

DGE-528T 10/100/1000Mbps Copper Gigabit PCI Card for PC

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.

# **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.

# **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 signals from the switch regarding buffer overrun

during peak usage periods. The card then delays transmission until the switch is ready again to accept new data.

## **Small Form Factor, Lower Power Requirement**

Using a single chip solution, this card is very small in size and consumes very little power of your computer system.

#### Features:-

- Copper Gigabit connection for PC
- 10/100/1000Mbps auto-sensing speeds
- 2000Mbps Gigabit full duplex support
- 32-bit 33/66MHz clock speed PCI Bus Master operation
- Built-in FIFO (8K/64K) buffer to reduce overhead of memory transfers
- Supports auto MDI/MDIX
- 802.3x Flow Control for fast, reliable data transmission
- Supports ACPI 2.0 WOL power management
- Supports 802.1Q VLAN Tagging
- PCI 2.1, 2.2 plug-and-play
- Runs Win98, 2000, ME, NT, XP, NetWare, Linux, MacOS
- Very small size, very low power consumption

# **Technical Specifications: General**

#### 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 2.1, 2.2 specifications
- IEEE 802.3x Flow Control
- IEEE 802.1Q VLAN tagging

### 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)

## **Diagnostic LED Report**

- 1000/100/10Mbps
- Full duplex

# System Setup IRQ

Allocated by system

## I/O Address

Allocated by system

# **Environmental & Physical Operating Temperature**

• 00 to 500 C

# **Storage Temperature**

•  $-10^0$  to  $70^0$  C

# **Operating Humidity**

• 10% to 90% RH

# **Storage Humidity**

• 5% to 90% RG

## **Emission**

- FCC Class B
- CE Class B
- VCCI Class B

# **Network O.S. Support**

- Microsoft Windows 98, NT 4.0, ME, 2000, XP
- Novell NetWare Server 5.x, 6.x
- Linux kernel 2.2.x, 2.4.x
- Macintosh OS X

# **Ordering Information**

Copper Gigabit PCI Card DGE-528T 10/100/1000Mbps PCI card