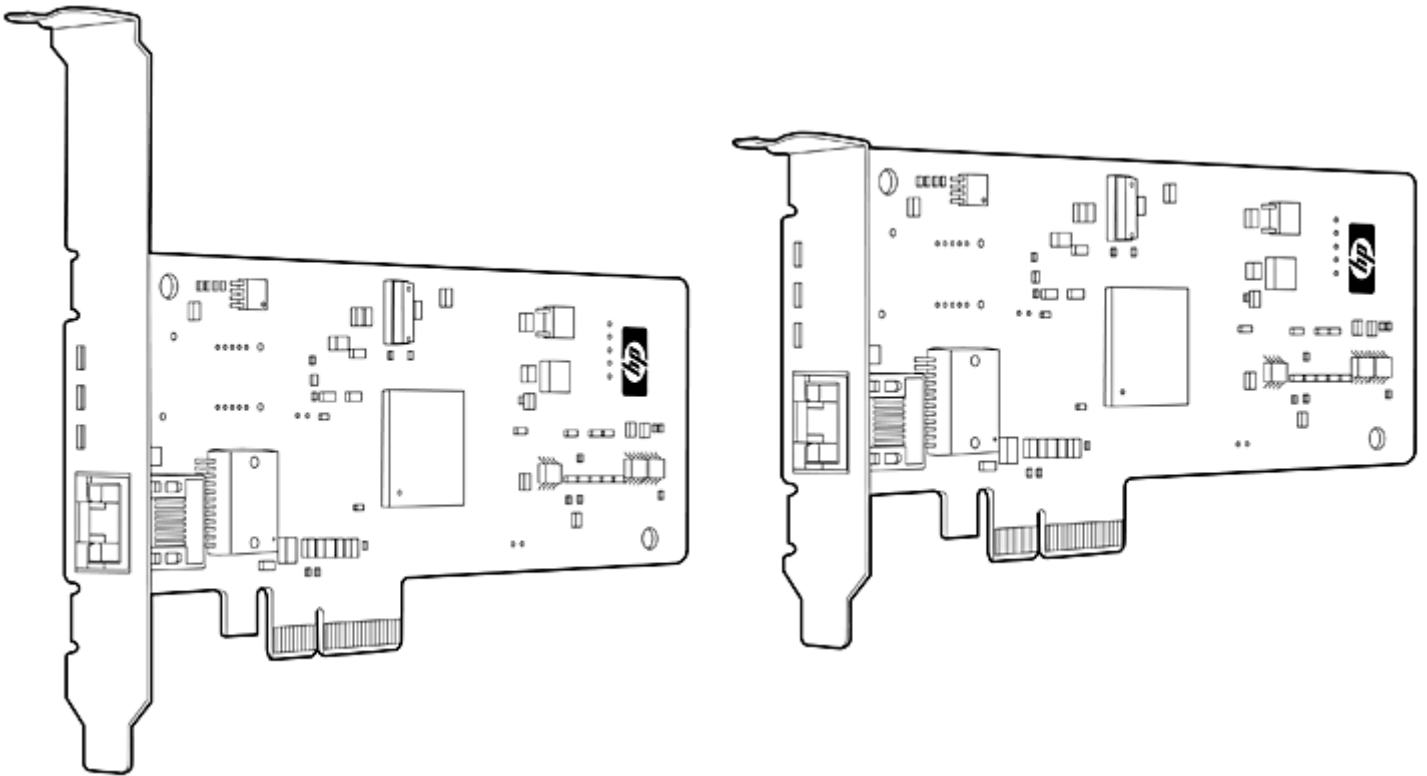


Overview

The HP NC373T is a high performance PCI Express Gigabit Ethernet multifunction network adapter suitable for either standard or low profile slots in ProLiant servers running in a twisted pair (copper) network environment.

In addition to delivering standard Gigabit Ethernet networking, the NC373T supports TOE (TCP/IP Offload Engine), for Windows only, and Internet Small Computer System Interface (iSCSI) over a single network connection making it a multifunction Ethernet server adapter.

Besides its multifunction capabilities, the NC373T ships with all the advanced server features that ProLiant customers have come to expect, such as support for failover and load balancing, Pre-Boot Execution Environment (PXE), large send offload capability, multiple VLAN tagging, and auto-negotiated 10/100/1000Mbps Ethernet speeds.



Models

HP NC373T PCI Express Multifunction Gigabit Server Adapter

394791-B21

Overview

Kit Contents

1. NC373T PCI Express Multifunction Gigabit Server Adapter (standard height bracket attached) in an anti-static bag
2. Low profile bracket (included)
3. CD containing Drivers, User Guide, Installation and Diagnostic Utilities, and User Guide (English only).
4. Product warranty statement and Quick Install Card (QIC)

NOTE: For a brief, printer friendly data sheet that describes this product and informs you of the essential capabilities and specifications, please visit: <http://h71028.www7.hp.com/ERC/downloads/5983-0738EN.pdf>.

Standard Features

Server Support

ProLiant DL (rack-optimized):

- HP ProLiant DL120 G5
- HP ProLiant DL140 G2
- HP ProLiant DL140 G3
- HP ProLiant DL145 G2
- HP ProLiant DL145 G3
- HP ProLiant DL160 G5
- HP ProLiant DL160 G6
- HP ProLiant DL165 G5
- HP ProLiant DL180
- HP ProLiant DL180 G5
- HP ProLiant DL180 G6
- HP ProLiant DL185 G5
- HP ProLiant DL320 G3
- HP ProLiant DL320 G4
- HP ProLiant DL320 G5
- HP ProLiant DL320 G5p
- HP ProLiant DL320 G6
- HP ProLiant DL320s
- HP ProLiant DL360 G4p
- HP ProLiant DL360 G5
- HP ProLiant DL360 G6
- HP ProLiant DL365
- HP ProLiant DL365 G5
- HP ProLiant DL370 G6
- HP ProLiant DL380 G4
- HP ProLiant DL380 G4 Packaged Cluster
- HP ProLiant DL380 G5
- HP ProLiant DL380 G6
- HP ProLiant DL385 G2
- HP ProLiant DL385 G5
- HP ProLiant DL385 G5p
- HP ProLiant DL580 G3
- HP ProLiant DL580 G4
- HP ProLiant DL580 G5
- HP ProLiant DL585 G2
- HP ProLiant DL585 G5
- HP ProLiant DL785 G5

Overview

ProLiant ML (expansion-optimized):

- HP ProLiant ML110 G5
- HP ProLiant ML115 G5
- HP ProLiant ML150 G5
- HP ProLiant ML150 G6
- HP ProLiant ML310 G5
- HP ProLiant ML350 G4p
- HP ProLiant ML350 G5
- HP ProLiant ML350 G6
- HP ProLiant ML370 G4
- HP ProLiant ML370 G5
- HP ProLiant ML370 G6
- HP ProLiant ML570 G3
- HP ProLiant ML570 G4

NOTE: This is a list of supported servers. Some may be discontinued and others added.

Performance

Gigabit Ethernet Throughput

10/100/1000Mbps Ethernet transfer rate delivers outstanding network performance that improves response time and removes bottlenecks across the entire network.

TCP/IP Offloading (for Windows only)

TCP/IP Offload Engine (TOE) for Windows only moves the processing of data in the TCP protocol stack from the server CPU to the network card, freeing CPU cycles for other duties. The NC373T supports TOE when Windows TOE Chimney, a part of Scalable Networking Pack available directly from Microsoft, is installed. With TOE, network communications are improved, and server efficiency is increased.

Accelerated iSCSI

Accelerated iSCSI allows the NC373T to multi-function as both as a network adapter and as a storage host bus adapter (HBA), thereby providing access to storage platforms and to servers over a single connection. Additionally, the NC373T offloads the iSCSI software to the hardware for improved performance.

Load Balancing

Transmit Load Balancing (TLB) and Switch-Assisted Load Balancing (SLB) are two advanced features used to build a bigger pipe for improved networking bandwidth. These port bonding techniques enable users to use up to eight adapter ports in a ProLiant server and aggregate their throughput up to a theoretical maximum of 16 Gigabits per second full-duplex transmission. The NC373T can be configured with other NC-series Ethernet server adapter teams supported on ProLiant servers.

Checksum and Segmentation Offloads, and Interrupt Coalescing

When running as a standard Gigabit adapter, the NC373T features TCP Checksum Offloads as well as TCP Segmentation Offloads and Interrupt Coalescence. These features reduce the load on the CPU for overall improved system response. Interrupt Coalescence is a feature that groups multiple packets and issues a single interrupt to the host. This process improves host efficiency.

Scalability and Reliability

Network Fault Tolerance (NFT)

Network Fault Tolerance, sometimes called "failover" or "NIC redundancy," allows for the installation of multiple NC373T server adapters or other network adapters so that the active device can be backed up by a redundant adapter to improve availability. The HP teaming utility also allows users to specify that when a failed adapter is fixed and replaced, the original adapter resumes its function as the primary network connection.

Management Support

Like all HP server adapters, the NC373T ships with drivers and agents that can be managed from all versions of HP Systems Insight Manager, as well as using any management application that supports SNMP.

Server Integration

HP Systems Insight Manager can recognize the NC373T individually or in port-bonded teams, and can collect and report SNMP statistics on the adapter events. Additionally, Integrated Management Log (IML) support is provided by the NC373T for critical event logging on HP servers.

Performance

Configuration Utilities

Each NC373T ships with a set of utilities that allow the user to:

- Enable initial diagnostics within Windows, Linux, and DOS operating systems.
- Configure network adapter teaming in a Windows environment. The Windows adapter teaming configuration utility includes a patented teaming GUI for Microsoft Windows 2000 and 2003 operating systems. Support for scripted installations of teams in a Microsoft Windows environment allow for unattended OS installations.

LED Indicator

Bracket LED indicators show link integrity, network activity, and network speed for easy troubleshooting.

Service and Support, HP Care Pack, and Warranty Information

Warranty

Additional information regarding worldwide limited warranty and technical support is available at:
<http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

Support Services

Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

A full range of HP Care Pack hardware and software services are available including:

- Installation and start up
- Education courses
- Extended onsite hardware coverage hours from same business day 13 ours, 5 day to 24 hours, 7 days call window with options including 4-hour response or 6-hour Call-To-Repair.
- Comprehensive range of software technical support for Microsoft, Linux, ProLiant Essentials, and VMWare-based IT solutions helping to deliver high level of application availability. Response times ranging from 30 minutes for critical problems to 2 hours.
- System Management, Performance Services and Mission Critical Support Solution

NOTE: For more information on HP Care Pack services, contact any of our worldwide sales offices or resellers or visit our worldwide Web site on the internet at: <http://www.hp.com/hps/carepack>

NOTE: For more complete information on HP Services offerings, customers and resellers, please visit us at: <http://www.hp.com/hps>

NOTE: Additional information regarding worldwide limited warranty and technical support is available at: <http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html>

Related Options

Additional Gigabit Server Adapters	HP NC110T PCI Express Gigabit Server Adapter	434905-B21
	NOTE: Does not support Windows 2000.	
	HP NC112T PCIe Gigabit Server Adapter	503746-B21
	HP NC360T PCI Express Dual Port Gigabit Server Adapter	412648-B21
	HP NC364T PCI Express Quad Port Gigabit Server Adapter	435508-B21
	NOTE: Does not support Windows 2000.	
	HP NC373F PCI Express Multifunction Gigabit Server Adapter	394793-B21
	HP NC380T PCI Express Dual Port Multifunction Gigabit Server Adapter	394795-B21
10 Gigabit Server Adapters	NOTE: Supported on a full length-full height slot only.	
	HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter	458492-B21
	HP NC7170 PCI-X Dual Port 1000T Gigabit Server Adapter	313881-B21
	HP NC522SFP Dual Port 10GbE Server Adapter	468332-B21
	NOTE: A minimum of two Gigabytes (2 GB) of server memory is required per each NC522SFP adapter.	
	NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately.	
	HP NC524SFP Dual Port 10GbE Server Adapter	489892-B21
	NOTE: A minimum of two Gigabytes (2 GB) of server memory is required per each NC524SFP module.	
	NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately.	

Technical Specifications

Compliance	IEEE 802.3, 802.3u, 802.3ab, 802.3x, Dynamic 802.3ad, 802.3p, 802.1Q PCI Express ver 1.0a		
General Specifications	Communications Processor	Broadcom 5708	
	On-board memory	92KB	
	Data rate	10/100/1000 Mbps, Half- and full-duplex	
	Data path	Four lane (x4) PCI Express compatible with x1, x4, x8, and x16 PCI Express slots	
	Connector	RJ45	
Power and Environmental Specifications	Distance and cabling	100m (328ft) CAT 5 or better	
	Dimensions (LxW)	6.6 x 2.5 in (16.8x 6.4 cm) without brackets	
	Operating	Temperature	32° to 131° F (0° to 55° C)
		Humidity	10% to 90% non-condensing
	Non-operating	Temperature	-40° to 185° F (-40° to 85° C)
		Humidity	5% to 95% non-condensing
	Power requirement	Operating Voltage: 3.3V +/- 5% Maximum: 2A @ 3.3V(DC)	
	Emissions Classifications	FCC Class B	
	Agency Approvals	USA	FCC (CFR 47 part 15) and UL 60950
		Canada	ICES-003 and CSA60950
		Japan	VCCI
		Korea	MIC (RRL), EMC Registration
		Australia	ACA, AS/NZS3548/EN55022:1998, EN55024:1998
Operating system support	Standard Gigabit Ethernet	EU	EN55022:1998 (CISPR 22), EN55024:1998, and IEC60950:1999 (EN60950:2000)
		<ul style="list-style-type: none"> • Microsoft® Windows 2000 Server • Microsoft Windows Server 2003, Standard, and Enterprise • Microsoft Windows Server 2003 x64 edition,, Standard and Enterprise • Microsoft Windows Server 2008 • Microsoft certified miniport and teaming drivers • Red Hat Enterprise Linux • SUSE Linux Enterprise Server • NDIS 2 for DOS unattended operating system install (43K or less in size) • SCO OpenServer 6.0.0 • SCO UnixWare 7.1.3 • SCO UnixWare 7.1.4 	

NOTE: For more Linux OS support & certification information, please visit our the ProLiant & BladeSystem Server Linux matrix:
<http://h18004.www1.hp.com/products/servers/linux/hplinuxcert.html>

Technical Specifications

TCP/IP Offload (for Windows only)

- Microsoft® Windows Server 2003, Standard and Enterprise
- Microsoft Windows Server 2003 x64 edition, Standard and Enterprise
- Microsoft certified miniport and teaming drivers
(Supported only with the availability of "TOE Chimney" in Microsoft's Scalable Networking Pack.)

Accelerated iSCSI

- Microsoft® Windows 2000 Server
- Microsoft Windows Server 2003, Standard, and Enterprise
- Microsoft Windows Server 2003 x64 edition,, Standard and Enterprise
- Microsoft certified miniport and teaming drivers

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to <http://www.hp.com/go/green>. To recycle your product, please go to: <http://www.hp.com/go/green> or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: <http://www.hp.com/go/green>. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

© Copyright 2009 Hewlett-Packard Development Company, L.P.

The information contained herein is subject to change without notice.

Windows is a US registered trademark of Microsoft Corporation.

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.