D-Link

DFE-550TX

With WOL Function

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 PCI Adapter

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.

IP Multicasting for Bandwidth Saving

With IP multicast support, the adapter can be configured with a Layer 3 switch or router. Multicast IP allows a host to be a member of one or more multicast groups and is useful for applications like live stock quotes and multiparty video-conferencing. Multicast IP conserves bandwidth by forcing the network to do packet replication only when necessary. In applications where compressed audio and video signals are transmitted as sequences of UDP packets to group address, multicast IP can eliminate users' need to maintain parallel networks for voice, video and data.

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*
- *Low network command processing overhead*
- *Run Win95, 98, NT, NetWare, OS/2, Unix, other O.S.*
- *Optional boot ROM for remote program load from servers*

LAN ADAPTER

10/100Mbps PCI 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

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
  (after Windows 2000 release, EEPROM firmware upgradable)

IP Multicast Routing
IP Addressing
Class D

Multicast Routing Protocols
- DVMRP
- MOSPF

Environmental & Physical
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° - 50°C (32° - 122°F)

Storage Temperature
-25° - 55°C (-13° - 131°F)

Humidity
10% -90% non-condensing

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

Network O.S. Drivers
- Novell NetWare ODI driver
- Novell NetWare Server, Client 32 for DOS/Windows
- Microsoft NDIS drivers
- Microsoft Windows 95, 98, 2000
- Microsoft NT 3.51/4.0
- Microsoft Workgroups
- Packet driver
- FTP PC/TCP
- NCSA
- Linux
- DMI 2.0

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
DFE-554   RPL Boot ROM for DFE-550TX Adapter
DFE-554P   PXE Boot ROM for DFE-550TX adapter

D-Link®

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Europe	TEL: 44-181-235-5555	FAX: 44-181-235-5500
U.K.	TEL: 44-181-235-5555	FAX: 44-181-235-5500
Germany	TEL: 49-(0)6192-97110	FAX: 49-(0)6192-971111
France	TEL: 33-1-30.23.86.88	FAX: 33-1-30.23.86.89
Italy	TEL: 39-2-2900-0676	FAX: 39-2-2900-1723
Sweden	TEL: 46-8-700.62.11	FAX: 46-8-21.96.40
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