PMC Module

CL PMC/GB4

N, E - Series

Dual Gigabit Ethernet Adaptor Fiber Interface



APPLICATIONS

The CL PMC/GB4 is a high performance, dual Gigabit fiber interface Ethernet adaptor suitable for use with PMC host boards including VME, VXS, CompactPCI®. The board is designed for applications that require high-speed data throughput and lower-latency communications, such as high-speed image transfer, telecommunications and fast industrial control operations.



- 2 x high performance Gigabit Ethernet interfaces:
 - compatible with SFP transceivers
 - 1000Base-SX or 1000Base-LX SFP options available
 - 1000Mbps with Multi-Mode or Single-Mode fiber
 - link and activity indicators
- PMC (PCI Mezzanine Card) format:
 - single size CMC (Common Mezzanine Card)
 - 33/66MHz 32/64-bit PCI and 66/100/133MHz PCI-X interfaces
 - 3.3V and 5V signaling level compatible

- Extended temperature version available:-25°C to +70°C (E-Series)
- Software support for Linux®, Windows® XP, Windows® XPE, Windows® 2000, Windows® Server 2003, Windows® Server 2008, VxWorks®, QNX®, LynxOS® and Solaric®
- For use with VME, VXS and CompactPCI® PMC host hoards



Specification

Gigabit Ethernet Interface

- 2 x 1000Base-SX or 1000Base-LX:-
 - → accessible via 2 x SFP LC connectors on front panel
- implemented by Intel® 82546GB Gigabit Ethernet controller:-
 - → supports IEEE 802.3z for 1000Base-SX over 850nm Multi-Mode fiber
 - → supports optional 1000Base-LX connections using 1310nm Single-Mode fiber
 - → supports Jumbo frames
- individual MAC and frame Controllers supporting the following features:-
 - → 64 Kbyte transmit and receive FIFOs for each port
 - → transmit and receive IP, TCP and UDP checksum off-loading
 - → transmit TCP segmentation
 - → automatic retransmission
 - → automatic receive stripping and transmit padding (individually programmable)
 - → automatic runt frame rejection
- PMC Interface complies with PCI Protocol Specification 2.2 including:-
 - → PCI clock rates at 33MHz and 66MHz, and PCI-X rates up to 133MHz
 - → 32-bit and 64-bit interface
 - → 3.3V and 5V signaling level compatible
 - → bus mastering capability

BIOS EPROM

- 8-bit wide 512 Kbyte EPROM
- 32-pin PLCC JEDEC socket
- PXE BIOS boot firmware installed

Software

support for Linux®, Windows® XP, Windows® XPE, Windows® 2000, Windows® Server 2003, Windows® Server 2008, VxWorks®, QNX®, LynxOS® and Solaris®

Electrical Specification

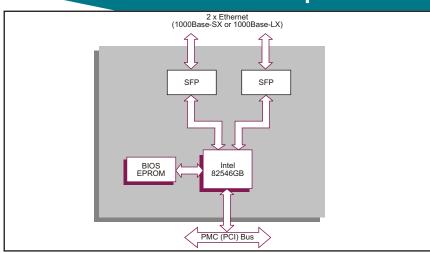
- +5V@1.0A (typical with dual 1000Base-SX operating); ±5%
- 3.3V, +12V and -12V not utilized

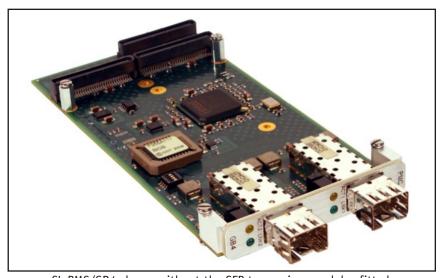
Environmental Specification

- compatible with PMC host boards operating at:-
 - → 0°C to +55°C (N-Series)
 - → -25°C to +70°C (E-Series)
- 5% to 95% Relative Humidity, non-condensing (operating)
- -40°C to +85°C (storage)
- 5% to 95% Relative Humidity, non-condensing (storage)

Mechanical Specification

- for use with VME, VXS and CompactPCI® PMC host boards
- single size CMC (Common Mezzanine Card) 74mm x 149mm
- 10mm height stack module





CL PMC/GB4 shown without the SFP transceiver modules fitted

ORDERING INFORMATION

Order NumberProduct Description (Hardware)CL PMC/GB4-00
CL PMC/GB4-10
CL PMC/GB4-20Dual Gigabit Ethernet PMC Adaptor without transceiver modules fitted
Dual Gigabit Ethernet PMC Adaptor 1000Base-SX over 850nm Multi-Mode Fiber Interface
Dual Gigabit Ethernet PMC Adaptor 1000Base-LX over 1310nm Single-Mode Fiber Interface

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