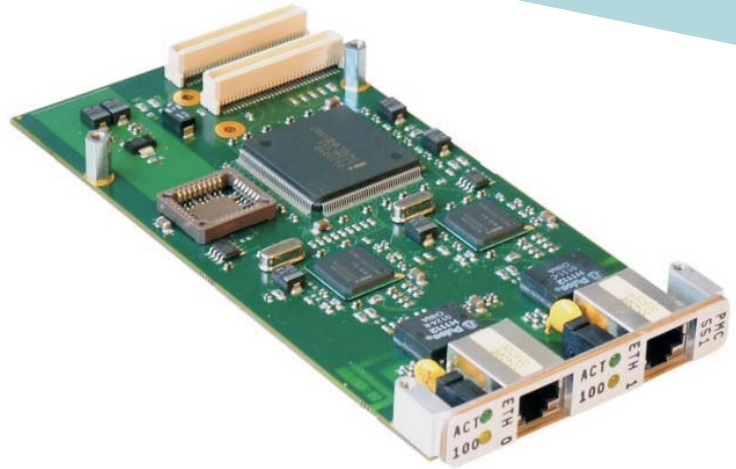## Dual Channel PMC Ethernet Adaptor

RoHS
2002/95/EC

APPLICATIONS

The CL PMC/551-U is a dual channel, single slot, intelligent Ethernet adaptor suitable for use with PMC Host Boards including VME and CompactPCI®. The on-board Intel® 82551 controllers manage the Ethernet protocol (including checksums), thereby alleviating the processing load of the host CPU.

HIGHLIGHTS

■ High performance 32-bit LAN interfaces:
- Two independent 10/100BaseT channels
- Ethernet (10BaseT/100BaseTx supported)
- standard RJ45 connectors
- 100Mbps with CAT5 cabling
- speed and status indicators
■ Hardware checksum calculation (full duplex)
■ PMC (PCI Mezzanine Card) format:
- single size CMC (Common Mezzanine Card)
- 32-bit interface
- 3.3V or 5V interface

■ Support for Boot EPROM
■ PCI clock rates up to 33MHz
■ Software support for VxWorks®, Windows NT®, Windows® 2000, Windows® XP and Windows® XP Embedded
■ For use with VME and CompactPCI PMC Host Boards

CONCURRENT TECHNOLOGIES

Concurrent Technologies Plc
Concurrent Technologies Inc

4 Gilberd Court, Colchester, Essex, CO4 9WN, UK
Tel: +44 (0)1206 752626 Fax: +44 (0)1206 751116
6 Tower Office Park, Woburn, MA 01801
Tel: (781) 933 5900 Fax: (781) 933 5911
email: info@gocct.com   http://www.gocct.com

Ethernet Interfaces

- single-chip Intel® 82551QM Ethernet controller per channel, includes enhanced IP Protocol support:-
  - → TCP, UDP, IP checksum offload
  - → received checksum verification
- supports ISO 8802-3 (IEEE 802.3 and 802.3u) Ethernet standards
- high-performance 32-bit Bus Master architecture with integrated DMA buffer Management Unit for low CPU and bus utilization
- full-duplex operation for increased network bandwidth
- individual transmit and receive FIFOs provide frame buffering for improved performance and supports the following features:-
  - → automatic retransmission
  - → automatic receive stripping and transmit padding (individually programmable) Checksum Calculation
  - → automatic runt frame rejection
  - → automatic selection of received collision frames
- provision for Boot EPROM for diskless node applications
- connection via standard RJ45 connectors

PMC Interface

- Peripheral Component Interconnect (PCI) local bus implemented using an Intel® 21152 transparent bridge
- direct interface to the PCI local bus (Revision 2.1 compliant)
- complies with PCI Protocol Specification
- complies with PCI Electrical Specification
- supports PCI clock rates up to 33MHz
- supports 3.3V or 5V signaling
- 32-bit interface
- bus master capability
- base address and interrupt selection software configurable

Boot EPROM

- 32-pin PLCC JEDEC socket, 8-bits wide:-
  - → supports a 29F010 or 29F040 device
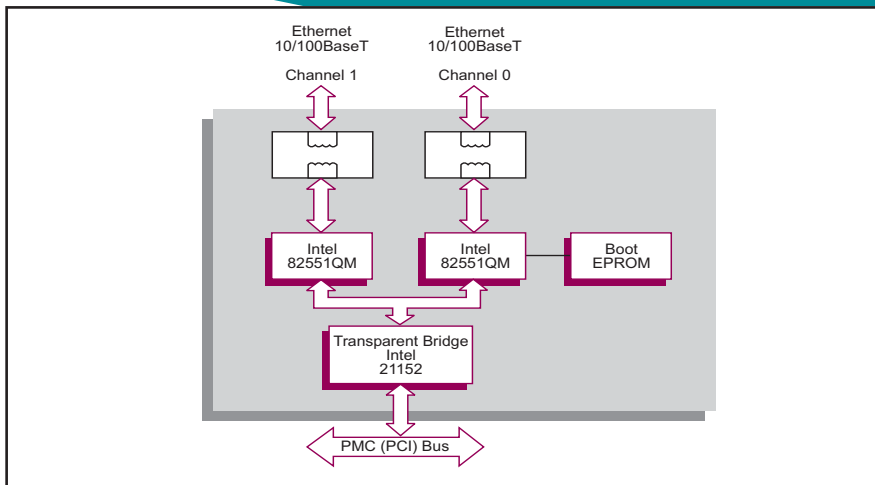 - → in-circuit programmable for BIOS updates

Software

- support for Software support for VxWorks®, Windows NT®, Windows® 2000, Windows® XP and Windows® XP Embedded

Electrical Specification

- all voltages to be within ±5%
- 0.7A (typical) current consumption at 5V
- +12V and -12V not utilized

Environmental Specification

- 0°C to +55°C (operating)
- 10% to 90% Relative Humidity, non-condensing (operating)
- -40°C to +70°C (storage)
- 10% to 90% Relative Humidity, non-condensing (storage)

Mechanical Specification

- single size CMC (Common Mezzanine Card) 75mm x 150mm
- 10mm height stack module

ORDERING INFORMATION

Order Number	Product Description (Hardware)
CL PMC/551-00U	Dual Channel Ethernet Adaptor for PMC