Intel® PRO/1000 GT Quad Port Server Adapter

Four Gigabit Copper Server Connections in a Single PCI/PCI-X* Slot

The Intelligent Way to Connect
Access multiple network segments, conserve valuable Peripheral Component Interconnect (PCI) slots in servers, and migrate existing Category-5 (CAT-5) networks to Gigabit Ethernet easily and cost-effectively with the Intel® PRO/1000 GT Quad Port Server Adapter. Standards-based management features help ensure compatibility with the latest server and networking environments.

Enhance server performance further by teaming connections on this adapter with each other, with connections on other Intel® PRO Server Adapters or with LAN-on-motherboard components using the Intel® advanced server features to achieve multi-Gigabit scalability and redundant failover capability.

Features

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<tr>
<th>Widespread Compatibility</th>
<th>Benefits</th>
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<tr>
<td>Support for most NOSs</td>
<td>Enables high-density networking in server appliances and embedded applications</td>
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<tr>
<td>Intel® SingleDriver™ technology</td>
<td>Common driver suite for Gigabit Ethernet reduces installation complexity</td>
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<td>Backward compatibility with previous generations of Intel® PRO/1000 Network Adapters</td>
<td>Reduces support costs and simplifies installation and maintenance</td>
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<td>Supports 3.3 volt 64-bit PCI-X* 1.0 or PCI 2.2 buses</td>
<td>This flexible, auto-sensing adapter works in a variety of bus types</td>
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<td>Remote management support (WfM, RIS, SNMP/DMI)</td>
<td>Reduces support costs with remote management based on industry-wide standards</td>
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<td>IEEE 802.3ab* compatibility</td>
<td>Supports Gigabit Ethernet industry-wide networking standard</td>
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New Features in the Intel® PRO/1000 GT Quad Port Server Adapter

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<th>Two Intel® NH82546GB Gigabit Controllers</th>
<th>Enables four 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</th>
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<tr>
<td>Lead-free</td>
<td>Lead has not been intentionally added, but lead may still exist as an impurity below 1000 ppm or an approved RoHS exemption applies</td>
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<td>Interrupt moderation</td>
<td>Delivers increased performance while significantly reducing CPU utilization</td>
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<td>Advanced cable diagnostics</td>
<td>Dynamically tests and reports network problems (interrupts, error rate, cable length) and automatically compensates for cable issues (cross-over cable, wrong pin-out/polarity)</td>
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<td>Expanded advanced server features</td>
<td>Intel® Advanced Networking Services (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</td>
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Gigabit-over-Copper Advantages

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<th>Gigabit speeds on Category-5 cable networks</th>
<th>Achieves Gigabit speeds on commonly deployed CAT-5 cabling without costly cable replacement</th>
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<tr>
<td>Compatible with Fast Ethernet</td>
<td>Reduces training costs and quickly ramps rollout</td>
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<td>Auto-sensing, self-configuring 10/100/1,000-Mbps performance</td>
<td>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</td>
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Specifications

General

| Product codes | PWL8494GT |
| Connectors | Four RJ-45 |
| IEEE standard/network topology | 10BASE-T, 100BASE-TX, 1000BASE-T CAT-5, 4-pair for 1000 Mbps, CAT-3, 2-pair for 100 Mbps |

Adapter Product Features

| Intel® SingleDriver™ technology | • |
| Plug and Play specification support | Standard |
| Auto-negotiation, full-duplex capable | • |
| Cable distance | 100 m |
| Integrated MAC and PHY | • |
| SMBus support | • |
| PCIe Hot Plug® and Active PCI® | • |

Network Management

Wired for Management (WmM)
- baseline v2.0 enabled for servers
- DMI 2.0 support, v0.98 & SNMP-manageable
- Dynamic cable diagnostics
- Intel® Boot Agent
- ACPI power management 1.0
- Wake on LAN®
- PXE 2.0

NOS Software Support

Windows 2000  
Windows® Server 2003 32- and 64-bit editions  
Windows® XP 32- and 64-bit editions
Red Hat® Linux* 2.4.x or later (32- and 64-bit)
FreeBSD® 4.x or later
UnixWare* 7.x, OpenUNIX* 8.0 (ddi8)
SunSoft Solaris* 7, 8
NetWare® 5.1, 6.0, 6.5
SCO® 5

Intel® Backing

Limited lifetime warranty
- 90-day money-back guarantee (U.S. and Canada)

Order Codes
- PWL8494GT (single packs)
- PWL8494GTBLK5 (order must be in increments of 5)

Companion Products

Consider these Intel® products in your server and network planning:
- Intel® PRO/1000 MT Server Adapters
- Intel® PRO/1000 MF Server Adapters
- Other Intel® PRO Desktop, Mobile, Wireless and Server Adapters
- Intel® Xeon® processors
- Intel® Server Boards
- Intel® PRO/1000 PT Server Adapters
- Intel® PRO/1000 PT Desktop Adapters
- Intel® PRO/1000 PT Dual Port Server Adapters
- Intel® PRO/1000 PT Quad Port Server Adapters
- Intel® PRO/1000 PF Server Adapters
- Intel® PRO/1000 PF Dual Port Server Adapters
- PWLA8494GTBLK5 (order must be in increments of 5)

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

Advanced Software Features

- Intel® PROSet for Windows® Device Manager
- Intel® PRO Intelligent Install
- Adapter Fault Tolerance
- Switch Fault Tolerance
- Adaptive Load Balancing
- Fast EtherChannel™
- Gigabit EtherChannel™
- IEEE 802.3ad™ (link aggregation control protocol)
- Test switch configuration
- B02.1 Q VLANs
- B02.3x flow control
- TCP checksum offload (TCP, UDP, IP)
- IEEE 802.1p
- TCP segmentation offload
- Interrupt moderation
- Save and Restore

Technical Features

- Data rate(s) supported per port 10, 100, and 1,000 Mbps
- Bus type: PCI/PCI-X
- Bus width: 32/64-bit
- Bus speed: 66/100/133 MHz
- Onboard memory: 256 KB
- Interrupt levels: INTA, INTB, INTC, INTD
- IEEE support: 802.3ab
- Hardware certifications: FCC class B, CE, C-Tick, AS/NZ 3548, BSMI, ICES-003, VCCI
- Data transfer mode: Bus-master DMA
- Controller—processor: Intel® NH82546GB
- Typical power consumption: 16.8 W at 3.3 VDC
- Operating temperature: 0–55° C
- Operating humidity: 85% at +55° C

Physical Dimensions

- Length: 16.5 cm (6.6 in)
- Width: 10.7 cm (4.2 in)

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

To speak to a customer service representative regarding Intel® products, please call 1-800-538-3373 (U.S. and Canada) or visit www.intel.com/support/9089.htm for the telephone number in your area. For additional product information on the Intel® Networking and Communication products, visit www.intel.com/network/.

Online Documents

For the latest product information, visit www.intel.com/network/.