# intel

## Intel® PRO/1000 MT Dual Port Server Adapter

Two Gigabit Copper Server Connections in a Single PCI Slot

### The Intelligent Way to Connect

Conserve valuable PCI slot space in servers, eliminate server bottlenecks and migrate existing Category-5 networks to Gigabit Ethernet easily and cost-effectively with the Intel\* PRO/1000 MT Dual Port Server Adapter. Featuring flexible, auto-negotiating 10/100/1000 Mbps performance, the Intel PRO/1000 MT Dual Port Server Adapter is designed to automatically scale with growing networks.

Enhance server performance further by teaming the two connections together or team with other Intel<sup>®</sup> PRO Server Adapters using Intel's advanced server feature software to achieve multi-Gigabit scalability and redundant failover capability. A compact form factor and swappable low-

profile bracket allow this dual port Gigabit adapter to fit in even high-density, rack-mounted 1U and 2U servers. With a flexible design that fits almost any type of PCI bus, the standards-based management features and wide network operating system support help to ensure extensive compatibility with the latest server and networking environments.

Features	Benefits	
WIDESPREAD COMPATIBILITY		
Support for most NOSs	Enables widespread deployment	
Intel <sup>®</sup> SingleDriver™ technology	Common driver suite for Gigabit Ethernet reduces installation complexity	
Backward Compatibility with previous generations of Intel PRO/1000 Network Adapters	Reduces support costs and simplifies installation and maintenance	
Supports 64- or 32-bit PCI-X 1.0 or PCI 2.2 buses	This flexible, auto-sensing adapter works in a variety of bus types	
Remote Management Support (WfM, RIS, SNMP/DMI)	Reduces support costs with remote management based on industry-wide standards	
IEEE 802.3ab Compatibility	Supports Gigabit Ethernet industry-wide networking standard	
NEW FEATURES IN THE INTEL PRO/1000 MT DUAL PORT S	SERVER ADAPTER	
Intel <sup>®</sup> 82546 Gigabit Controller	Enables two Gigabit connections in a single adapter, delivering increased bandwidth for slot-constrained servers and providing high performance, reliability, and low power use in a single, integrated, dual port Gigabit Ethernet controller chip	
Full-height and low-profile, screw-on brackets included with each adapter	Compatible with full-height and low-profile PCI slots—the standard, full-height bracket can be easily swapped out and replaced by the shorter, low-profile bracket, for installation in high-density 1U and 2U servers that feature low-profile PCI slots	
Interrupt Moderation	Delivers increased performance while significantly reducing CPU utilization	
Advanced Cable Diagnostics	Dynamically tests and reports network problems (interrupts, error rate, cable length) and automatically compensates for cable issues (cross over cable, wrong pin-out/polarity)	
Large Send Off-load/TCP Segmentation Off-load	Compatible with Large Send Off-load feature of Microsoft Windows* Server 2003, 2000 and XP which enables wire speed performance with low CPU utilization	
Expanded Advanced Server Features	Intel <sup>®</sup> ANS software increases uptime with redundant, teamed connections and scales bandwidth by balancing network traffic across multiple server connections. Now offers Switch Fault Tolerance and Test Switch Configuration to test compatibility and further increase uptime	

- Easy, cost-effective 10/100/1000 migration over existing CAT-5 cabling
- Multi-Gigabit scalability and increased uptime through advanced server features
- Optional low-profile bracket included for high-density, rackmounted servers



#### **GIGABIT-OVER-COPPER ADVANTAGES**

Gigabit speeds on Category-5 cable networks	Able to achieve Gigabit speeds on commonly deployed CAT-5 cabling without costly cable replacement	
Compatible with Fast Ethernet	Reduces training costs and ramp rollout quickly	
Auto-sensing, self-configuring 10/100/1000 Mbps performance	Enables migration to faster networks easily and inexpensively—adapter will automatically sense when the network is able to support a faster speed, and self-configure to save IT staff time,	

money and server downtime

#### SPECIFICATIONS

#### Intel<sup>®</sup> PRO/1000 MT Dual Port Server Adapter

GENERAL Product Codes Connectors IEEE Standard/Network Topology Wiring ADAPTER PRODUCT FEATURES Intel® SingleDriver™ technology Plug and Play Specification Support Easy Installation, Intel® PROSet Utility and Intel® PRO Intelligent Install Auto-negotiation, Full-duplex Capable Includes a Low-profile and a Full-height Bracket Cable Distance NETWORK MANAGEMENT	PWLA8492MT Two RJ-45 10BASE-T, 100BASE-TX, 1000BASE-T Cat-5, 4-pair Standard	ADVANCED SOFTWARE FEATURES Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Fast EtherChannel*1 Gigabit EtherChannel*1 IEEE 802.3ad (Link Aggregation Control Protocol)*1 Test Switch Configuration PCI Hot Plug* and Active PCI* 802.1Q VLANs 802.3x Flow Control TCP Checksum Offload IEEE 802.1p TCP Segmentation/Large Send Off-load Interrupt Moderation	
Wired for Management (WfM) Baseline v2.0 Enabled for Servers DMI 2.0 Support, WMI & SNMP-manageable Offline Diagnostics Dynamic Cable Diagnostics Intel® Boot Agent ACPI Power Management Wake on LAN* PXE 2.0		Save and Restore TECHNICAL FEATURES Data Rate(s) Supported per Port Bus Type Bus Width Bus Speed (MHz) Onboard Memory Interrupt Levels IEEE Support	<ul> <li>10, 100 and 1,000-Mbps</li> <li>PCI/PCI-X</li> <li>32- or 64-bit</li> <li>33/66/100/133</li> <li>128 KB</li> <li>INTA</li> <li>802.3ab</li> </ul>
NOS SOFTWARE SUPPORT Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP 32- and 64-bit Editions Microsoft Windows NT* 4.0 Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later		Hell Opport       Bit State         Hardware Certifications       FCC A, CE         Data Transfer Mode       Bus-master DMA         Controller—Processor       Intel® 82546         Typical Power Consumption       1A at +5VDC         Operating Temperature       0-55°C         Operating Humidity       85% at +55°C         PHYSICAL DIMENSIONS       Length         Length       16.5cm (6.6 in)         Width       6.4cm (2.5 in)         Height of Full-Height End Bracket       12.1cm (4.75 in)         Height of Low-Profile End Bracket       8.1cm (3.2 in)	FCC A, CE Bus-master DMA Intel® 82546 1A at +5VDC 0–55°C
Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5* INTEL BACKING Limited Lifetime Warranty 90-day Money-back Guarantee (U.S. and Canada)	:		6.4cm (2.5 in) 12.1cm (4.75 in)

#### **ORDER CODES**

PWLA8492MT (Single Packs) PWLA8492MTBLK5 (Five Packs)

#### **COMPANION PRODUCTS**

Consider these Intel<sup>®</sup> products in your sever and network planning:

- Intel<sup>®</sup> PRO/1000 MT Desktop Adapters
- Intel<sup>®</sup> PRO/1000 MT Server Adapters
- Intel<sup>®</sup> PRO/1000 MF Server Adapters
- Intel<sup>®</sup> PRO/1000 MF Server Adapters (LX)
- Intel® PRO/1000 MF Dual Port Server Adapters
- Intel® PRO/1000 MT Quad Port Server Adapters
- Other Intel<sup>®</sup> PRO Desktop, Mobile, Wireless and Server Adapters
- Intel® Xeon<sup>™</sup> processors
- Intel<sup>®</sup> 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.

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\*Other names and brands may be claimed as the property of others.

<sup>1</sup>Available only when used with a capable switch.

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