AD CR5/PMC

N, E, K - Series

Dual PMC Carrier Board



APPLICATIONS

The AD CR5/PMC Dual PMC Carrier Board can be used with a range of Concurrent Technologies VME PMC host processor boards. The carrier board allows two PMC modules to be added to the host processor board, thereby increasing the flexibility and functionality of the host board. Standard PMC modules include SAS,

LAN, WANs, Graphics, Communications and Modems. Non-monarch mode Processor PMCs (PrPMC) modules can also be used. For harsher environments, extended temperature versions are supported. The AD CR5/PMC is pin-compatible with the rear I/O of the popular AD CR2/PMC Dual PMC Carrier board.

HIGHLIGHTS

- Supports two single size PMC modules or one double size module
- I/O is available via front panel, P2 backplane connector and optional PO backplane connector:
 - pin mapping combinations are compliant with VITA 35
 - pin-compatible with the popular AD CR2/PMC
- Up to 128 rear panel I/O lines
- 5V and 3.3V PMC modules are supported
- Standard PCI bus expansion using a PCI to PCI bridge

- Extended temperature versions (E-Series, K-Series):
 - E: -25°C to +70°C, air-cooled
 - K: -40°C to +85°C, humidity sealant, air-cooled
- Occupies one VME slot
- For use with a range of Concurrent Technologies VME PMC host processor boards
- Operating System support depends upon the Concurrent Technologies PMC host processor board



Specification

Dual PMC Carrier Board

- support for 2 single width modules or one dual width module:-
 - → 5 Volt or 3.3 Volt signaling
 - → 32-bit, 33MHz local PCI bus
 - > supports dual function modules
 - → supports non-Monarch Processor PMC modules
- complies with CMC (Common Mezzanine Card) standard IEEE 1386-2001 and PMC (PCI Mezzanine Card) standard IEEE 1386.1-2001
- I/O is accessible via the front panel, P2 connector and optional PO connector:-
 - → 64 or 32+32 I/O signals via P2 connector
 - → 64 I/O signals via PO connector
 - → I/O pin mapping compliant with IEEE 1386 and with VITA 35 PMC I/O wiring standards
 - → I/O signals routed as differential pairs
- I/O is user configurable with jumper blocks
- I/O is compatible with the popular AD CR2/PMC

Adaptor Interface

- connects to a compatible VME PMC host processor board:-
 - → implemented using the Pericom PI7C8152A PCİ to PCI bridge
 - → 32-bit, 33MHz PCI interface
- utilizes PCI 2.2 Local Bus Specification
- utilizes PCI to PCI Bridge Specification 1.1

Compatible VME PMC Host Boards

- Example host processor boards are:-
 - → VP 717/08x
 - → VP 417/03x

Software Support

- adaptor interface features a standard PCI to PCI bridae:-
- → PMC modules appear on the additional PCI bus Operating System support depends upon the Concurrent Technologies PMC host processor board

Electrical Specification

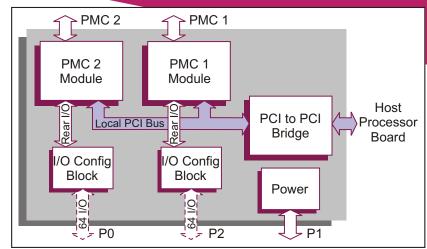
- +5V @ 0.5Å maximum (excluding PMC modules)
- +12V @ 0.0A; -12V @ 0.0A; 3.3V not required
- +12V and -12V routed to both PMC sites

Environmental Specification

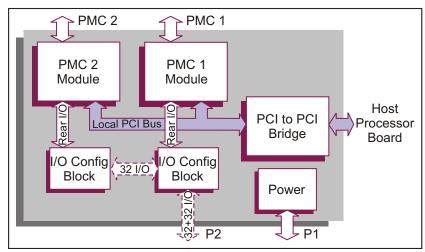
- operating temperatures:-
 - → 0°C to +55°C (N-Series) → -25°C to +70°C (E-Series)
- → -40°C to +85°C (K-Series)
- storage temperature: -40°C to +85°C 5% to 95% Relative Humidity, non condensing
- (operating or storage):-
 - → K-Series includes humidity sealant

Mechanical Specification

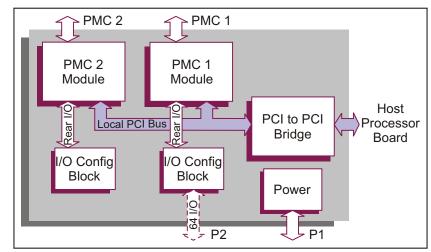
- 6U form-factor
- single slot, front panel width 0.8-inch (20.3mm)
- utilizes 96-way connectors for P1 and P2
- optional PO
- shock: 20q, 11ms, 1/2 sine
- vibration: 5Hz-2000Hz at 2g, 0.38mm peak displacement



Rear I/O Configuration: VITA 35 P4V0-64 and P4V2-64ac



Rear I/O Configuration: IEEE 1386 or VITA 35 P4V2-32+32ac



Rear I/O Configuration: VITA 35 P4V2-64ac

ORDERING INFORMATION

Order Number Product Description (Hardware) AD CR5/PMC-00 AD CR5/PMC-01 AD CR5/PMC-10 Dual PMC Carrier Board without PO Connector and with VME handles Dual PMC Carrier Board with PO Connector and with VME64x handles Dual PMC Carrier Board without PO Connector and with VME64x handles

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