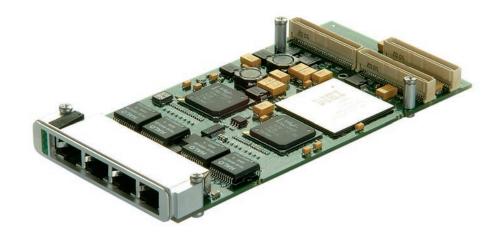
# **GE Fanuc Automation**



# PMC677 Ouad 1000BaseT Ethernet

The PMC677 is a PMC card designed to offer maximum 1000Mbit Full Duplex Ethernet connectivity on four channels. The PMC677 uses LC connectors with SX or (optionally LX) transceivers. The PMC677 Ethernet/PCI interface includes a powerful DMA engine with very deep FIFO buffers (64 Kbyte). This assures continuous, full bandwidth operation with minimum PCI overhead. The PMC677 has one PCI-to-PCI bridge onboard.

# **Product Features**

- PCI-X, PCI 64 bit / 66 MHz
- DMA engine
- Full 1000 Mbit point-to-point performance
- Jumbo Frame capable
- Four 1000 Mbit Ethernet fiber ports
- Interchangeable, pluggable transceivers
- LC connector
- 1000BaseSX or 1000BaseLX

#### **Host Offloading Features**

- Packet filtering based on checksum errors
- $\bullet$  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

# **Software Support**

The PMC677 is supported by native drivers for many common operating systems (e.g. Windows®, Linux®). GE Fanuc Embedded Systems has software drivers for additional operating systems (e.g. VxWorks®, LynxOS®, 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 PMC676.



# PMC677 Specifications

## Components

PCI bridge: IBM21P1002 x Ethernet: Intel 82546

#### **Power Specifications**

Power: 8.7 watts
 - @ 3.3 V 0.8 amps
 - @ 5 V 1.06 amps

#### **Ethernet Characteristics**

• Ports: 4 x 1000 BaseSX (optional LX)

• Port routing: Front, fiber LC (SPF)

#### **PCI Bus Characteristics**

Signaling: 3 & 5 V
 Specification: 2.2
 Speed: 33/66 MHz
 Width: 32/64

#### Form Factor

• Single slot PMC

## Mean Time Between Failures (MTBF)

• MIL 217-F Nav Shel 25 Deg. C: 245000 Hours

#### **Temperature**

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

#### Humidity

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

#### **Conformal Coating**

· Yes, additional charge

### **Operating System Support**

- Windows
- Linux
- S/B VxWorks
- LynxOS
- Solaris

# Warranty

• 3 years

# **Ordering Options**

| PMC677LC    | Quad Gigabit Ethernet, fiber, LC (SFP), SX transceiver |
|-------------|--|
| PMC677LC/LX | Quad Gigabit Ethernet, fiber, LC (SPF), LX transceiver |

Linux (2.4.x, 2.6.x), Windows (XP, NT, W2K) 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.

# Media Kit Options

| M-GBI-SEV-ARC | VxWorks on PPC   |
|---------------|------------------|
| M-GBI-SEV-ARP | VxWorks on x86   |
| M-GBI-SES-ARS | Solaris on SPARC |

# **GE Fanuc Automation Information Centers**

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# **Additional Resources**

For detailed technical specifications and product ordering information, please visit the GE Fanuc Embedded Systems web site at:

www.gefanuc.com/embedded

