

## **Gigabit Smart Ethernet PCI**

**IEEE 802.3/u Compliant**  
**IEEE 802.3z/ab Compliant**

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The smart 10/100/1000Mbps based 32-bit PCI Local Bus Ethernet adapter designed to address high-performance network solution for workstations and servers offering 2 gigabits per second of aggregate bandwidth. Support for the gigabit includes critical performance and management related advanced features.

It is fully compliant with PCI power management and ACPI. It implements multi wake up events including Magic packet, pattern match packets and Link status changes. The card also support AC power loss and PCI abnormal shut down wake up case on Magic packet power management mechanisms.

The driver and card have been developed together to provide the optimal performance in term of both throughput and host CPU utilization.

There are with more than 5dB of design margin with respect to all worst-case impairments (NEXT, FEXT, Echo, and system noise). To enable maximum network management feedback to the host system and user, VeriPHY Link Management Suite routines allow extensive network and cable plant operating and status information, such as the cable length and effective Bit Error Rate (BER) that greatly simplifies Gigabit Ethernet network deployment and management.

### **Features and benefits**

- CSMA/CD network technology
- IEEE802.3, IEEE802.3u, and IEEE802.3z/ab compliant
- 802.3x Full duplex flow control, including automatic transmission of Pause frames based on RX FIFO
- Complies with PCI V2.2 and 32 bits
- Internal 16K (2048x64) Bytes Transmit and 48K Bytes (6144x64) Receive Data FIFOs
- Support Plug & Play, and Half/Full-Duplex function
- 802.1Q Virtual LAN (VLAN) and long frame (1518+4) support
- Supports Auto MDI/MDIX at 10, 100, and 1000Mbps
- **WFM (Wired For Management) 2.0 enable for server.**
- Provides Link, Speed, and Activity status LED indicators.
- **SNMP-management, DMI 2.0**
- **Statistics for RFC1213 (MIB II), RFC1398 (EtherLike MIB), and IEEE 802.3 LME**
- Large Packet Segmentation offload
- 16K bytes Jumbo frame support.
- 802.1p 4 level priority transmit. (MAC support 4 TD, 1 RD queue)
- **Advance Software Support**
  - NICSET-GE : NIC management application in Windows platform**
  - DMI-GE : DMI CI and MA in Windows platform**
  - VSMP-GE : SNMP extension agent in Windows platform**
  - VeriPHY Link Management Suite : integrated into GigaCheck cable analysis and link analysis function**