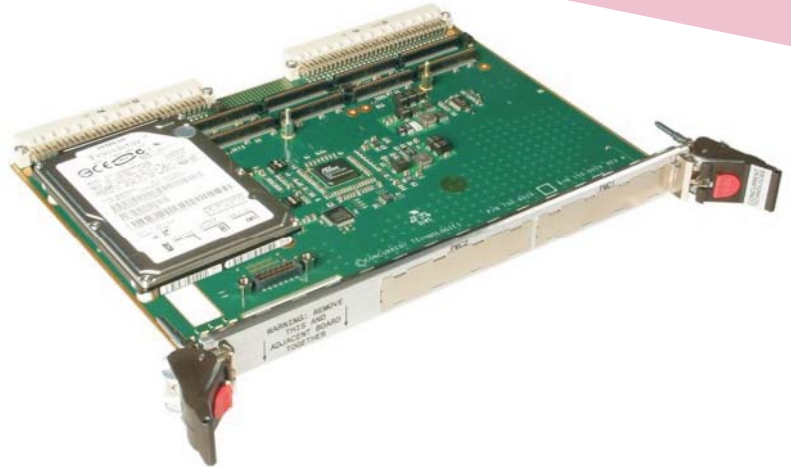# 64-bit 66 MHz
Dual PMC Carrier Board

RoHS
2002/95/EC

APPLICATIONS

The AD CR3/PMC Carrier Board can be used with a range of Concurrent Technologies' PMC host processor boards. By using a host board PMC site the carrier board allows 2 PMC modules to be added to the host processor board while still operating at 66 MHz and in 64-bit mode. This increases the flexibility and I/O capability of the host board without compromising performance. Standard PMC slave boards include SCSI, LAN, WANs, Graphics, Communications and Modems. Non-monarch processor PMCs (PrPMC) can also be used. Specialized I/O can be designed and added using the AD CR3/PMC Carrier Board. An EIDE hard disk drive and Compact Flash™ Drive are also supported.

HIGHLIGHTS

- Supports 2 single size PMC modules or 1 double size module:
  - both PMC sites support 32/64-bit and 33/66 MHz
  - I/O via front panel and P0 and P2 backplane connectors
  - Up to 128 rear panel I/O lines
- For use with selected Concurrent Technologies PMC host processor boards
- Extends EIDE interface on selected PMC host processor boards:
  - allows simultaneous use of on-board disk drive, Compact Flash and both PMC sites

- Occupies one VME slot
- Extended temperature versions available:
  - -25°C to +70°C (E-Series)
  - -40°C to +85°C (K-Series)
- Standard PCI bus expansion using PCI-PCI bridges, compatible with, for example:
  - Windows® XP
  - Windows® 2000
  - Linux®
  - VxWorks®

PMC Interfaces
- 2 x PMC sites and for both sites:-
  - ➜ I/O via front panel, via P2 for site 1 and optionally via P0 for site 2
  - ➜ 32/64-bit and 33/66 MHz PCI operation
  - ➜ 3.3V PCI signaling only
- 64 I/O signals via optional P0 connector
- 64 I/O signals via P2 connector
- I/O pin mapping compliant with ANSI/VITA 35-2000 P4V0-64 & P4V2-64ac PMC I/O wiring standards
- carrier provides 3.3V supply
- utilizes PCI 3.0 electrical specification
- utilizes PCI logical layer specification
- complies with CMC (Common Mezzanine Card) standard (IEEE P1386)

AD CR3/PMC Carrier Interface
- connects to the host processor board using either PMC or XMC adaptor:-
  - ➜ PMC interface at up to 64-bit/66MHz
  - ➜ XMC PCI Express™ (PCI-E) interface at up to x4 PCI-E
  - ➜ utilizes PMC/XMC site on host board
- carrier uses flexible cable connection with either PMC or XMC adaptor:-
  - ➜ uses x4 PCI-E cable connection
  - ➜ boards are located in chassis together, then pushed into backplane separately
 - ➜ easier to insert and eject

Compatible Host Boards
- example host processor boards with XMC interface:-
  - ➜ VX 405/04x
- example host processor boards with PMC interface:-
  - ➜ VP 347/02x
  - ➜ VP 345/02x
  - ➜ VP 337/02x
  - ➜ VP 335/02x
  - ➜ VP 317/02x
 - ➜ VP 315/02x

EIDE Interface
- extends host board's EIDE interface:-
  - ➜ uses host board's EIDE connector
- example host boards with compatible EIDE connector:-
  - ➜ VP 337/02x
  - ➜ VP 335/02x
  - ➜ VP 317/02x
  - ➜ VP 315/02x
- single channel for up to two devices (master and slave)
  - ➜ on-board disk drive and CompactFlash
- EIDE interface can be fully used in conjunction with both PMC sites

Software Support
- carrier features standard PCI-PCI bridge(s):-
  - ➜ PMC modules appear on additional PCI bus
- compatible with various operating systems, for example VxWorks, Windows XP, Windows 2000 or Linux
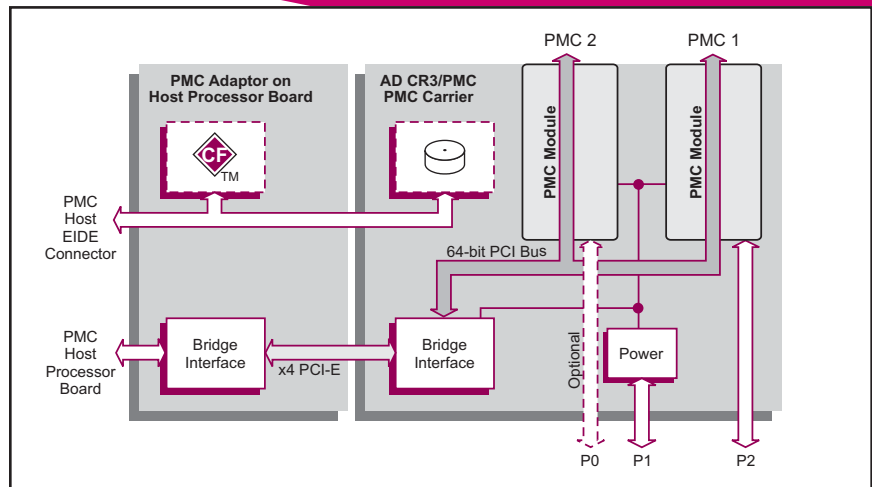
AD CR3/PMC Carrier with PMC Interface
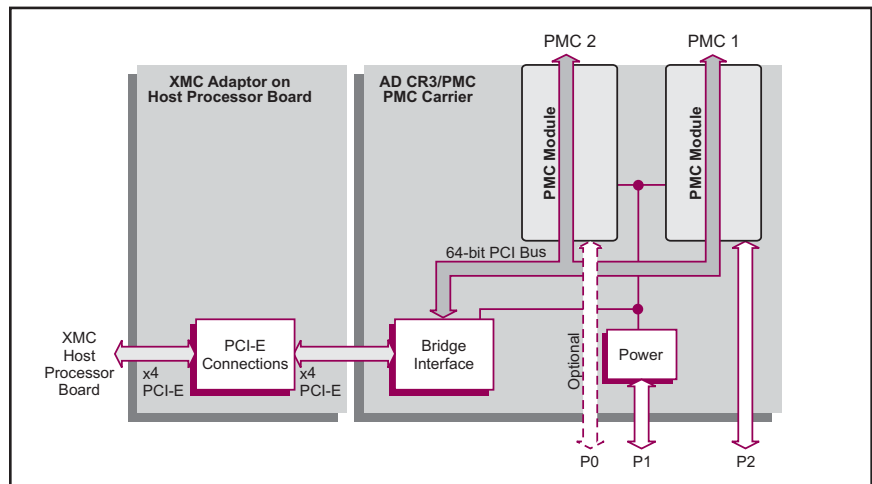
AD CR3/PMC Carrier with XMC Interface

Environmental Specification
- compatible with host boards operating at:-
  - ➜ 0°C to +55°C (N-Series)
  - ➜ -25°C to +70°C (E-Series)
  - ➜ -40°C to +85°C (K-Series)
- 10% to 90% Relative Humidity non-condensing (operating)
  - ➜ K-Series includes humidity sealant
- -40°C to +85°C (storage)
- 10% to 90% Relative Humidity non-condensing (storage)

Electrical Specification
- all voltages to be within ±5%
- power taken from VME bus P1 connector
- 1.2A (maximum) current consumption at +5V
- 0.0A current consumption at +12V
- 0.0A current consumption at -12V

Mechanical Specification
- utilizes a single VME slot
- has a VME front panel:-
  - ➜ VME 6U dimensions
- shock:
  20g, 11ms, ½ 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)

ORDERING INFORMATION

Order Number	Product Description (Hardware)
AD CR3/PMC-0y	Dual PMC Carrier Board without P0 Connector and VME handles, for PMC interface
AD CR3/PMC-1y	Dual PMC Carrier Board with P0 Connector and VME64x handles, for PMC interface
AD CR3/PMC-2y	Dual PMC Carrier Board without P0 Connector and with VME64x handles, for PMC interface
AD CR3/PMC-4y	Dual PMC Carrier Board with P0 Connector (not VXS) and VME64x handles, for XMC interface
AD CR3/PMC-5y	Dual PMC Carrier Board without P0 Connector and with VME64x handles, for XMC interface

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

Where y = hard disk size
0 - typical capacity HDD
5 - larger capacity HDD
7 - no HDD fitted

Note: all compatible SBCs are as listed above in the section "Compatible Host Boards"
For extended temperature, E or K-Series, and for Hard Disk Drive (HDD) capacity, please contact your local sales office