10/100/1000MBPS COPPER GIGABIT PCI CARD

IMPROVED SECURITY
Configure your PC a VLAN switch to enhance performance and security

FAST GIGABIT SPEED
Experience fast Gigabit speed without going through the trouble to install new fiber cables

POWER MANAGEMENT
Power ON a computer from a remote station with Wake-On-LAN

HIGH-PERFORMANCE GIGABIT SPEED
Capable of running at full-duplex Gigabit speed, this card gives your PC 2000Mbps data transmission on your existing Cat. 5 twisted-pair network cable. As an inexpensive alternative solution to fiber-optic, the card allows you to instantly upgrade to Gigabit without requiring you to install new, expensive fiber cables. The card supports 10/100/1000Mbps network speed auto-sensing and full/half duplex auto-negotiation. In addition, as a single chip solution, this device consumes little power from a computer system.

VLAN TO IMPROVE PERFORMANCE AND SECURITY
The card provides on-board screening of VLANs Tagged Ethernet frames, allowing your PC to be configured with a VLAN-supported switch. Your PC can be part of a VLAN network, where domains are segmented up to enhance performance and security.

WAKE-ON-LAN FOR POWER MANAGEMENT
Wake-On-LAN (WOL) is an Advanced Configuration Power Interface (ACPI) function allowing a powered OFF computer to be powered ON from a remote station. This function allows the administrator to send wake-up signals to a computer. The WOL function provides a great utility for power management of the PC and allows users to initiate action at irregular times and from distant locations.

FLOW CONTROL TO MINIMIZE PACKET LOSS
The card's embedded flow control and independent FIFO provide a means to protect against possible data loss during transmission on the network. When connected to a Gigabit switch supporting flow control, the card receives signalsfrom the switch regarding buffer overrun during peak usageperiods. The card then delays transmission until the switch is ready again to accept new data.

WHAT THIS PRODUCT DOES

The D-Link DGE-528T is a high-performance 10/100/1000Mbps copper Gigabit PCI card for desktop PC. Installable in a PC equipped with PCI expansion slots, this card turns a desktop computer into a high-bandwidth Gigabit workstation or a server running at 2000Mbps full-duplex speed.

KEY FEATURES

- Copper Gigabit connection for PC
- 32-bit 33/66MHz clock speed PCI Bus Master operation
- Built-in 72K FIFO buffer to reduce overhead of memory
- transfers
- 802.3x Flow Control, auto MDI/MDIX support
- Supports ACPI 2.0 WOL power management
- Supports 802.1Q VLAN Tagging, 802.1p Priority Queues
- Supports up to 7KBytes jumbo frames
- Cable Diagnostics Utility provided
- Optional Remote Boot ROM (DGE-528R)
- Runs Microsoft Windows 7 and Vista
- NetWare, Linux, MacOS
- Small size, low power consumption

TECHNICAL SPECIFICATIONS

STANDARDS
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation
- PCI local bus 2.3 specifications
- IEEE 802.3x Flow Control
- IEEE 802.1Q VLAN Tagging
- IEEE 802.1P Priority Queues

PROTOCOL
- CSMA / CD

DATA TRANSFER RATES
- Ethernet
  - 10Mbps (half duplex)
  - 20Mbps (full duplex)
- Fast Ethernet
  - 100Mbps (half duplex)
  - 200Mbps (full duplex)
- Gigabit Ethernet
  - 2000Mbps (full duplex)

NETWORK CABLES
- 10BASE-T
  - UTP Cat. 3, 4, 5 (100 m max.)
  - EIA/TIA-586 100-ohm STP (100 m max.)
- 100BASE-TX, 1000BASE-T
  - UTP Cat. 5 (100 m max.)
  - EIA/TIA-568 100-ohm STP (100 m max.)

FLOW CONTROL
- IEEE 802.3x flow control per for full duplex
- Back pressure in half duplex

FULL / HALF DUPLEX
- Full duplex only (1000Mbps)
- Full / half duplex (10/100Mbps)

LEDS
- 1000 / 100 / 10 Mbps
- Full duplex

OPERATING TEMPERATURE
- 0 º to 40 º C

STORAGE TEMPERATURE
- -25 º to 55 º C

OPERATING HUMIDITY
- 5% to 90% RH

STORAGE HUMIDITY
- 5% to 90% RG

CERTIFICATION
- FCC Class B
- CE Class B
- ICES-003

NETWORK SUPPORT
- Microsoft Windows 7 32/64-bit Edition
- Microsoft Windows Vista 32/64-bit Edition
- Microsoft Windows Server 2008 32/64-bit Edition
- Microsoft Windows Server 2003
- Microsoft Windows XP 32/64-bit Edition
- Microsoft Windows ME
- Microsoft Windows 2000
- Microsoft Windows 98
- Microsoft Windows NT 4.0
- Novell NetWare Server 5.x, 6.x
- Novell Client for DOS
- Linux kernel 2.4.x. 2.6.x
- Mac OS 10.2, 10.3, 10.4.X
- DOS ODI Client
- NDIS for DOS
- Free BSD 4.x, 5.0

OPTIONAL BOOT ROM
- DGE-528R: RPL and PXE remote boot ROM (PLLC type)