



Intel® PRO/10GbE LR Server Adapter

Industry's First 10 Gigabit Server Connection

The Intelligent Way to Connect

Enable more productive networks with the fastest Ethernet connectivity available using the industry's first 10 Gigabit Ethernet adapter – the Intel® PRO/10GbE LR Server Adapter. The Intel PRO/10GbE LR Server Adapter delivers industry-leading performance to bandwidth-intensive applications using a highly integrated PCI-X Intel® 82597EX 133 MHz/64-bit 10GbE controller. High-speed server connectivity – once reserved for costly proprietary technologies such as high-performance computing clusters and grid-based computing – can now be achieved with the industry-standard Intel PRO/10GbE LR Server Adapter.

The IEEE 802.3ae* 10 Gigabit Ethernet standard extends single-mode fiber distances to 10 km at 10 Gbps line speeds. Using the Intel PRO/10GbE LR Server Adapter, enterprises can cost-effectively expand campus-wide connectivity and take control of their corporate networks with privately owned fiber that eliminates costly leased lines. And the Intel PRO/10GbE LR Server Adapter makes it possible for global companies to decrease critical data center back-up time to provide maximum network availability.

With the Intel PRO/10GbE LR Server Adapter, you can improve the productivity of your networks, extend your reach, and eliminate costly proprietary networking technologies, while confidently deploying standards-compliant Ethernet connectivity based on IEEE 802.3ae* 10 Gigabit Ethernet.

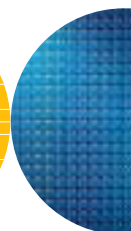


Features

Intel® 82597EX 10GbE PCI-X 133 MHz/64-bit MAC controller
Single-mode fiber support through 1310 nm optical module
IEEE 802.3ae* 10GBASE-LR compliant
Jumbo Frames supported up to 16 KB
TCP/IP segmentation and TCP checksum offload in RX and TX
256 KB RX and 32 KB TX data FIFO
Parity protection for RX FIFO buffer
Mechanisms for delaying/reducing TX and RX frame interrupts
PCI-X 1.0a and PCI 2.3 compliant
SC-Duplex connector for single-mode optical fiber
Flow Control 802.3x*
PCI 2.2 Message Signaled Interrupts

Benefits

■ High performance on widely adopted 2 nd -generation PCI host-bus interface
■ Extends cable length up to 10 km; noise resistant for signal integrity
■ Supports industry-wide 10 Gigabit Ethernet standard
■ Increase performance through reduced overhead
■ Provides efficiency for host processing
■ Enhanced TX and RX logic with minimum buffer requirements
■ Data integrity
■ Reduces CPU utilization
■ Compliance and compatibility
■ Ease of use with currently available 10 GbE equipment
■ Supports industry-wide networking standard
■ Improves system interrupt handling



Specifications: Intel® PRO/10GbE LR Server Adapter

General

Product Code	■ PXL8590LR
Connectors	■ SC Duplex
IEEE Standard/Network Topology	■ IEEE 10GBASE-LR
Wiring	■ Single-mode fiber
Adapter Product Features	
Intel® SingleDriver™ technology	■
Plug and Play Specification Support	■
Easy Installation, Intel® PROSet Utility and Intel® PRO Intelligent install	■
Full-duplex	■
Fiber medium distance	■ 10 km
Network Management	
WBEM-CIM Support	■
WMI & SNMP-manageable	■
Hardware Diagnostics	■
Intel® Boot Agent	■
ACPI Power Management	■
PXE 2.0	■
Jumbo Frames support (16 KB)	■
NOS Software Support	
Microsoft Windows® 2000	■
Microsoft Windows NET®	■
Linux® 2.2.5 or later	■
Warranty	
Limited Lifetime Warranty	■
90-day Money-back Guarantee (U.S. and Canada)	■

Advanced Software Features

Adapter Fault Tolerance	■
802.1q VLANs	■
802.3x Flow Control	■
TCP Checksum Offload	■
IEEE 802.1p*	■
TCP Segmentation/Large Send Off-load	■
Save and Restore	■
Technical Features	
Data Rate(s) Supported per Port	10 Gbps
Bus Type	PCI-X
Bus Width	64-bit
Bus Speed (MHz)	133
Onboard Memory	256 KB
Interrupt Levels	INTA
IEEE Support	802.3ae
Hardware Certifications	FCC Class A, CE, and Microsoft
Data Transfer Mode	Bus-master DMA
Controller—Processor	Intel® 82597EX
Typical Power Consumption	<12 watts
Operating Temperature	0–55°C
Operating Humidity	85% at +55°C
Physical Dimensions	
Length	33.7cm (12.4in)
Width	10.5cm (4.2in)

Order Code

- PXL8590LR (Single Packs)

Companion Products

Consider these Intel® products in your server and network planning:

- Intel® PRO/1000 MT Desktop Adapter
- Intel® PRO/1000 MT Server Adapter
- Intel® PRO/1000 MT Dual Port Server Adapter
- Intel® PRO/1000 MT Quad Port Server Adapter
- Intel® PRO/1000 MF Server Adapter
- Intel® PRO/1000 MF Server Adapters (LX)
- Intel® PRO/1000 MF Dual Port Server Adapter
- Other Intel® PRO Desktop, Mobile, Wireless and Server Adapters
- Intel® Itanium® processors
- Intel® Xeon™ processors
- Intel® Server Boards

Network-Ready PCs

Top PC and server manufacturers offer Intel® adapters in their new products. Specify or ask for Intel® PRO Network Connections with your next PC, server, or mobile PC purchase. For a list of preferred suppliers, visit us on the World Wide Web:

www.intel.com/network/connectivity/how_to_buy/index.htm.

Customer Support

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