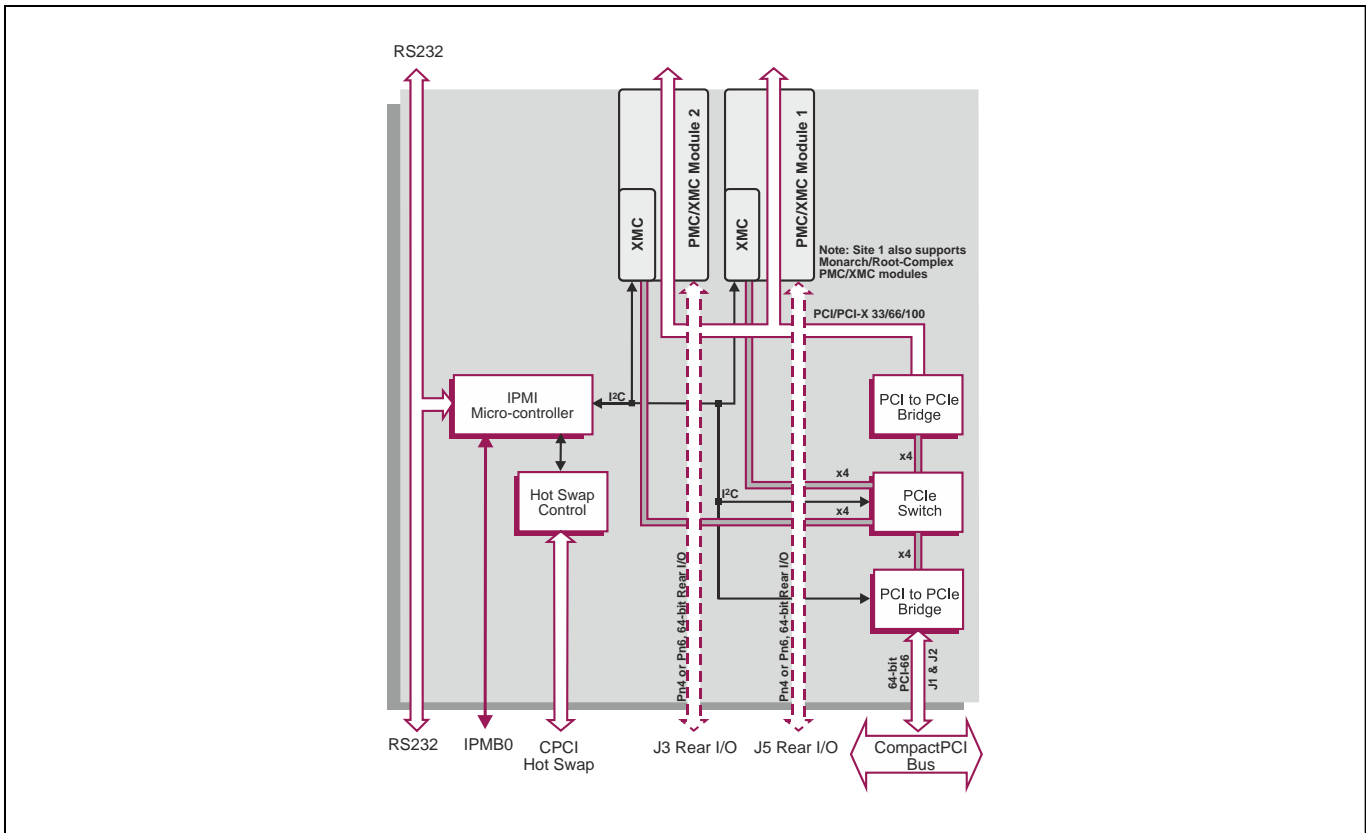## 6U CompactPCI® Dual XMC/PMC Carrier

Key Features

PP XMC/M02 is a 6U CompactPCI® carrier board for up to two XMC/PMC modules.

- Includes support for one Processor XMC module operating in root-complex mode

- XMC/PMC size options:
  - → two single size modules
  - → one dual width module

- XMC/PMC combinations:
  - → two XMC modules
  - → two PMC modules
  - → one XMC and one PMC module

- Extended temperature versions available

Block diagram showing: RS232, PMC/XMC Module 2, PMC/XMC Module 1, XMC, Note: Site 1 also supports Monarch/Root-Complex PMC/XMC modules, PCI/PCI-X 33/66/100, IPMI Micro-controller, I²C, Hot Swap Control, PCI to PCIe Bridge, x4, PCIe Switch, x4, PCI to PCIe Bridge, x4, 64-bit PCI-66, J1 & J2, RS232, IPMB0, CPCI Hot Swap, J3 Rear I/O, J5 Rear I/O, CompactPCI Bus, Pn4 or Pn6, 64-bit Rear I/O.

Dual XMC/PMC Carrier

- supports 2 single size XMC/PMC modules (or as one dual width module):
  - → a single PMC and a single XMC module can be used simultaneously
  - → supports Monarch and Root-Complex processor modules, PrPMC or PrXMC, in site 1 only
- XMC module interface requirements:
  - → x1, x2 or x4 PCI Express®
  - → VPOWER supply is +5V only
- PMC module interface requirements:
  - → 5 Volt or 3.3 Volt signaling
  - → 32/64-bit and 33/66/100 MHz PCI/PCI-X
- complies with XMC (Switched Mezzanine Card) VITA 42 standard
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001 and PMC (PCI Mezzanine Card) standard IEEE 1386.1-2001
- front panel I/O, and rear I/O build options via J3 and J5 connectors:
  - → 64 I/O signals per XMC/PMC site
  - → 64 I/O signals via PMC Pn4 or XMC Pn6 connectors to the rear
  - → rear I/O routed as differential pairs
  - → can be connected to an optional Rear Transition Module (AD PP5/007, with two PIM sites)

CompactPCI Bridge Setup

- CompactPCI® bridge configuration setup:
  - → uses a RS232 serial port or IPMI
  - → bridge initialization and setup implemented via micro-controller
  - → RS232 port available via front and rear panel

Hot Swap Function

- permits live insertion and extraction of PP XMC/M02 carrier:
  - → front panel blue LED
- supports Basic and Full Hot Swap
- compatible with PICMG® 2.1, Rev 2.0 Hot Swap specification
- CompactPCI backplane interface signals:
  - → ENUM (board insertion/extraction indication)
  - → healthy (power)

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

CompactPCI Bus Interface

- occupies one 6U CompactPCI® slot
- conforms to PICMG 2.0 R3.0:
  - → supports 3.3V and 5V signaling
  - → 32/64-bits at 33/66 MHz
- PCI Express to PCI reversible bridge

Other Features

- front panel activity LED:
  - → flashes with on-board PCI bus activity

Compatible Processor Modules

- PrXMC example:
  - → XP B5x/msd utilizing Intel® Xeon® processor
- contact your local sales office for further information
- supported operating systems depend on the processor module used

Safety

- PCB (PWB) manufactured with flammability rating of UL94V-0

Electrical Specification

- all current figures are typical (without XMC/PMC modules fitted)
- +5V @ 0.2A; voltage +5%/-3%
- +3.3V @ 1.0A; voltage +5%/-3%
- +12V @ <5mA; voltage +5%/-5%
- -12V not required
- maximum power per XMC/PMC module is 35W

Environmental Specification

- operating temperatures, air-cooled:
  - → 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

- 6U form-factor: 9.2-inches x 6.3-inches (233mm x 160mm)
- single-slot: 0.8-inches (20.3mm)
- connectors: IEC-1076-4-101 for J1-J5, J4 not fitted
- operating shock: 20g, 11ms, ½ sine
- operating vibration: 5Hz-2000Hz at 2g, 0.38mm peak displacement

Please contact your local Concurrent Technologies sales office for further details on board build options and accessories.