N, E - Series

Dual PMC Carrier Board



APPLICATIONS

The PP PMC/202-U PMC carrier board provides a flexible solution for designers wishing to add functionality to 32/64-bit (33/66 MHz) CompactPCI® systems using PMC modules. The carrier can accommodate two single or one dual width, 32/64-bit (33/66 MHz), PMC modules 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.



Hot Swap support enables live insertion and extraction of the PP PMC/202-U so that I/O and network interfaces can be added, replaced or upgraded without interruption to the system operation. I/O signals from each of the PMC sites are routed to the CompactPCI J3 and J4 or J5 connectors allowing access from the rear of the system. Front panel access is supported and there is an optional rear panel I/O Transition Module.

HIGHLIGHTS

- Supports 2 single size PMC modules or one dual width module:
 - 5 Volt or 3.3 Volt signaling
 - 32/64-bit and 33/66 MHz
- "Hot Swap" live insertion and extraction
- I/O via front panel and rear I/O via J3 and J4 or J5 connectors:
 - rear I/O routed as differential pairs
- 3.3 Volt, 5 Volt, +12 Volt and -12 Volt provided for PMC modules via CPCI backplane
- Extended temperature versions available:
 - -25°C to +70°C (E-Series)
- Occupies one 6U CompactPCI slot:
 - 5 Volt or 3.3 Volt signaling
 - 32/64-bit and 33/66 MHz



Specification

PMC Interfaces

- support for 2 single width modules or one dual width module:-
 - → 5 Volt or 3.3 Volt signaling
 - → 32/64-bit and 33/66 MHz PCI interface
 - > supports dual function modules
 - → supports non-Monarch Processor PMC
- 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
- I/O can also be accessed via rear through backplane connectors:-
 - → 64 I/O signals per PMC site
 - → PMC rear I/O connects via J3 and J4 or J3 and J5
 - → PMC rear I/O routed as differential pairs to support SCSI rear I/0
 - → can connect to a Transition Module (AD PP2/001)
- logical layer based on PCI protocol specification
- electrical layer based on PCI electrical specification

Hot Swap Function

- permits live insertion and extraction of PP PMC/202-U carrier
- supports Basic and Full Hot Swap
- compatible with PICMG® 2.1, Rev 2.0 Hot Swap specification
- Hot Swap capable register:-
 - → insertion
 - → extraction
 - → ENUM mask/enable
 - front panel blue LED
- CPCI backplane interface signals:-
 - → ENUM (board insertion/extraction indication)
 - → healthy (power)

CompactPCI Bus Interface

- conforms to PICMG 2.0 R3.0:-
 - → supports 3.3V and 5V signaling
 - → 32/64-bits at 33/66 MHz
- PLX Technology PCI 6254 PCI to PCI bridge

Other Features

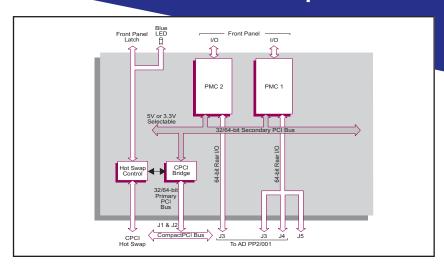
- front panel activity LED:-
 - → flashes with on-board PCI bus activity
- front panel fault LED:
 - reports power fault or PCI bus error conditions

Electrical Specification

- +5V@0.2A; +5%/-3%
- +3.3V@0.6A; +5%/-3%
- +12V@0.03A;
- -12V@0.01A (0.0A if no PMC module requires -12V)

Environmental Specification

- operating temperatures:-
 - → 0°C to +55°C (N-Series)
- → -25°C to +70°C (E-Series)
- 10% to 95% Relative Humidity (operating)
- -40°C to +70°C (storage)
- 10% to 95% Relative Humidity (storage)

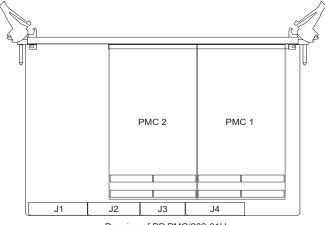


Safety

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

Mechanical Specification

- 6U form-factor: 9.2" x 6.3" (233.4mm x 160mm)
- utilizes a single CPCI slot: 0.8" (20.3mm)
- connectors: IEC-1076-4-101 for J1, J2, J3, J4, J5 (not all fitted)
- shock:
 - 20g, 11ms, 1/2 sine (operating);
 - 30g, 11ms, ½ sine (non-operating)
- vibration:
 - 5Hz-2000Hz at 2g, 0.38mm peak displacement
 - (operating); 5Hz-2000Hz at 5g, 0.76mm peak displacement (non-operating)



Drawing of PP PMC/202-01U

ORDERING INFORMATION

Order Number Product Description (Hardware)

Replace the order number suffix (xy) with selections from the following:

PP PMC/202-xyU PMC Carrier Board for CPCI

01 - Dual PMC with rear I/O via J3 & J4 (can be used with AD PP2/001-00) (J5 not fitted) 05 - Dual PMC with rear I/O via J3 & J5 (J4 not fitted)

AD PP2/001-00U Transition Module

(for use with PP PMC/202-01U)

For extended temperature operation, E-Series, please contact your local sales office