# 0/100Mbps PCI Adag



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DFE-550TX 10/100Mbps adapter featuring Wake-On-LAN and other advanced functions for direct connection of high-powered PCs to LAN switches and routers.

# 10/100Mbps Adapter with Advanced Functions

The DFE-550TX is a high-performance auto-sensing 10/100Mbps network adapter for desktop PCs. The adapter is equipped with advanced features and is an excellent choice for powerful PCs directly connect to a LAN switch in a dedicated bandwidth workstation or high-speed server configuration.

### 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 user to send a Wake-up signal to a computer. The WOL function provides a great utility for power management of PC and allows users to initiate action at irregular times and from distant locations.

### **High Performance**

With 32-bit Bus Master operation, the adapter guarantees the highest performance for power workstations and servers. Bus Master transfers data directly between the adapter and the host at multi-megabits per second, bypassing the host CPU to alleviate its workload. This allows the host to concentrate on the application at hand.

### Secure Transmission

In the fast 200Mbps full-duplex mode, the adapter's embedded flow control provides a means to protect users against possible data loss during transmission on the network. When connected to a LAN switch that supports flow control, the adapter receives signals from the switch regarding the switch's buffer overrun during peak usage periods. The adapter then delays transmission until the switch is ready again to accept new data.

### Flexible Connection

The adapter's single connector connects to either 10BASE-T Ethernet or 100BASE-TX Fast Ethernet. 10/100Mbps and full/half duplex are auto-negotiated, completely without users' need to intervene.

### IEEE 802.1p Priority Queues Support

The adapter allows traffic to be queued as critical and non-critical, permitting voice over IP, video-conference and multimedia applications where packets are delivered at Best-effort speeds.

### **DMI Driver for Desktop Management**

The adapter provides a DMI driver for management of the desktop PC independent of the network operating system. This allows the administrator to remote troubleshoot the PC from any platform.

### RPL and PXE Remote Boot Options

2 remote boot options are available for selection. Administrators can choose to set up a security scheme for diskless workstations to boot from servers using (1) the traditional Remote Program Load (RPL) or (2) Intel's Pre-boot Execution Environment (PXE). Stations with boot ROMs installed on the adapter's on-board socket can boot O.S. from NetWare, NT and other servers to run applications designated by the administrator.

### Feartures

- 10/100Mbps auto-sensing with single shielded RJ-45 connector
- 32-bit PCI Bus Master operation
- Full/half duplex for 10BASE-T, 100BASE-TX
- Wake-on-LAN (WOL) function
- IEEE 802.3x flow control for connection to LAN switch
- IP multicast address filter mechanism
- Run Win95, 98, 2000, NT, NetWare, Unix, other O.S.
- Optional boot ROM for remote program load from servers
- IEEE 802.1p priority Queues
- IEEE 802.1Q VLAN Tagging

# 0/100Mbps PCI

LAN ADAPTER

## **Technical Specifications**

### General

### **Standards**

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation
- PCI local bus 2.1 specifications
- IEEE 802.3x Flow Control
- IEEE 802.1p Priority Queues
- IEEE 802.10 VLAN Tagging

### Topology

Star

### Protocol

CSMA/CD

### **Network Data Transfer Rates**

- 10BASE-T:

10Mbps (half-duplex) 20Mbps (full-duplex)

- 100BASE-TX:

100Mbps (half-duplex)

200Mbps (full-duplex)

### **Network Cables**

- 10BASE-T:
- 2-pair UTP Cat. 3 (100 m)

4-pair UTP Cat. 4, 5 (100 m)

EIA/TIA-568 150-ohm screened twisted-pair (STP) (100 m)

- 100BASE-TX:

4-pair UTP Cat. 5 (100 m)

EIA/TIA-568B 150-ohm screened twisted-pair (STP) (100 m)

### **Diagnostic LED Report**

- Link/Activity
- Speed
- Full/half duplex

### **Cache Buffer**

- 2K bit receive FIFO
- 2K bit transmit FIFO

### System

### **IRQ**

Allocated by system

### I/O Address

Allocated by system

### Wake-On-LAN

### **Standards**

- Advanced Configuration and Power Interface (ACPI) v.1.0
- Intel Desktop Management Interface (DMI) v.2.0
- Intel Pre-boot Execution Environment (PXE) v.2.0

### **Methods Supported**

- AMD Magic Packet support
- Wakeup Frame and Media Change support

### IP Multicast Routing

### IP Addressing

Class D

### **Power Consumption**

4.0 watts (maximum)

### **Dimensions**

14 x 7.4 cm (0.46 x 0.24 inch)

### Weight

60g (0.13 pound)

### **Operating Temperature**

 $0^{\circ} - 50^{\circ} \text{C} (32^{\circ} - 122^{\circ} \text{F})$ 

### **Storage Temperature**

-25° - 55°C (-13° - 131°F)

### Humidity

10% -90% non-condensing

### **Emission**

- FCC Class B
- CE Class B
- Canada ICES-003 Class B
- CISPR Class B
- VCCI Class B
- C-Tick
- BSMI Class B

### Network O.S. Drivers

- Novell NetWare Server 3.12, 3.2, 4.1X, 4.2, 5.X ODI drivers
- Novell NetWare Client for DOS
- Novell NetWare Client 32 for DOS
- Microsoft Windows 95, 98, 2000
- Microsoft Windows for Workgroups 3.11
- Microsoft Windows NT 3.51, 4.0
- Microsoft LAN Manager 2.1 for DOS
- Microsoft Client for DOS
- Linux (kernal 2.0.X, 2.2X)
- IBM LAN Support Program
- IBM LAN service for DOS
- WIN/TCP PathWay Access for DOS - FTP PC/TCP
- NDIS2 Driver for DOS
- Packet Driver
- SCO Open Server 5.0X
- LANtastic
- Winsock
- SUN PC-NFS
- NCSA

### Remote Boot (Optional)

### **Boot ROM Address**

Searched by system BIOS

### **Boot ROM Sizes**

- RPL boot ROM: 64KB
- PXE boot ROM: 128KB

### **Boot Servers Supported**

- Novell RPL Boot ROM code
- NetWare 3.x, 4.x RPL server
- Microsoft Windows NT 3.51, 4.x RPL server
- Intel PXE 2.0











# Ordering Information

### 10/100Mbps Adapter

DFE-550TX

10/100Mbps adapter for PCI bus, With WOL and advanced functions

Optional Boot ROMs

RPL Boot ROM for DFE-550TX DFE-554

PXE Boot ROM for DFE-550TX

adapter

DFE-554P

TEL: 1-949-788-0805
TEL: 1-905-829-5033
TEL: 44-20-8731-5555
TEL: 44-90-8731-5555
TEL: 49-(08192-97110
TEL: 33-1-30-23-86.88
TEL: 39-02-2900-0676
TEL: 46-(09-564-61900
TEL: 358-9-622-91660
TEL: 358-9-622-91660
TEL: 36-3434-9678
TEL: 81-3-5434-9678
TEL: 81-3-5434-9678
TEL: 38-10-88097777
TEL: 31-2-522-34185
TEL: 202-2456176
TEL: 55-2-223-3185
TEL: 27(0)126652165
TEL: 886-2-2910-2626
TEL: 886-2-2910-2626

FAX: 1949-753-7033
FAX: 1908-753-7033
FAX: 44-20-8731-5511
FAX: 44-20-8731-5511
FAX: 34-10-302-361.89
FAX: 34-10-302-361.89
FAX: 38-10-302-361.89
FAX: 38-10-302-361.89
FAX: 46-10-8-564-61801
FAX: 45-43-42-45-47
FAX: 35-8-3-22-41661
FAX: 45-43-42-45.89
FAX: 68-70-88096789
FAX: 68-10-88096789
FAX: 68-10-88096789
FAX: 58-2-23-20923
FAX: 701)126652188
FAX: 58-2-23-7-3390
FAX: 886-2-2910-1515
FAX: 886-2-2914-6299



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