Intel® Ethernet Server and Desktop Adapters

Quick Reference Guide

Revision History

Revision	Revision History	Date
-001	First release of the Intel® Gigabit Server and Desktop Adapters Quick Reference Guide	October 2010
-002	Changed title to Intel® "Ethernet" Server and Desktop Adapters Quick Reference Guide	December 2010

Intel® 10 Gigabit Server Adapters

Networking Specifications

Name	Intel® 10 Gigabit AF DA Dual Port Server Adapter	Intel® 10 Gigabit AT Server Adapter	Intel® 10 Gigabit AT2 Server Adapter	Intel® 10 Gigabit CX4 Dual Port Server Adapter	Intel® 10 Gigabit XF LR Server Adapter
Product Code	E10G42AFDA	E10G41AT	E10G41AT2	EXPX9502CX4	Intel® 10 Gigabit XF LR Server Adapter
Status	Launched	End of Life	Launched	Launched	Launched
Launch Date	Q2 '08	Q3 '08	Q3 '09	Q2 '08	Q4 '07
Vertical Segment	Server	Server	Server	Server	Server
Ethernet Controller(s)	Intel® 82598EB	Intel® 82598EB	Intel® 82598EB	Intel® 82598EB	Intel® 82598EB
Cable Medium	Copper	Copper	Copper	Copper	Fiber
Bracket Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height
Security					
Cabling Type	SFP+ Direct Attached Twin Axial Cabling up to 10m	10GBASE-T: 100 m on Cat-6A, 55 m on Cat-6 1000BASE-T: 100 m on Cat-5e, Cat-6 or Cat-6A	10GBASE-T: 100 m on Cat-6A, 55 m on Cat-6 1000BASE-T: 100 m on Cat-5e, Cat-6 or Cat-6A	8 pair, 100ohm Twin Axial Cabling up to 15m	SMF up to 10km
Max TDP	12.2 W	27.5W	15.5 W	4.9 W	11.5 W
# of Ports	Dual	Single	Single	Dual	Single
Interface Type (Slot type,maximum bus speed,slot width)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (@.5GT/s) x8	PCIe v2.0 (2.5GT/s)	PCIe	PCIe v2.0 (2.5GT/s)
Operating Temperature Range	0-55C	0-55C	0-55C	0-55C	0-55C
Message Signal Interrupt	Yes	INTA, MSI, MSI-X	Yes	Yes	Yes
Intel® Virtualization Technology for Connectivity (VT-c)	VMDq	VMDq	VMDq	VMDq	VMDq
Receive Side Scaling	Yes	Yes	Yes	Yes	Yes
Fiber Channel over Ethernet	No	No	No	No	No
Intel® Virtualization Technology for Directed I/O (VT-d)	No	No	No	No	No
Advance Software Features	Adapter Fault Tolerance (AFT) Switch Fault Tolerance (SFT) Adaptive Load Balancing (ALB) Teaming support IEEE 802.3ae*5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active Peripheral Component Interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum 0 offloading (IPv4, IPv6) capabilities control protocol (TCP), user datagram protocol (UDP), Internet Protocol (IP) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance (AFT) Switch Fault Tolerance (SFT) Adaptive Load Balancing (ALB) Teaming support IEEE 802.3ad5 (link aggregation control protocol) PCIe Hot Plug/Active Peripheral Component Interconnect (PCI) IEEE 802.1Q VLANs IEEE 802.3 2005 flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), User Datagram Protocol (UDP), Internet Protocol (IP) IEEE 802.1p TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading	Adapter Fault Tolerance (AFT) Switch Fault Tolerance (SFT) Adaptive Load Balancing (ALB) Teaming support IEEE 802.3ad5 (link aggregation control protocol) PCIe Hot Plug/Active Peripheral Component Interconnect (PCI) IEEE 802.1Q VLANs IEEE 802.3 2005 flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), User Datagram Protocol (UDP),Internet Protocol (IP)) IEEE 802.1p TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance (AFT) Switch Fault Tolerance (SFT) Adaptive Load Balancing (ALB) Teaming support IEEE 802.3ad4 (link aggregation control protocol) Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active Peripheral Component Interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), User Datagram Protocol (UDP), Internet Protocol (IP) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad4 Link aggregation control protocol Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support IPv6, IPv4 Tx/Rx IP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type
Supported Operating System	Windows 7[1] Windows Server 2008 R2 Core (x64 and IPF) Windows 2008 Microsoft Windows* 2003 Server IA32, X64 Microsoft Vista* IA32, X64, IPF Windows Virtual Server* 2005 IA32, X64, IPF Red Hat Linux* 2.6x or later IA32, X64, IPF SUSE SLES 10* or later, Professional 9.2 or later IA32, X64, IPF FreeBSD* 5.x or later IA32, X64, IPF ESX 3.x* support (for VMware) IA32, X64, IPF Fedora* IA32, X64, IPF EFI 1.1* IA32, X64, IPF	Windows 7[1] Windows Server 2008 R2[2] Windows 2008 Microsoft Windows Server 2003* Microsoft Vista* Microsoft Windows Virtual Server 2005* Red Hat Enterprise 4* or later SUSE SLES 10* or later, Professional 9.2 or later FreeBSD 5.x* or later VMware ESX 3.x* support Fedora* EFI 1.1	Microsoft Windows Server 2003* Microsoft Vista* Microsoft Windows Virtual Server 2005* Red Hat Enterprise 4* or later SUSE SLES 10* or later, Professional 9.2 or later FreeBSD 5.x* or later VMware ESX 3.x* support Fedora* EFI 1.1	Windows 7[1] Windows Server 2008 R22 Windows Vista SP1* IA32, X64 Windows Server* 2003 SP2 IA32, X64, IPF Windows Unified Storage Solution* 2003 IA32, X64, IPF Windows Server* 2008 IA32, X64, IPF Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4 and RHEL 5 IA32, X64, IPF Linux* SLES 9 and SLES 10 IA32, X64, IPF FreeBSD* 7.0 IA32, X64, IPF EFI* 1.1 IA32, X64, IPF	Windows 7[1] Windows Server 2008 R2[2] Windows Vista Windows Server 2003 Linux* Free BSD*

Name	Intel® 10 Gigabit XF SR Dual Port Server Adapter	Intel® 10 Gigabit XF SR Server Adapter	Intel® Ethernet Server Adapter X520-DA2	Intel® Ethernet Server Adapter X520-LR1	Intel® Ethernet Server Adapter X520-SR1
Product Code	EXPX9502AFXSR	EXPX9501AFXLR EXPX9501AFXSR	E10G42BTDA	E10G41BFLR	E10G41BFSR
Status	Launched	Launched	Launched	Launched	Launched
Launch Date	Q4 '07	Q4 '07	Q3 '09	Q3 '09	Q3 '09
Vertical Segment	Server	Server	Server	Server	Server
Ethernet Controller(s)	Intel® 82598EB	Intel® 82598EB	Intel® 82599ES	Intel® 82599ES	Intel® 82599ES
Cable Medium	Fiber	Fiber	Copper	Fiber	Fiber
Bracket Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height
Security			IPsec	IPsec	IPsec
Cabling Type	MMF up to 300m	MMF up to 300m	SFP+ Direct Attached Twin Axial Cabling up to 10m	SMF up to 10km	MMF up to 300m
Max TDP	14 W	10.4 W	8.6 W	8 W	8 W
# of Ports	Dual	Single	Dual	Single	Single
Interface Type (Slot type,maximum bus speed,slot width)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (5.0GT/s)	PCIe v2.0 (5.0GT/s)	PCIe v2.0 (5.0GT/s)
Operating Temperature Range	0-55C	0-55C	0-55C	0-55C	0-55C
Message Signal Interrupt	Yes	Yes	Yes	Yes	Yes
Intel® Virtualization Technology for Connectivity (VT-c)	VMDq	VMDq	VMDq & VMDc	VMDq & VMDc	VMDq & VMDc
Receive Side Scaling	Yes	Yes	Yes	Yes	Yes
Fiber Channel over Ethernet	No	No	Yes	Yes	Yes
Intel® Virtualization Technology for Directed I/O (VT-d)	No	No	Yes	Yes	Yes
Advance Software Features	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad4 Link aggregation control protocol Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support IPv6, IPv4 Tx/Rx IP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad4 Link aggregation control protocol Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support IPv6, IPv4 Tx/Rx IP, TCP, and UDP checksum offloading (IPv4, IPv6) capabilities control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading Checksum and segmentation capability extended to new standard packet type	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad (link aggregation control protocol) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/ large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading — Checksum and segmentation capability extended	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad (link aggregation control protocol) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/ large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading — Checksum and segmentation capability extended	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad (link aggregation control protocol) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/ large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading — Checksum and segmentation capability extended
Supported Operating System	Windows 7[1] Windows Server 2008 R2[2] Windows 2008 Microsoft Windows* 2003 Server Microsoft Vista* Windows Virtual Server 2005 Red Hat Enterprise Linux* 4 or later SUSE SLES* 10 or later, Professional 9.2 or later FreeBSD 5.x or later	Windows 7[1] Windows Server 2008 R2[2] Windows 2008 Microsoft Windows* 2003 Server Microsoft Vista* Windows Virtual Server 2005 Red Hat Enterprise Linux* 4 or later SUSE SLES* 10 or later, Professional 9.2 or later FreeBSD 5.x or later	Windows Server 2008 R2* Windows 7* Windows Server 2008* SP2 Windows Vista* SP2 Windows Server 2003 R2* Windows Server 2003* SP2 Linux* Stable Kernel version 2.6 Red Hat Enterprise Linux* version 4.7 Red Hat Enterprise Linux* version 5.3 Novell SUSE Linux Enterprise Server 10 SP2 Novell SUSE Linux Enterprise Server 11 FreeBSD* version 7.3 and later	Windows Server 2008 R2* Windows 7* Windows Server 2008* SP2 Windows Vista* SP2 Windows Server 2003 R2* Windows Server 2003* SP2 Linux* Stable Kernel version 2.6 Red Hat Enterprise Linux* version 4.7 Red Hat Enterprise Linux* version 5.3 Novell SUSE Linux Enterprise Server 10 SP2 Novell SUSE Linux Enterprise Server 11 FreeBSD* version 7.3 and later	Windows Server 2008 R2* Windows 7* Windows Server 2008* SP2 Windows Vista* SP2 Windows Server 2003 R2* Windows Server 2003* SP2 Linux* Stable Kernel version 2.6 Red Hat Enterprise Linux* version 4.7 Red Hat Enterprise Linux* version 5.3 Novell SUSE Linux Enterprise Server 10 SP2 Novell SUSE Linux Enterprise Server 11 FreeBSD* version 7.3 and later

Name	Intel® Ethernet Server Adapter X520-SR2	Intel® Ethernet Server Adapter X520-T2	NetEffect™ Ethernet Server Cluster Adapter CX4	NetEffect™ Ethernet Server Cluster Adapter DA	NetEffect™ Ethernet Server Cluster Adapter SFP+ SR
Product Code	E10G42BFSR	E10G42BT	E10G81GT2CX4	E10G81G2P	E10G81GF2SR
Status	Launched	Launched	Launched	Launched	Launched
Launch Date	Q3 '09	Q3'10	Q2 '09		Q2 '09
Vertical Segment	Server	Server	Server	Server	Server
Ethernet Controller(s)	Intel® 82599ES	Intel® 82599ES	NetEffect™ NE020	NetEffect™ NE020	NetEffect™ NE020
Cable Medium	Fiber	Copper	Copper	Copper	Fiber
Bracket Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height
Security	IPsec	IPsec			
Cabling Type	MMF up to 300m	Cat 6A up to 100m	8 pair, 100ohm Twinax up to 15m	SFP+ Direct Attach Twin Axial Cabling up to 10m	MMF up to 300m
Max TDP	10.7 W	19 W	6.2 W	8.5 W	9 W
# of Ports	Dual	Dual	Single	Single	Single
Interface Type (Slot type,maximum bus speed,slot width)	PCIe v2.0 (5.0GT/s)	PCIe v2.0 (5.0GT/s)	PCIe v1.1 (2.5GT/s)	PCIe v1.1 (2.5GT/s)	PCIe v1.1 (2.5GT/s)
Operating Temperature Range	0-55C	0-55C			0-65c
Message Signal Interrupt	Yes	Yes			
Intel® Virtualization Technology for Connectivity (VT-c)	VMDq & VMDc	VMDq & VMDc			
Receive Side Scaling	Yes	Yes			
Fiber Channel over Ethernet	Yes				
Intel® Virtualization Technology for Directed I/O (VT-d)	Yes	Yes			No
Advance Software Features	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Teaming support IEEE 802.3ad (link aggregation control protocol) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3 2005* flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/ large send offload MSI-X supports Multiple Independent Queues Interrupt moderation IPv6 offloading — Checksum and segmentation capability extended	Adapter Fault Tolerance (AFT) Switch Fault Tolerance (SFT) Adaptive Load Balancing (ALB) Teaming support IEEE 802.3ad5 (link aggregation control protocol) PCIe Hot Plug/Active Peripheral Component Interconnect (PCI) IEEE 802.1Q VLANs IEEE 802.3 2005 flow control support Tx/Rx IP, TCP, & UDP checksum offloading (IPv4, IPv6) capabilities (Transmission control protocol (TCP), User Datagram Protocol (UDP), Internet Protocol (IP)) IEEE 802.1p TCP segmentation/large send offload MSI -X supports Multiple Independent Queues Interrupt moderation IPv6 offloading	See Product Brief	See Product Brief	See Product Brief
Supported Operating System	Windows Server 2008 R2* Windows 7* Windows Server 2008* SP2 Windows Vista* SP2 Windows Server 2003 R2* Windows Server 2003* SP2 Linux* Stable Kernel version 2.6 Red Hat Enterprise Linux* version 4.7 Red Hat Enterprise Linux* version 5.3 Novell SUSE Linux Enterprise Server 10 SP2 Novell SUSE Linux Enterprise Server 11 FreeBSD* version 7.3 and later	Windows 7 (IA32 and X64) Windows Server 2008 R2 (x64 and IPF) Windows Server 2008 R2 Core (x64 and IPF) Linux SLES 11 SP1 Microsoft Windows Server 2003* Microsoft Vista* Microsoft Windows Virtual Server 2005* Red Hat Enterprise 4* or later SUSE SLES 10* or later, Professional 9.2 or later FreeBSD 5.x* or later VMware ESX 3.x* support Fedora* EFI 1.1	Microsoft Windows* Server 2003 (layer 2 only) Protocol software supporting Linux Novell* and Red Hat*, kernels 2.6.9 and higher	Microsoft Windows* Server 2003 (layer 2 only) Protocol software supporting Linux Novell* and Red Hat*, kernels 2.6.9 and higher	Microsoft Windows* Server 2003 (layer 2 only) Protocol software supporting Linux Novell* and Red Hat*, kernels 2.6.9 and higher

[1] http://www.intel.com/support/network/sb/CS-030613.htm
[2] http://www.intel.com/support/network/sb/CS-030614.htm

Intel® Gigabit Server Adapters

Networking Specifications

Name	Intel® Ethernet Server Adapter I340-T4	Intel® Gigabit EF Dual Port Server Adapter	Intel® Gigabit ET Dual Port Server Adapter	Intel® Gigabit ET Quad Port Server Adapter	Intel® Gigabit ET2 Quad Port Server Adapter	Intel® PRO/1000 GT Quad Port Server Adapter
Product Code	E1G44HT	E1G42EF	E1G42ET	E1G44ET	E1G44ET2	PWLA849GT
Status	Launched	Launched	Launched	End of Life	Launched	Launched
Launch Date	Q2'10	Q4 '08	Q3 '08	Q1 '09	Q3'10	Q1 '06
Expected Discontinuance				12/23/2010		
Vertical Segment	Server	Server	Server	Server	Server	Server
Ethernet Controller	Intel® 82580	Intel® 82576	Intel® 82576	Intel® 82576 Gigabit	Intel® 82576	Intel® NH82546GB
Cable Medium	Copper	Fiber	Copper	Copper	Copper	Copper
Bracket Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Full Height
Security		IPSec, MACsec	IPSec	IPSec, MACsec	IPsec, MACsec	
Cabling Type	Category-5 up to 100m	MMF 62.5um/50um up to 275m/550m respectively	Category-5 up to 100m	Category-5 up to 100m	Category-5 up to 100m	Category-5 up to 100m
Max TDP	4.3 W	2.2 W	2.9 W	8.4 W	8.4 W	16.8 W
# of Ports	Quad	Dual	Dual	Quad	Quad	Quad
Interface Type	PCIe v2.0 (5.0GT/s)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (2.5GT/s)	PCIe v2.0 (2.5GT/s)	PCI-X
Operating Temperature Range	0-55C	0-55C	0-55C	0-55C	0-55c	0-55C
Message Signal Interrupt	Yes	Yes	Yes	Yes	Yes	Yes
Intel® Virtualization Technology for Connectivity (VT-c)	VMDq	VMDq, VMDc	VMDq, VMDc	VMDq & VMDc	Yes	
Receive Side Scaling	Yes	Yes	Yes	Yes	Yes	Yes
Fiber Channel over Ethernet					No	
Intel® Virtualization Technology for Directed I/O (VT-d)	No	Yes	Yes	Yes		
Advance Software Features	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Teaming Support IEEE 802.3ad (link aggregation control protocol) Test switch configuration , tested with major switch original equipment manufacturers (OEM) PCIe Hot Plug/Active Peripheral Component Interconnect IEEE 802.1Q* VLANS IEEE 1588 Precision Tiime Control Protocol, time synch capability - synchornizes internal clocks according to a network master clock IEEE 802.3 2005* flow control support TX/RX IP, TCP and UDP checksum offloading (IPv4, IPv6) capabilities(Transmission cotrol protocol (TCP), user datagram protocol (UDP), Internet protocol (IP)) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports multiple independent queues Interrupt moderation IPv6 offloading, Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Teaming Support IEEE 802.3ad (link aggregation control protocol) Test switch configuration , tested with major switch original equipment manufacturers (OEM) PCIe Hot Plug/Active Peripheral Component Interconnect IEEE 802.1Q* VLANS IEEE 1588 Precision Tiime Control Protocol, time synch capability - synchornizes internal clocks according to a network master clock IEEE 802.3 2005* flow control support TX/RX IP, TCP and UDP checksum offloading (IPv4, IPv6) capabilities(Transmission cotrol protocol (TCP), user datagram protocol (UDP), Internet protocol (IP)) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports multiple independent queues Interrupt moderation IPv6 offloading, Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Teaming Support IEEE 802.3ad (link aggregation control protocol) Test switch configuration , tested with major switch original equipment manufacturers (OEM) PCIe Hot Plug/Active Peripheral Component Interconnect IEEE 802.1Q* VLANS IEEE 1588 Precision Tiime Control Protocol, time synch capability - synchornizes internal clocks according to a network master clock IEEE 802.3 2005* flow control support TX/RX IP, TCP and UDP checksum offloading (IPv4, IPv6) capabilities(Transmission cotrol protocol (TCP), user datagram protocol (UDP), Internet protocol (IP)) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports multiple independent queues Interrupt moderation IPv6 offloading, Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Teaming Support IEEE 802.3ad (link aggregation control protocol) Test switch configuration , tested with major switch original equipment manufacturers (OEM) PCIe Hot Plug/Active Peripheral Component Interconnect IEEE 802.1Q* VLANS IEEE 1588 Precision Tiime Control Protocol, time synch capability - synchornizes internal clocks according to a network master clock IEEE 802.3 2005* flow control support TX/RX IP, TCP and UDP checksum offloading (IPv4, IPv6) capabilities(Transmission cotrol protocol (TCP), user datagram protocol (UDP), Internet protocol (IP)) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports multiple independent queues Interrupt moderation IPv6 offloading, Checksum and segmentation capability extended to new standard packet type	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Teaming Support IEEE 802.3ad (link aggregation control protocol) Test switch configuration , tested with major switch original equipment manufacturers (OEM) PCIe Hot Plug/Active Peripheral Component Interconnect IEEE 802.1Q* VLANS IEEE 1588 Precision Tiime Control Protocol, time synch capability - synchornizes internal clocks according to a network master clock IEEE 802.3 2005* flow control support TX/RX IP, TCP and UDP checksum offloading (IPv4, IPv6) capabilities(Transmission cotrol protocol (TCP), user datagram protocol (UDP), Internet protocol (IP)) IEEE 802.1p* TCP segmentation/large send offload MSI-X supports multiple independent queues Interrupt moderation IPv6 offloading, Checksum and segmentation capability extended to new standard packet type	Intel® PROSet for Windows* Device Manager Intel® PRO Intelligent Install 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 802.1Q VLANs 802.3x flow control TCP checksum offload (TCP, UDP, IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation Save and Restore
Supported Operating System	Windows* Vista* SP2 IA32,x64 Windows Server* 2003 SP2 IA32, X64, IPF Windows* Unified Storage Solution 2003 IA32, X64, IPF Windows Server* 2008 SP2 IA32, X64, IPF Windows Server* 2008 R2 IA32, X64, IPF Windows 7 Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4.8 IA32, X64 Linux* RHEL 5.4 IA32, X64, IPF Linux* SLES 10 SP3 IA32, X64 Linux SLES 11 IA32, X64 FreeBSD*8.0 IA32, X64 UEFI* 2.1 X64, IPF Vmware ESX* 4.x X64	Windows* Vista* SP1 IA32,x64 Windows* Vista* SP1 IA32, X64, IPF Windows Server* 2003 SP2 IA32, X64, IPF Windows* Unified Storage Solution 2003 IA32, X64, IPF Windows Server* 2008 IA32, X64, IPF Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4 IA32, X64, IPF Linux* RHEL 5 IA32, X64, IPF Linux* SLES 9 IA32, X64, IPF Linux SLES 10 IA32, X64, IPF FreeBSD* 7.0 IA32, X64, IPF UEFI* 1.1 IA32, X64, IPF Vmware ESX* 3.x IA32, X64, IPF	Windows* Vista* SP1 IA32,x64 Windows* Vista* SP1 IA32, X64, IPF Windows Server* 2003 SP2 IA32, X64, IPF Windows* Unified Storage Solution 2003 IA32, X64, IPF Windows Server* 2008 IA32, X64, IPF Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4 IA32, X64, IPF Linux* RHEL 5 IA32, X64, IPF Linux* SLES 9 IA32, X64, IPF Linux SLES 10 IA32, X64, IPF FreeBSD* 7.0 IA32, X64, IPF UEFI* 1.1 IA32, X64, IPF Vmware ESX* 3.x IA32, X64, IPF	Windows* Vista* SP1 IA32,x64 Windows* Vista* SP1 IA32, X64, IPF Windows Server* 2003 SP2 IA32, X64, IPF Windows* Unified Storage Solution 2003 IA32, X64, IPF Windows Server* 2008 IA32, X64, IPF Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4 IA32, X64, IPF Linux* RHEL 5 IA32, X64, IPF Linux* SLES 9 IA32, X64, IPF Linux SLES 10 IA32, X64, IPF FreeBSD* 7.0 IA32, X64, IPF UEFI* 1.1 IA32, X64, IPF Vmware ESX* 3.x IA32, X64, IPF	Windows* Vista* SP1 IA32,x64 Windows* Vista* SP1 IA32, X64, IPF Windows Server* 2003 SP2 IA32, X64, IPF Windows* Unified Storage Solution 2003 IA32, X64, IPF Windows Server* 2008 IA32, X64, IPF Linux* Stable Kernel version 2.6 IA32, X64, IPF Linux* RHEL 4 IA32, X64, IPF Linux* RHEL 5 IA32, X64, IPF Linux* SLES 9 IA32, X64, IPF Linux SLES 10 IA32, X64, IPF FreeBSD* 7.0 IA32, X64, IPF UEFI* 1.1 IA32, X64, IPF Vmware ESX* 3.x IA32, X64, IPF	Windows Server 2008 R2*[2] Windows Server* 2008 Windows* 2000 Windows* Server 2003 32- and 64-bit editions Windows* XP 32- and 64-bit editions Windows Vista Windows 7[1] RedHat 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

Name	Intel® PRO/1000 MF Dual Port Server Adapter	Intel® PRO/1000 MF Server Adapter	Intel® PRO/1000 MF Server Adapter (LX)	Intel® PRO/1000 MT Dual Port Server Adapter	Intel® PRO/1000 MT Server Adapter	Intel® PRO/1000 PF Dual Port Server Adapter
Product Code	PWLA8492MF	PWLA8490MF	PWLA8490LX	PWLA8492MT	PWLA8490MT	EXPI9402PF
Status	Launched	Launched	Launched	Launched	Launched	Launched
Launch Date	Q3 '03	Q3 '03	Q3 '03	Q3 '03	Q3 '03	Q4 '05
Expected Discontinuance						
Vertical Segment	Server	Server	Server	Server	Server	Server
Ethernet Controller	Intel® 82546	Intel® 82545	Intel® 82545	Intel® 82546	Intel® 82545	Intel® 82571GB
Cable Medium	Fiber	Fiber	Fiber	Copper	Copper	Fiber
Bracket Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height
Security						
Cabling Type	MMF 62.5um/50 um up to 275m/550m respectively	MMF 62.5um/50 um up to 275m/550m respectively	SMF 9um up to 5km, MMF 62.5um/50 um up to 275m/550m respectively	Category-5 up to 100m	Category-5 up to 100m	MMF 62.5um/50 um up to 275m/550m respectively
Max TDP	1A at +5VDC	1A at +5VDC		1A at +5VDC	1A at +5VDC	3.3 W
# of Ports	Dual	Single	Single	Dual	Single	Dual
Interface Type	PCI-X	PCI-X	PCI-X	PCI-X	PCI-X	PCIe v1.0a (2.5GT/s)
Operating Temperature Range	0-55C	0-55C	0-55C	0-55C	0-55C	0-55C
Message Signal Interrupt						
Intel® Virtualization Technology for Connectivity (VT-c)						
Receive Side Scaling						
Fiber Channel over Ethernet						
Intel® Virtualization Technology for Directed I/O (VT-d)						
Advance Software Features	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Receive Load Balancing 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 Off-load IEEE 802.1p TCP Segmentation/Large Send Off-load Interrupt Moderation Save and Restore	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Receive Load Balancing 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 Offload Interrupt Moderation Save and Restore	Adapter Fault Tolerance Switch Fault Tolerance Adaptive Load Balancing Receive Load Balancing 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 Offload Interrupt Moderation Save and Restore	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 Save and Restore	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 Save and Restore	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 8 connections Multiple teams Supports 4 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation
Supported Operating System	Windows Server 2008 R2*[2] Windows Server* 2008 Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP 32- and 64-bit Editions Microsoft Windows NT* 4.0 Windows Vista Windows 7[1] Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5*	Windows Server 2008 R2* 2 Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP (32- and 64-bit) Microsoft Windows NT* 4.0 Windows 7[1] Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5*	Windows Server 2008 R2*[2] Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP (32- and 64-bit) Microsoft Windows NT* 4.0 Windows 7[1] Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5*	Windows Server 2008 R2*[2] Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP 32- and 64-bit Editions Microsoft Windows NT* 4.0 Windows 7[1] Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5*	Windows Server 2008 R2*[2] Microsoft Windows* Server 2003 and 2000 Microsoft Windows* XP 32- and 64-bit Editions Microsoft Windows NT* 4.0 Windows 7[1] Linux* 2.4.x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 4.11, 4.2, 5.0, 5.1, 6.0 SunSoft Solaris* 7, 8 UnixWare* 7.x, OpenUNIX 8 (ddi8) SCO5*	Windows Server 2008 R2*[2] Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Windows 7 (Not in Windows 7 RC)[1] Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 5.x, 6.x Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*

Name	Intel® PRO/1000 PF Quad Port Server Adapter	Intel® PRO/1000 PF Server Adapter	Intel® PRO/1000 PT Dual Port Server Adapter	Intel® PRO/1000 PT Quad Port Low Profile Server Adapter	Intel® PRO/1000 PT Quad Port Server Adapter	Intel® PRO/1000 PT Server Adapter
Product Code	EXPI9404PF	EXPI9400PF	EXPI9402PT	EXPI9404PTL EXPI9404PTLBLK	EXPI9404PT	EXPI9400PT
Status	Launched	Launched	Launched	Launched	Launched	Launched
Launch Date	Q1 '07	Q4 '05	Q4 '05	Q1 '07	Q3 '06	Q4 '05
Expected Discontinuance					Q3 '09	
Vertical Segment	Server	Server	Server	Server	Server	Server
Ethernet Controller	Intel® 82571GB	Intel® 82572GI	Intel® 82571GB	Intel® 82571GB	Intel® 82571GB	Intel® 82572GI
Cable Medium	Fiber	Fiber	Copper	Copper	Copper	Copper
Bracket Height	Full Height	Low Profile & Full Height	Low Profile & Full Height	Low Profile & Full Height	Full Height	Low Profile & Full Height
Security						
Cabling Type	MMF 62.5um/50 um up to 275m/550m respectively	MMF 62.5um/50 um up to 275m/550m respectively	Category-5 up to 100m	Category-5 up to 100m	Category-5 up to 100m	Category-5 up to 100m
Max TDP	4.95 W	3.3 W	4.95 W	12 W	12.1 W	3.3 W
# of Ports	Quad	Single	Dual	Quad	Quad	Single
Interface Type	PCIe v1.0a (2.5GT/s)	PCIe v1.0a (2.5GT/s)	PCIe v1.0a (2.5GT/s)	PCIe v1.0a (2.5GT/s)	PCIe v1.0a (2.5GT/s)	PCIe v1.0a (2.5GT/s)
Operating Temperature Range	0-55C	0-55C	0-55C	0-55C	0-55C	0-55C
Message Signal Interrupt						
Intel® Virtualization Technology for Connectivity (VT-c)	N/A					
Receive Side Scaling		Yes				
Fiber Channel over Ethernet						
Intel® Virtualization Technology for Directed I/O (VT-d)						
Advance Software Features	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 8 connections Multiple teams Supports 4 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 4 connections Multiple teams Supports 2 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 8 connections Multiple teams Supports 4 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 8 connections Multiple teams Supports 4 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) EEE 802.1Q* VLANs EEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*5 (FEC) Gigabit EtherChannel*5 (GEC) Teaming support Scales up to 8 connections Multiple teams Supports 4 separate teams, maximum IEEE 802.3ad* (link aggregatiocontrol protocol)5 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP segmentation/large send offload Interrupt moderation	Adapter fault tolerance (AFT) Switch fault tolerance (SFT) Adaptive load balancing (ALB) Fast EtherChannel*4 (FEC) Gigabit EtherChannel*4 (GEC) Teaming support Scales up to 4 connections Multiple teams Supports 2 separate teams, maximum IEEE 802.3ad* (link aggregation control protocol)4 Test switch configuration Tested with major switch original equipment manufacturers (OEMs) PCIe Hot Plug*/Active peripheral component interconnect (PCI) IEEE 802.1Q* VLANs IEEE 802.3* (z, ab, u, x) flow control support TCP checksum offload — transmission control protocol (TCP), user datagram protocol (UDP), Internet protocol (IP) IEEE 802.1p* TCP checksum/large send offload Interrupt moderation
Supported Operating System	Windows Server 2008 R2*[2] Windows Server* 2008 Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD* 4.x or later Novell Netware* Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*	Windows Server 2008 R2*[2] Windows Server* 2008 Windows 7[1] Windows* Vista Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD* 4.x or later Novell Netware* 5.x,6.x Sun Solaris* x86, OS 8 and later Vmware ESX* 3.x supports SCO Open Server 5, OpenUNIX*8	Windows Server 2008 R2*[2] Windows Server* 2008 Windows 7[1] Windows* Vista Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 5.x, 6.x Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*	Windows Server 2008 R2*[2] Windows Server* 2008 Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*	Windows Server 2008 R2*[2] Windows Server* 2008 Microsoft Windows* Server 2003, Enterprise, Datacenter (32- and 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*	Windows Server 2008 R2*[2] Windows Server* 2008 Windows 7[1] Windows* Vista Microsoft Windows* Server 2003, Enterprise, Datacenter (32- & 64-bit) Microsoft Windows 2000 Red Hat Linux* 2.4x or later (32- and 64-bit) FreeBSD 4.x or later Novell Netware* 5.x, 6.x Sun Solaris* x86, OS 8 and later SCO Open Server 5, OpenUNIX 8*

[1] http://www.intel.com/support/network/sb/CS-030613.htm
[2] http://www.intel.com/support/network/sb/CS-030614.htm

Intel® Gigabit Desktop Adapters

Networking Specifications

Name	Intel® Gigabit CT Desktop Adapter	Intel® PRO/1000 GT Desktop Adapter
Product Code	EXPI9301CT	PWLA8391GT
Status	Launched	Launched
Launch Date	Q2 '08	Q3 '04
Vertical Segment	Desktop	Desktop
Ethernet Controller	Intel® 82574L	Intel® 82541PI
Cable Medium	Copper	Copper
Bracket Height	Low Profile & Full Height	Low Profile & Full Height
Cabling Type	Category-5 up to 100m	Category-5 up to 100m
Max TDP	1.9 W	
# of Ports	Single	Single
Interface Type	PCIe v2.0 (2.5GT/s)	PCI
Temperature Range	0-55C	0-55C
Intel® Virtualization Technology for Connectivity (VT-c)	VMDq	
Receive Side Scaling	Yes	
Advance Software Features	Test switch configuration Tested with major switch original equipment manufacturers (OEMs) TCP checksum offload – transition control protocol (TCP), user diagram protocol (UDP), Internet protocol (IP) IEEE 802.1p*, Intel(R) Priority Packet 8 TCP segmentation/large send offload Teaming support Interrupt moderation Tx/Rx IP	IEEE 802.1Q Virtual Local Area Network (VLANs) IEEE 802.3x Flow Control Transmission Control Protocol (TCP) Checksum Offload IEEE 802.1p, Intel® Priority Packet II
Supported Operating System	Windows* 2000 Windows* Server 2003 Windows* Server 2008 Windows XP* (Service Pack 2) [Service Pack 3 is to be released mid-year] Windows Vista* (Service Pack 1) Linux* RHEL 4.6 Linux* Kernel version 2.6.24 Linux* Kernel version 2.4.36.2 RHEL* 5.1 SLES* 9 SP4 SLES* 10 SP1 FreeBSD* 7.0 DOS* DOSODI* SCO OpenServer 6/Unixware* 7.1.x Novell Netware* 6.5 Xen* FreeBSD* 5.x or later ESX* 3.x* support (for VMware)	Windows Server 2008 R2* 2 Windows Server* 2008 Windows 7 1 Windows* Vista Microsoft Windows* 2000, XP Microsoft Windows NT* 4.0 Microsoft Windows 98 SE, Me Disk Operating System (DOS) and Disk Operating System Optical Digital Image (DOSODI) Linux* 2.2.5 or Later Novell Netware* 4.2, 5.1, 6.0

[1] http://www.intel.com/support/network/sb/CS-030613.htm

[2] http://www.intel.com/support/network/sb/CS-030614.htm