PMC-Gigabit-ST3

PMC with One 1000BaseT/100BaseTX/ 10BaseT Gigabit Ethernet Interface

SBS Technologies™

Features

- 10BaseT/100BaseTX/ 1000BaseT network interface card

- Single-wide 32/64-bit 33/66 MHz PCI, 66/133 MHz PCI-X PMC

- LED indicators for link, speed, and activity

- Auto-negotiating protocol selection

- Transmit and receive FIFOs

- Drivers for VxWorks®, Linux® and Windows NT® available

- Supports Jumbo frames
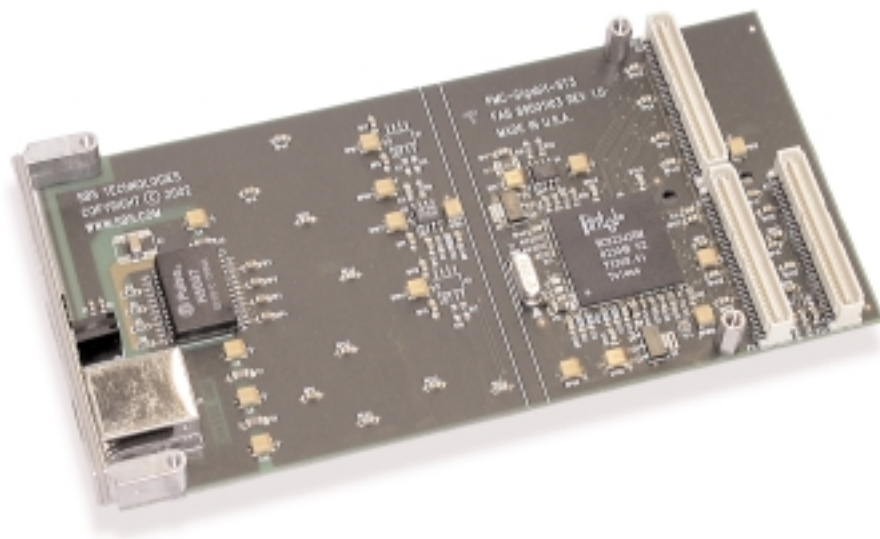
PMC-Gigabit-ST3 is a single-wide PCI Mezzanine Card (PMC) with one high-performance Gigabit Ethernet interface controller port. The PMC-Gigabit-ST3 relieves bandwidth bottlenecks and allows rapid incorporation of Gigabit Ethernet technology into high-performance CompactPCI® and VMEbus systems.

The Ethernet interface complies with the IEEE802.3 specification for 10BaseT, 100BaseTX, and 1000BaseT over category 5 twisted pair cable. Full-duplex and half-duplex modes are supported. The PMC-Gigabit-ST3 is compliant with standard single-wide PMC IEEE P1386.1, PCI 2.2, and PCI-X 1.0 specifications.

The PMC-Gigabit-ST3 includes 64 Kbytes of FIFO buffer memory allowing back-to-back transmissions with minimal interface latency. It also features a 10BaseT, 100BaseTX and 1000BaseT auto-detection CSMA/CD interface controller.

The Intel® 82545EM Ethernet chip provides integrated low-powered MAC/PHY functionality and supports a number of sophisticated features including: auto-negotiation, collision detection, link detection, 4B/5B encoding/decoding (100BaseTX), flow control, and half-duplex/full-duplex. Standard network connection is accomplished via a front-panel RJ45 connector.

PMC-Gigabit-ST3 addresses applications requiring high-bandwidth system interconnection and PMC form factor, such as, industrial automation, semiconductor processing, medical, server and enterprise, security, printing, entertainment, retail point-of-sale, data communications, LAN/WAN, and telecommunications applications.

PMC-Gigabit-ST3

Block Diagram
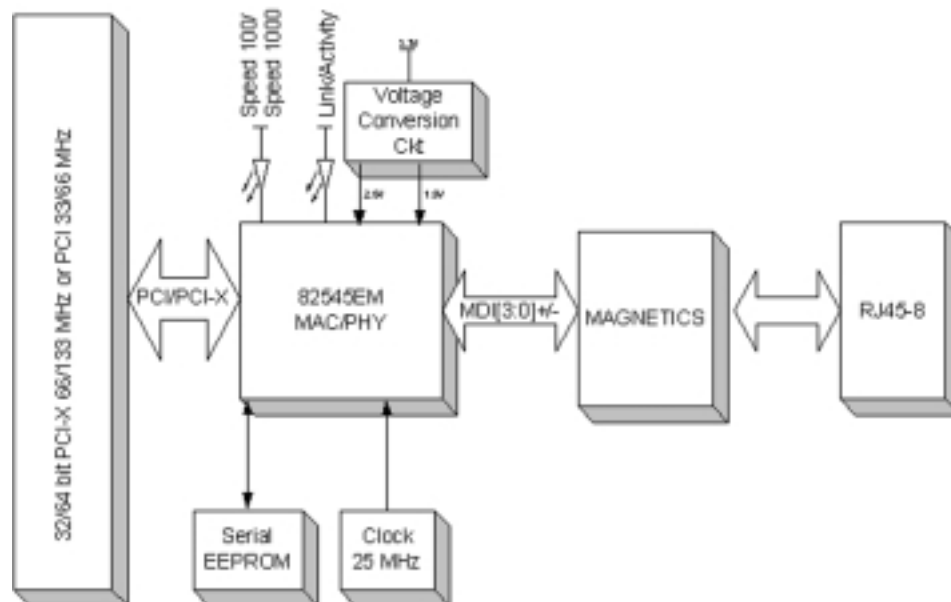
Specifications

Technical Highlights
- Single-wide PMC; one port
- 64-bit PMC Specification IEEE P1386.1 compliant
- Intel® 82545EM PCI controller/Ethernet MAC/PHY
- Ethernet 10BaseT, 100BaseTX, 1000BaseT protocols
- Transmit/receive FIFOs with 64 KB total

PCI Interface
- 66/133 MHz PCI-X bus
- PCI-X 1.0 specification
- 33/66 MHz, 32/64-bit, master and slave, 3.3V/5V signaling
- PCI Protocol and Electrical Rev. 2.2

Front Panel I/O Access
- One RJ45 connector

Rear Panel I/O Access (P4)
- None

Power Requirements
- +3.3 VDC at 1180 mA (typical)

Temperature
- Operating: 0˚ to 70˚ C
- Storage: -40˚ to +85˚ C

Relative Humidity
- 5% to 95% non-condensing

Weight
- 0.07kg (0.16 lbs)

Dimensions
- 74.0 mm x 149.0 mm

Configurations

Model Number	Configuration
PMC-Gigabit-ST3	PMC with one copper Gigabit Ethernet Interface

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