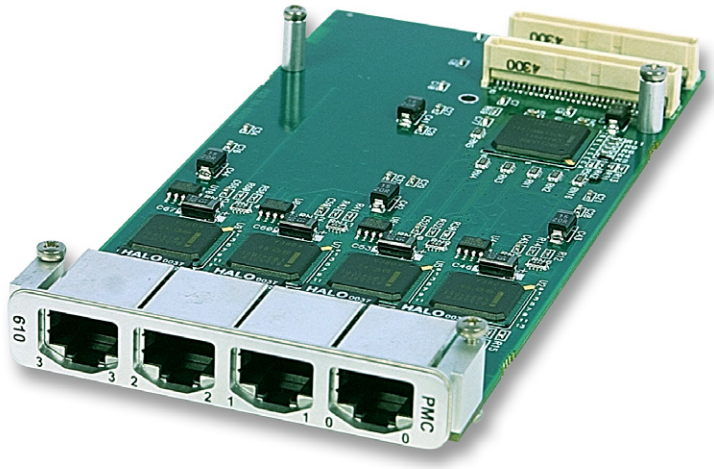
GE
Intelligent Platforms



PMC610RC

Quad/dual 10/100BaseTX Ethernet NIC PMC

Features

- PCI 66 MHz capable
- Front I/O
- Quad or dual 10/100BaseTX ports
- Full duplex operation in both 10 and 100 Mbit modes
- TCP/UDP checksum off loading
- Fully supports IP Security (IpSec)
- Versions supporting wide operating temperature range available
- RoHS compliant

The PCM610RC family of Ethernet NICs provides two or four 10/100BaseTX engines on a PMC. Each engine is capable of full-duplex operation in both 10 and 100 Mbit modes. A PCI to PCI bridge couples the Ethernet interfaces to the host PCI bus, ensuring high performance with minimal PCI loading.

A full auto-negotiation facility allows automatic configuration to the highest possible operating mode. This includes the option of automatic determination of both bandwidth and full-duplex operation.

Low Cost, Effective Interconnect

Two PMC610RC boards can be directly cabled with a simple “cross-over”. This configuration creates a full-duplex 800 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 PMC610 an excellent candidate for high performance interconnects that require real time determinism.

Software Support

Software drivers are available for most popular operating systems such as VxWorks®, Linux®, LynxOS®, Windows® NT 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 used across the PMC610RC. These drivers allow user control over the PMC610RC auto-negotiation capability.

PMC610RC 10/100BaseTX Ethernet NIC PMC

Specifications

Components
- Intel® 82551ER chipset

Power Requirements
- 3.3 V

Form Factor
- PMC

PMC Expansion Site Connector
- 3.3 V and 5 V signaling
- Types 1 and 2, 32-bit PCI bus, 66 MHz maximum

Ethernet Characteristics
- Ports: two or four 10/100BaseTX
- Port routing: front

Mean Time Between Failures (MTBF)
- 281,000 hours

Standard Temperature
- Operating: 0 to +55 °C
- Storage: -40 to +85 °C

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

Humidity
- Operating: 5% to 95% non-condensing
- Storage: 5% to 95% non-condensing

Other Options
- Conformal coating: polyurethane or acrylic

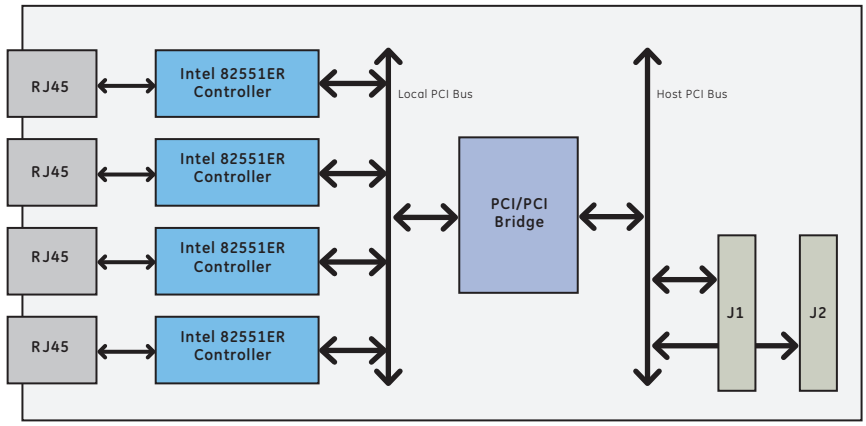
Operating System Support
- Windows®
- Linux®
- VxWorks®
- LynxOS®

Regulatory Compliance
- European Union (CE Mark)
- EN55024
- EN55022 Radiated Emissions Class A
- EN61000-4-2 (ESD)
- EN61000-4-3 (Radiated Immunity)
- EN61000-4-4 (EFT)
- EN61000-4-5 (Surge)
- EN61000-4-6 (Conducted RF)
- EN61000-4-8 (Power Frequency Magnetic Fields)
- EN61000-4-11 (Voltage Dips)
- EN61000-3-2 (Harmonic Emissions) (PMC610RC only)
- EN61000-3-3 (Flicker) (PMC610RC only)
- United States FCC Part 15, Class A
- Canada ICES-003, Class A

Safety:
- UL60950-1
- CSA C22.2, No. 60950-1-03
- EN60950-1 (Low Voltage Directive)

RoHS versions available
- Meet European Union (EU) Restriction of Hazardous Substance Directive (2002/95/EC) current revision

Block Diagram



Ordering Information

PMC610RC	10/100BaseTX PMC; four ports; front I/O; standard operating temperature range; RoHS
PMC610RC-2	10/100BaseTX PMC; two ports; front I/O; standard operating temperature range; RoHS
PMC610RC-WT	10/100BaseTX PMC; four ports; front I/O; wide operating temperature range; RoHS
PMC610RC-2-WT	10/100BaseTX PMC; two ports; front I/O; wide operating temperature range; RoHS

- CC may be applied to any part to indicate polyurethane conformal coating
- CCA may be applied to any part to indicate acrylic conformal coating

About GE Intelligent Platforms

GE Intelligent Platforms, a General Electric Company (NYSE: GE), is an experienced high-performance technology company and a global provider of hardware, software, services, and expertise in automation and embedded computing. We offer a unique foundation of agile, advanced and ultra-reliable technology that provides customers a sustainable advantage in the industries they serve, including energy, water, consumer packaged goods, government and defense, and telecommunications. GE Intelligent Platforms is a worldwide company headquartered in Charlottesville, VA and is part of GE Home and Business Solutions. For more information, visit www.ge-ip.com.

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