**DATA PATTERNS**

DP-cPCI-5400   cPCI Dual PMC Carrier

KEY FEATURES AND BENEFITS

• PMC carrier on 6U cPCI module

• 2 PMC compliant slot

• 32 bit, 33MHz PCI bus

• Industry standard bridge register definitions

• Switch selection for VIO

• PICMG 2.3 compliant

APPLICATIONS

• PMC slot implementation in cPCI for

• Data acquisition

• Automated testing

• Process control & instrumentation PLCs
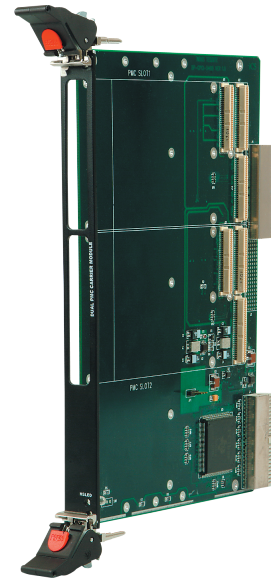
DESCRIPTION

In general, PMC cards provides modular and cost effective solution for engineering various applications in process control, medical electronics, aerospace, defence and telecom sector.

FORMAT

The DP-cPCI-5400 adapter/carrier board supports installation of 2 PMC cards into a standard cPCI slot. The DP-cPCI-5400 offers two PMC carrier slots on a 6U cPCI module suitable for 32 bit, 33 MHz bus operation. The PMC front panel connector is brought out via cPCI mounting bracket. The I/O connections of PMC cards are brought out to cPCI connectors (J3 & J4) for access.

BRIDGE

The PCI bus is interconnected to the PMC via a 32 bit, 33MHz bridge. The voltages are buffered between the PCI and PMC buses. The PCI VIO automatically defines the reference levels for the primary side of the bridge. A jumper switch is used to select the voltage reference (5V or 3.3V) to be used on the secondary side.

POWER REGULATION

Local regulation of the 3.3V power ensures clean power on the 3.3V rail.   An LC filter ensures clean power to the PMC. A shunt allows the user to select between the PCI supply and the local regulator.

The voltages 3.3V, 5V ,+12V and -12V are supplied to the PMC slot via the cPCI connector. The voltages are bypassed at the cPCI connector and at the PMC connector. The 5V has additional decoupling to support the regulator requirements.

SOFTWARE DRIVERS

The PCI bridge in the carrier should be enumerated by the operating system. No separate software drivers are supported with the carrier. The PMC card which is plugged into the carrier must provide required driver to the operating system to ensure functionality.

DP-cPCI-5400

SPECIFICATIONS

PMC compliance slotb	2
Electrical/Mechanical interface	Two single or one double size PMC modules 32 bit, 33MHz PCI bus
cPCI compliance	Meets cPCI specification PICMG 2.0 R3.0 10/1/1999

CONNECTORS

Backplane interface	cPCI interface
JI cPCI backplane interface	cPCI 32 bit PCI interface J1 type A, Right angle female
J3 & J4 cPCI rear I/O	J3 type B, Right angle female J4 type A, Right angle female
P11, P12, P14, P21, P22, P24 (PMC connectors)	64 pin receptacle female connector

POWER

+5V: PMC site 1 current + PMC site 2 current (max 5V current per PMC slot is 2A)

+3.3V: 150mA + PMC site 1 current + PMC site 2 current (Max 3.3V current per PMC slot is 3A)

+12V: PMC site 1 current + PMC site 2 current (Max 12V current per PMC slot is 200mA)

-12V: PMC site 1 current + PMC site 2 current (Max 12V current per PMC slot is 200mA)

MECHANICAL

Board size	233.35mm x 160mm (6U board)
Module	One dual or two single PMC module 74mm x 149mm (single PMC) 149mm x 149mm (dual PMC)

ENVIRONMENT

Commercial version only

ORDERING INFORMATION

DP   cPCI   5400   3 0 0

Factory options specified based on applications

3 - Commercial version

BLOCK DIAGRAM OF DP-cPCI-5400