (K-Series, includes humidity sealant)
- Ruggedized air-cooled version (RA-Series) also available:
  - -40°C to +75°C
  - conformally coated
  - see separate TP CRx/PMC-RA datasheet
- Ruggedized conduction-cooled version (RC-Series) also available:
  - conduction-cooled to ANSI/VITA 30.1-2002
  - -40°C to +85°C
  - conformally coated
  - see separate TP CRx/PMC-RC datasheet
- Occupies one 3U CompactPCI slot

## 3U CompactPCI PMC Carrier

- available in two options:-
  - 64-bit PCI bus to operate with 64-bit CompactPCI backplanes
  - 32-bit PCI bus to operate with 32-bit CompactPCI backplanes

## PMC Interface

- support for one single width module:-
  - 5 Volt or 3.3 Volt signaling
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001 and PMC (PCI Mezzanine Card) standard IEEE 1386.1-2001
- I/O can be accessed via front panel or via J2:-
  - can connect to a Transition Module
- 64-bit option (TP CR2/PMC):-
  - supports 32/64-bit, 33/66 MHz modules
  - option for 21 rear I/O signals via J2 (uses reserved pins on J2)
- 32-bit option (TP CR1/PMC):-
  - supports 32-bit, 33/66 MHz modules
  - 64 rear I/O signals via J2
  - conforms to PICMG 2.3 R1.0 pinouts

## CompactPCI Bus Interface

- pinout conforms to PICMG 2.0 R3.0:-
  - supports 3.3V and 5V signaling
  - 32-bit and 64-bit options both support 33MHz and 66 MHz
- passive CompactPCI interface:-
  - no CompactPCI bridge

## Electrical Specification

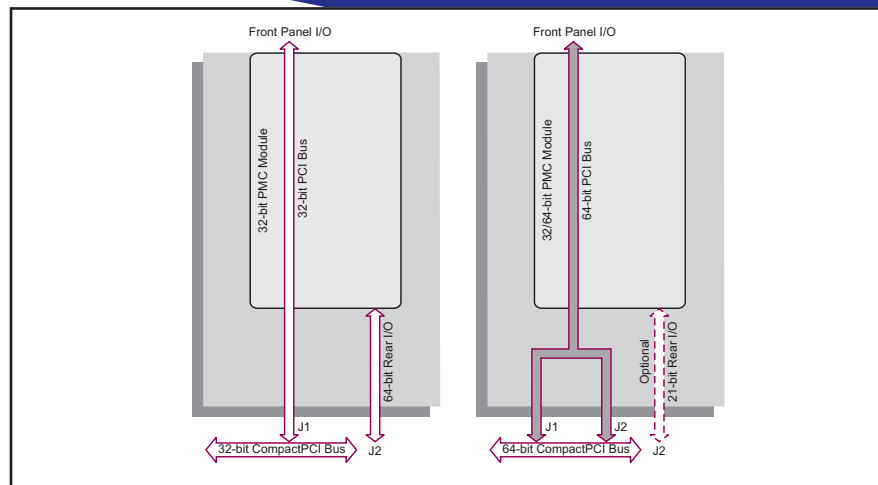
- CompactPCI V(I/O) power rail used for PMC V(I/O):-
  - quiescent current only (<1mA)
- +12V@0.0A; -12V@0.0A
- all power supply rails available to PMC site:-
  - overall power consumption dependent on PMC used

## Safety

- PCB (PWB) manufactured with flammability rating of 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)
- storage temperatures:-
  - 40°C to +85°C
- Relative Humidity, non condensing (operating and storage):-
  - 10% to 90%
  - K-Series includes humidity sealant
- altitude (operating):
  - 0 to 15,000 feet (0 to 4,572 meters)
- ruggedized air-cooled version also available:-
  - see separate TP CRx/PMC-RA datasheet
- ruggedized conduction-cooled version also available:-
  - see separate TP CRx/PMC-RC datasheet



## 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, 1/2 sine (operating);
  - 30g, 11ms, 1/2 sine (non-operating)
- vibration:
  - 5Hz-2000Hz at 2g, 0.38mm peak displacement (operating);
  - 5Hz-2000Hz at 5g, 0.76mm peak displacement (non-operating)

## ORDERING INFORMATION

### Order Number Product Description (Hardware)

Order Number	Product Description (Hardware)
TP CR1/PMC-10	32-bit PMC Carrier Board for 3U CPCI, with 64-bit rear I/O
TP CR2/PMC-10	64-bit PMC Carrier Board for 3U CPCI, with 21-bit rear I/O option
TP CR2/PMC-20	64-bit PMC Carrier Board for 3U CPCI, without rear I/O option

For extended temperature operation (E and K-Series) please contact your local sales office  
 For ruggedized conduction-cooled version, see separate TP CRx/PMC-RC datasheet  
 For ruggedized air-cooled version, see separate TP CRx/PMC-RA datasheet