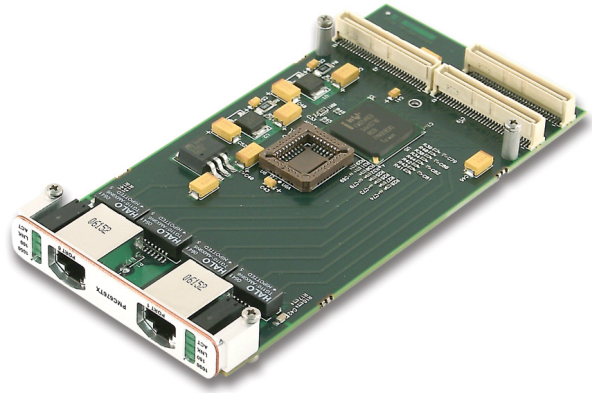
GE
Intelligent Platforms



PMC676RCTX

Single or Dual Copper Gigabit Ethernet PMC with Deep FIFO

Features

- Packet filtering based on checksum errors
- SNMP and RMON statistic counters
- Hardware TCP checksum offloading
- Support for various address filtering modes:
  - 16 exact matches (unicast or multicast)
  - 4096-bit hash filter for multicast frames
  - Promiscuous unicast and promiscuous multicast transfer modes
- PCI-X 133 MHz, PCI 64-bit/66 MHz
- RJ-45 connectors
- DMA engine
- Dual 10/100/1000BaseTX Ethernet
- Jumbo Frame capable
- RoHS compliant
- Versions supporting wide operating temperature range available

The PMC676RCTX is a Gigabit Ethernet PMC that offers dual 10/100/1000BaseTX Ethernet interfaces. The card is capable of full duplex operation on each of its channels. The Ethernet/PCI/PCI-X interface includes a powerful DMA engine for each port with very deep FIFO buffers (64 Kbyte). This assures continuous, full bandwidth operation with minimum PCI overhead. In addition, card edge PCI systems can be accommodated using a GE PMC239 adapter for rapid proto-type and development.

Low Cost, Effective Interconnect

Two PMC676RCTX boards can be directly cabled with a simple Ethernet cable. This configuration creates a full duplex 1000 Mbit dedicated data path - delivering high bandwidth at very low cost. More complex, dedicated interconnects can be created using a hub or switch. Both point-to-point and switched hubs, in full duplex mode, remove many determinism concerns raised with traditional Ethernet solutions. This makes the PMC676RCTX an excellent candidate for high performance interconnects that require real time determinism.

Software Support

The PMC676RCTX is supported by native drivers for many common operating systems (Microsoft® Windows®, Linux®, LynxOS®). GE has software drivers for addtional operating systems (VxWorks® and Solaris®). These drivers have been carefully designed and implemented to fit within the LAN protocol stack of the host operating system. Thus all facilities available from the host OS can be utilized across the PMC676RCTX.

PMC676RCTX – Single or Dual Copper Gigabit Ethernet PMC with Deep FIFO

Specifications

Components
- Dual port Ethernet: 82546

Power Specifications
- Power (total): 6 watts
- @ 3.3 V: 0.9 amps
- @ 5 V: 0.6 amps

Ethernet Characteristics
- Ports: 2 x 10/100/1000BaseTX
- Port routing:
  Front: RJ-45

PCI Bus Characteristics
- Signaling: 3 V and 5 V
- Specification: 2.2
- Speed: 33/66 MHz
- Width: 32/64

Form Factor
- Single slot PMC
- IEEE P1386.1: PCI Mezzanine Card, IEEE Standards compliant

MTBF
- SMIL 217-F Nav Shel 25 Deg. C: 245,000 hours

Temperature
- Operating: 0°C to +60°C
- Storage: -40°C to +85°C

Wide Temperature Range
- Operating: -20°C to +70°C
- Storage: -40°C to +85°C

Humidity
- Operating: 5% to 95% noncondensing
- Storage: 5% to 95% noncondensing

Other Options
- Conformal coating: acrylic or polyurethane
- Solaris OBP boot option
- PXE (Preboot eXecution Environment) boot option

Operating System Support
- Microsoft Windows®
- Linux®
- VxWorks®
- LynxOS®
- Solaris®

Ordering Information

PMC676RCTX	Dual port 10/100/1000BaseTX NIC; RoHS

-S may be applied to any model number to indicate Solaris OBP boot option
-CC may be applied to any model number to indicate polyurethane conformal coating
-CCA may be applied to any model number to indicate acrylic conformal coating
-PXE may be applied to any model number to indicate PXE boot option Media Kits
-WT Wide temperature range option

M-GBI-SES-ARS	Solaris (versions 7, 8, 9) SPARC
M-GBI-SEV-ARC	VxWorks (versions 5.4 - 6.8) PPC
M-GBI-SEV-ARP	VxWorks (versions 5.4 - 6.8) x86

Linux, Microsoft Windows (XP, NT, 2000) supported by drivers from Intel (included in most distributions, available from the Intel® web site). LynxOS 4.x supported by driver included in the distribution.

About GE Intelligent Platforms

GE Intelligent Platforms is a General Electric (NYSE: GE) company, headquartered in Charlottesville, VA and part of GE Energy Management. The company's Military/Aerospace business, headquartered in Huntsville, AL, and Towcester, England, provides one of the industry's broadest ranges of high performance, rugged, SWaP-optimized embedded computing platforms. Backed by programs that provide responsive customer support and minimize long term cost of ownership for multi-year programs, GE's solutions are designed to help customers minimize program risk and cost, and to speed time-to-market. For more information, visit defense.ge-ip.com.

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