

Intel I350 GbE Network Adapter Family for IBM System x

Intel delivers advanced power savings and flexible I/O virtualization



Highlights

- Reduce power consumption: Innovative power management features
 - Market leading virtualization: SRIOV and VMDq
 - Two form factors: IBM Exclusive Mezzanine LOM Gen 2 and PCIe
 - Excellent selection: 1 Port SR Fiber, 2 Port BaseT, and 4 Port BaseT configurations
-

The Intel I350 GbE Network Adapter Family for IBM® System x® features a robust, standards-based portfolio that delivers economical Ethernet features in an industry-standard PCIe form factor, and an IBM ML2 form factor. The IBM ML2 Network Adapter is placed into a ML2 slot on equipped IBM System x servers, enabling you to preserve your PCIe slots for other purposes. The IBM ML2 Adapter also enables the IBM System x server's management traffic to be combined with the application traffic. By merging this traffic onto a single port, your cabling and switching costs are greatly reduced.

Virtualization, cloud computing, High-Performance Computing (HPC), and clustering initiatives are increasing workload demands. The Intel I350 GbE Network Adapter is the solution of choice for workload-intensive computing environments.

Intel I350 GbE Network Adapter for IBM System x at a glance

Part number	<ul style="list-style-type: none">• 00D1998: Intel I350 ML2 Quad-Port GbE Adapter for IBM System x• 00AG500: Intel I350-F1 1xGbE Fiber Adapter for IBM System x• 00AG510: Intel I350-T2 2xGbE BaseT Adapter for IBM System x• 00AG520: Intel I350-T4 4xGbE BaseT Adapter for IBM System x
Data rate:	Line rate with IEEE 802.3 auto negotiation for 1000/100/10 BaseT Ethernet
Bus interface	<ul style="list-style-type: none">• PCI Express 2.0 Gen 2 x4 for both 2.5GT/s and 5GT/s• IBM Mezzanine LOM Gen 2 Interface
Supported servers	Visit the IBM ServerProven page for the latest supported servers at: ibm.com/servers/eserver/serverproven/compat/us/
Interface	<ul style="list-style-type: none">• 00AG500: 1x GbE Fiber Optic LC connector supporting MMF 62.5/50 um• 00D1998: 4x GbE BaseT, RJ45• 00AG510: 2x GbE BaseT, RJ45• 00AG520: 4x GbE BaseT, RJ45



Intel I350 GbE Network Adapter for IBM System x at a glance

Performance features	<ul style="list-style-type: none"> • TCP/UDP, IPv4 checksum offloads, extended Tx descriptors • IPv6 support for IP/TCP and IP/UDP receive checksum offloads • Tx TCP segmentation offload (IPv4, IPv6) • Transmit segmentation offload • Interrupt throttling control • Legacy and Message Signal Interrupt (MSI) • Message Signal Interrupt Extension (MSI-X) • Intelligent interrupt generation • RSS for Windows • Scalable I/O for Linux • Low latency interrupts • Header/Packet Data Split in Receive • PCIe v2.1 TLP processing hint requester • Descriptor ring management hardware for transmit and receive
Ethernet and power features	<ul style="list-style-type: none"> • IEEE 802.3, 802.3u, 802.3ab • Jumbo frame support (9500 bytes) • IEEE 1588 and 802.1AS • MDI/MDIX auto crossover detection • IEEE 802.3x and 802.3z complaint flow control • Flow control (IEEE 802.3) • VLAN support (IEEE 802.1q) • Priority of service (IEEE 802.1p) • PXE Preboot eXecution • iSCSI as an iSCSI software initiator • Wake on LAN support • IEEE 802.3az Energy Efficient Ethernet • DMA coalescing
Virtualization features	<ul style="list-style-type: none"> • SRIOV • Intel Virtual Technology (VT) with I/OAT and VMDq • Eight TX and Rx Queue pairs per port • Flexible Port Partitioning – 32 VFs • RX/TX Round-Robin Scheduling • Traffic isolation • Traffic steering • VM to VM packet forwarding • MAC and VLAN anti-spoofing • Malicious driver detection • Storm control • Per-pool statistics, off loads, and jumbo support • IEEE 802.1q VLAN support with VLAN tag insertion for up to 4096 • Mirroring rules • VEPA (VM switching)
Dimensions & bracket	<ul style="list-style-type: none"> • PCIe: Low Profile Adapter with 2U bracket mounted, loose 3U bracket is included in box • ML2: Conforms to IBM Mezzanine LOM Gen 2 form factor
Warranty	<p>One year limited warranty. When installed in an IBM System x server, these cards assume your system's base warranty and any IBM ServicePac@ upgrade</p>

For more information

To learn more about the Intel I350 GbE Network Adapter Family for IBM System x, please contact your IBM representative or IBM Business Partner, or visit the following website:

ibm.com/systems/x/options/networking



© Copyright IBM Corporation 2014

Systems and Technology Group
Route 100
Somers, NY 10589

Produced in the United States of America
June 2014

IBM, the IBM logo, ibm.com, and System x are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at “Copyright and trademark information” at ibm.com/legal/copytrade.shtml

Intel, Intel logo, Intel Inside, Intel Centrino, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.



Please Recycle

Why IBM?

To help optimize technology investments, IBM offers a single point of serviceability backed by renowned support and training. In addition, the Intel I350 GbE Network Adapter Family is part of the IBM ServerProven® program, enabling compatibility among a variety of IBM and partner products.