

# **D-Link Corporation**

## **100 Based-FX 32Bit PCI-Bus Fiber-optics Adapter with SC connector**

### **Product External Specifications**

**Product Model Name: DFE-551FX**

**Rev.A1**

**Version: 1.01**

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## DFE-551FX 100Base-FX Fiber PCI Adapter

### ➤ Introduction

The DFE-551FX is an IEEE 802.3u-compliant 100Mbps Fast Ethernet PCI-Bus adapter. The DFE-551FX implements all advanced network features, including ACPI, IEEE 802.3x Flow-control and IEEE 802.1p/1Q prioritization and VLAN function.

Except for the advanced features, normal network function is essential to DFE-551FX. Utilizing the plug-and-play features, the DFE-551FX adapter is fully auto-configurable for easy installation. With one built-in SC connector operating at 1300nm-wavelength, DFE-551FX can double the network speed to 200Mbps with distance up to 2km in full-duplex mode. With PCI 32-bit data bus, DFE-551FX can deliver high throughput without the need of the on-board memory because its MAC controller has sufficient built-in FIFO memory for receive/transmit packet buffering. Along with PCI bus master architecture, DFE-551FX can lower the utilization of PCI bus and free the CPU for other bus intensive applications.

### ➤ Specification

Chassis	
Dimension	120mm x 74mm x11mm
Key Components / Performance	
MAC Controller	VIA VT6105M
Transceiver	AVAGO
Data Transfer Rate	148809bps for 100Mbps
FIFO	TX: 2K Bytes RX: 2K Bytes
Port Functions	
LAN	- 1x 100Base-FX port (SC connector) - Compliant to following standards: 1. IEEE 802.3u compliance 2. Support Full-Duplex operations at 100Mbps 3. IEEE 802.3x Flow Control support for Full-Duplex mode
Fiber Cable	- 100Base-FX 50/125/um or 62.5/125um multi-mode fiber optic cable, up to 2km
Wavelength	1300nm

## ➤ LED indicators

Location	LED Indicative	Color	Status	Description
LED Per 100Base-FX Port	Link/Act	Green	Solid Light	When there is a secure connection (or link) to Ethernet device at any of the ports.
			Blinking	When there is reception or transmission (i.e. Activity--Act) of data occurring at a port.
			Light off	No link
	100Mbps	Green	Solid Light	When there is a secure connection (or link) to 100Mbps device at any of the ports.
			Off	No link
	Full	Green	Solid Light	Full duplex mode
			off	Half duplex mode or no link

## ➤ Features

- Support SNMP v1 function.
- Support 32-bit PCI Local Bus Master high speed operation.
- Complies with IEEE 802.3u 100Base-FX industrial standard.
- Plug-and-Play--simply insert this card into a PC and it can automatically be configured by PC BIOS
- Auto-assignment of IRQ, I/O address.
- One Built-in SC Connector
- Transmission distance: 2km at full-duplex mode.
- Support 100Mbps Ethernet data transfer rate.
- Support full duplex operation.
- Comply with PCI Power Management v1.1
- Comply with 802.3x Full Duplex Flow Control to improve network traffic.
- Comply with Advanced Configuration and Power Interface specification v1.0
- Supports PCI clock speed up to 33Mhz, independent of network clock.
- Built-in 2K bytes FIFO for receive and transmit Controller buffer to eliminate external memory
- Low Ethernet Command Processing Overhead.
- Easy-to-view LEDs for diagnostics
  - Link / Active
  - 100
  - Full
- Power consumption : 1.14Watts (maximum)
- Host interface PCI 2.2 specification

- IEEE802.1p priority tagging with eight priority queues for traffic prioritization to speed throughput of time-critical applications
- Support 802.1Q VLAN to improve network performance and security, and maximum is up to 32 VLAN groups.
- TCP/UDP Checksum Offload
- Address filtering
- MIB Counter 64 (Hardware support)
- DMI 2.0
- WMI (Microsoft)
- WFM (Intel)
- Boot ROM support: Remote Program Load(DFE-551R) & Pre-boot Execution Environment(DFE-551P)

➤ **Driver support**

- Microsoft NT3.51, 4.0
- Microsoft Windows for Workgroups 3.11
- Microsoft Windows 95OSR2 / 95 / 98 / 98SE / ME
- Microsoft Windows 2000 / 2003
- Microsoft Windows XP X86
- Microsoft Windows XP x64
- Microsoft Windows Vista x86
- Microsoft Windows Vista x64
- Novell Netware Server 5.x / 6.x
- Novell Netware Client 32 for DOS
- Novell Netware Client for DOS
- NDIS2 for DOS
- Packet Driver
- Linux kernel 2.2.x ~ 2.6.x
- Apple Mac 10.3.x
- IBM LAN service for DOS

➤ **Physical & Environment**

Operating Temperature: 0° ~ 40°C

Storage Temperature: -25° ~ 55°C

Humidity: 5 % ~ 90% non-condensing

➤ **EMC & Safety**

- FCC Class B
- VCCL Class B
- CE Class B
- BSMI Class B
- C-Tick