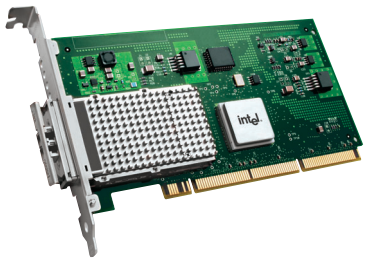
Intel® PRO/10GbE SR Server Adapter

Industry-leading 10 Gigabit Multi-mode Fiber Server Connection

- **Cost-effective 10 Gigabit performance for distances up to 300 m**
- **Highly integrated PCI-X second-generation silicon for high performance**
- **Smaller form factor with XPAK Optical Transceiver fits in a standard server PCI or PCI-X slot**



The Intelligent Way to Connect

The Intel® PRO/10GbE SR Server Adapter—the industry's second-generation 10 Gigabit Ethernet adapter—enables the fastest Ethernet connectivity available. The Intel PRO/10GbE SR 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 SR Server Adapter.

Using the Intel PRO/10GbE SR Server Adapter, enterprises can cost-effectively deploy 10GbE to a broad range of servers using lower-cost multi-mode fiber optic cabling and switching infrastructure. The 10GbE SR standard enables 10GbE transmissions at distances up to 300 meters using standard multi-mode cabling.

The Intel PRO/10GbE SR Server Adapter helps improve network productivity and eliminate costly proprietary networking technologies, while enabling deployment of standards-compliant Ethernet connectivity based on IEEE 802.3ae* 10 Gigabit Ethernet standard.

Features	Benefits
Intel® 82597EX 10GbE PCI-X 133 MHz/64-bit MAC controller	High performance on widely adopted 2nd-generation PCI host-bus interface
Multi-mode fiber support through 850 nm optical module	Cable lengths up to 300 meters; noise resistant for signal integrity
IEEE 802.3ae* 10GBase-SR compliant	Supports industry-wide 10 Gigabit Ethernet standard
Jumbo Frames supported up to 16 KB	Increase performance through reduced overhead
TCP/IP segmentation and TCP checksum offload in RX and TX	Provides efficiency for host processing
256 KB RX and 32 KB TX data FIFO	Enhanced TX and RX logic with minimum buffer requirements
Parity protection for RX FIFO buffer	Data integrity
Mechanisms for delaying/reducing TX and RX frame interrupts	Reduces CPU utilization
PCI-X 1.0a and PCI 2.3	Compatible
LC-Duplex connector for multi-mode optical fiber	Ease of use with currently available 10GbE equipment
Flow Control 802.3x*	Supports industry-wide networking standard
PCI 2.2 Message Signaled Interrupts	Improves system interrupt handling

Intel® PRO Network Connections

Specifications: Intel® PRO/10GbE SR Server Adapter

General	
Product Code	PXLA8591SR
Connectors	LC duplex
IEEE Standard/Network Topology	IEEE 10GBase-SR
Wiring	Multi-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	300 meters with 50 µm multi-mode fiber 33 meters with 62.5 µm multi-mode fiber
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 Server 2003	■
Linux* 2.2.5 or Later	■
Free BSD 1.0.6	■
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 or 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	<9 watts
Operating Temperature	0–55°C
Operating Humidity	85% at +55°C
Laser Product	Class 1M laser product
Physical Dimensions	
Length	16.8 cm (6.6 in)
Width	9.1 cm (3.575 in)

Order Code

- PXLA8591SR (Single Pack)

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
- Intel® PRO/10GbE LR 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 at www.intel.com/network/connectivity/how_to_buy/index.htm.

Customer Support

Intel® Customer Support Services offers a broad selection of programs including phone support and warranty service. For more information, contact us at support.intel.com/support/network. Service and availability may vary by country.

For Product Information

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