



HP Network Adaptors for ProLiant DL and ML Servers

Family data sheet



Increased demands placed on your network for reliability, bandwidth and security will only accelerate while imposing pressure for infrastructure simplification and reduced costs. From entry-level adaptors to options for multiple applications, our line of network products provides a complete offering for ProLiant servers.

Building network reliability

HP ProLiant server adaptors provide up to four Gigabit ports on a single card, allowing multiple connections to devices and/or redundant switches. One or more ports on a single adaptor or throughout multiple adaptors can be teamed for simple failover to more advanced teaming capabilities.

Simplifying the infrastructure

HP offers several multi-function adaptors for ProLiant servers that combine accelerated networking, storage networking and clustering – all in a single, high-performance network adaptor. They support TCP/IP Offload Engine (TOE) for Windows and accelerated Internet Small Computer System Interface (iSCSI). Today, the typical server environment requires separate connectivity products for networking and storage. Not so with HP multi-function network adaptors. The adaptors present a single connection supporting multiple functions, thereby allowing IT professionals to

manage their whole infrastructure as a single, unified fabric. A unified fabric infrastructure can dramatically reduce costs, increase flexibility in business solution deployment, allow sharing of resources for improved efficiencies and greatly simplify infrastructure management.

Managing effectively

ProLiant network adaptors ship with drivers and agents that can be managed from HP Systems Insight Manager (SIM), as well as any other management application that supports SNMP. SIM can recognise the adaptors individually or in teams and can collect and report SNMP statistics on adaptor events. Integrated Management Log (IML) support is provided by the adaptors for critical event logging on ProLiant servers.

The adaptors ship with a set of utilities that allow the user to enable initial diagnostics and configure adaptor teaming. This includes a patented teaming GUI for Microsoft® Windows® operating systems. Additionally, support for scripted installations of teams in a Microsoft Windows environment allows for unattended OS installations.

Networking with confidence

Tested and proven to meet demanding HP standards, our adaptors undergo an extensive level of ProLiant server compatibility and systems interoperability testing. We validate the adaptors over a wide range of both 32-bit and 64-bit operating systems. This approach provides a robust and reliable networking solution while providing IT administrators with a single point of contact for both their servers and their server network adaptors.

NC112T PCI Express Gigabit Server Adaptor

The NC112T is a single lane (x1) PCI Express Gigabit server adaptor offering performance at a very modest price. It offers first-rate price/performance compared to other NC-series Gigabit Ethernet adaptors. The option kit ships with two brackets allowing the adaptor to be used in either low profile or standard height server I/O slots.

HP NC300 Series Network Adaptors

NC360T PCI Express Dual-port Gigabit Server Adaptor

The NC360T is an x4 PCI Express adaptor featuring two 10/100/1000 ports on a single card, saving valuable server I/O slots for other purposes. The option kit ships with two brackets allowing the adaptor to be used in either low profile or standard height server I/O slots.

NC364T Quad-port Gigabit Server Adaptor

The NC364T is a quad-port 10/100/1000T adaptor. It has four PCI Express lanes (x4) and it is compatible with x4, x8 and x16 PCI Express slots. Additionally, both low profile and standard height PCI Express slots are supported with brackets included with the kit. The NC364T offers the greatest port density in a NC-series PCI Express adaptor, making it ideal for virtualisation, server consolidation, network segmentation and other network I/O-intensive applications. The aggregate throughput of 4 Gbps meets the needs for customers desiring high bandwidth but are not yet ready to move to 10 Gigabit Ethernet.

NC373F and NC373T Single-port Multi-function Gigabit Server Adaptors

The NC373F (x4 PCI Express, 1000SX) and NC373T (x4 PCI Express, 1000T) are high-performance, single-port PCI Express multi-function adaptors that support TCP/IP Offload for Windows and accelerated iSCSI, all on a single card. These adaptors enhance server performance and improve network efficiency by redirecting TCP/IP processing from the server CPU to the network adaptor. With accelerated networking and storage networking combined in one adaptor, system flexibility is increased while allowing an organisation to consolidate ports, converge functions and centralise IT management.

NC382T PCI Express Dual-port Multi-function Gigabit Server Adaptor

The NC382T 10/100/1000T adaptor shares the common TOE for Windows and accelerated iSCSI multi-function feature set as NC373F and NC373T. The NC382T provides two Gigabit ports, thereby saving valuable PCI Express slots. Like the NC373x adaptors, the NC382T can be used in either standard or low-profile slots.

HP NC500 Series Network Adaptors

NC522SFP Dual Port 10 Gigabit Server Adaptor

The NC522SFP is a PCI Express Gen 2 adaptor that ships with two SFP+ (Small Form-Factor Pluggable) cages suitable for connecting the adaptor to Direct Attach Cable (DAC) or fibre modules to support SM, LM and LRM fibre optic cabling. This x8 PCI Express adaptor combines 10,000 Mbps with multi-function capabilities ideal for a host of demanding applications. To support a wider range of ProLiant servers, the NC522SFP is backward compatible with x4 slots, automatically auto-sensing between x8 and x4. Both low-profile and standard height PCI Express slots are supported with the brackets included in the option kit.

HP Services

NIC Service Support Options

HP Care Pack Services delivering specialised networking expertise to complement your in-house capabilities. Cover your NIC options with a single convenient server support package. HP Care Pack Services for HP ProLiant Servers and HP BladeSystems provide support for all HP branded hardware options that are qualified for inclusion with your server at the time of or after purchase, at no extra charge.

Server and software Installation and Startup HP Care Pack Services

Take advantage of complete installation and implementation support – to get your IT solutions up-and-running rapidly, with minimal business disruption.

HP Care Pack Services Hardware Support

HP Care Pack Services help increase uptime and productivity with rapid same day 4 hour response on a 24x7 or 13x5 basis. In addition, HP Services offer 24x7, 6 hour call-to-repair where downtime needs to be kept to a minimum.

Customer benefits

- Speedy server implementation
- Improve the performance and reliability of your server
- Knowledge transfer helping to enhance expertise of your in-house IT staff

For more information, visit:

www.hp.com/services/proliantservices
www.hp.com/go/proliant/carepack

Technical specifications



NC112T



NC360T



NC364T



NC373F

Hardware features				
Part number	503746-B21	412648-B21	435508-B21	394793-B21
Port speed and media	10/100/1000T	10/100/1000T	10/100/1000T	1000SX
Number of adaptor ports	1	2	4	1
Port connector	RJ-45	RJ-45	RJ-45	Low profile LC
Bus type	PCI Express	PCI Express	PCI Express	PCI Express
Data path	x1	x4	x4	x4
Brackets	Standard and low profile	Standard and low profile	Standard and low profile	Standard and low profile
Network controller	Intel 82574L	Intel 82571 EB	Intel 82571 EB	Broadcom 5708
Software features				
Accelerated iSCSI capable				•
TOE for Windows				•
Receive Side Scaling (RSS)	•	•	•	•
ProLiant heterogeneous teaming driver	•	•	•	•
Pre-boot execution environment (PXE)	•	•	•	•
Wake-on-LAN (WOL)	•	•	•	
Jumbo frames	•	•	•	•
Checksum offload	•	•	•	•
Dual address cycles	•	•	•	•
802.1 VLAN tagging	•	•	•	•
802.3p Quality of service	•	•	•	•
802.3x Flow control	•	•	•	•
802.3ad Link aggregation	•	•	•	•

Supported features may vary by server operating system; for details, please consult www.hp.com/go/ProLiantNICs or your local HP representative.

Accelerated iSCSI Pack	
Part number	
Single license	452679-B21
Flexible license	452680-B21
	Microsoft Windows 2000 Microsoft Windows Server 2003 Microsoft Windows Server 2008 Linux Red Hat 5.x Linux SLES 10-SP1

Accelerated iSCSI Pack

The HP ProLiant Essentials Accelerated iSCSI Pack enables accelerated iSCSI capability on ProLiant server embedded multi-function network adaptors. Accelerated iSCSI allows the network controller to

function as both a NIC and an HBA over a single connection. Additionally, it offloads the iSCSI software to the multi-function adaptor for improved performance. For details about HP iSCSI options, go to www.hp.com/go/iscsi



NC373T



NC382T



NC522SFP

Hardware features			
Part number	394791-B21	458492-B21	468332-B21
Port speed and media	10/100/100T	10/100/100T	10,000 SFP
Number of adaptor ports	1	2	2
Port connector	RJ-45	RJ-45	SFP for DAC, SM, LM, LRM
Bus type	PCI Express	PCI Express	PCI Express
Data path	x4	x4	x8
Brackets	Standard and low profile	Standard and low profile	Standard and low profile
Network controller	Broadcom 5708	Broadcom 5709	NetXen NX3031
Software features			
Accelerated iSCSI capable	•	•	
TOE for Windows	•	•	
Receive Side Scaling (RSS)	•	•	
ProLiant heterogeneous teaming driver	•	•	
Pre-boot execution environment (PXE)	•	•	
Wake-on-LAN (WOL)	•	•	
Jumbo frames	•	•	
Checksum offload	•	•	
Dual address cycles	•	•	
802.1Q VLAN tagging support	•	•	•
802.3p Quality of service	•	•	•
802.3x Flow control	•	•	•
802.3ad Link aggregation	•	•	

Supported features may vary by server operating system; for details, please consult www.hp.com/go/ProLiantNICs or your local HP representative.

Financial services

HP Financial Services provides innovative financing and financial asset management programmes to help customers cost-effectively acquire, manage and ultimately retire their HP solutions. For more information on these services, please contact your local HP representative, or visit www.hp.com/go/hpfinancialservices

Technology for better business outcomes

To learn more, visit www.hp.com/go/ProLiantNICs

© Copyright 2006 – 2009 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Linux is a U.S. registered trademark of Linus Torvalds. Microsoft and Windows are U.S. registered trademarks of Microsoft Corporation.

4AA0-6064EEW Rev. 5, March 2009

