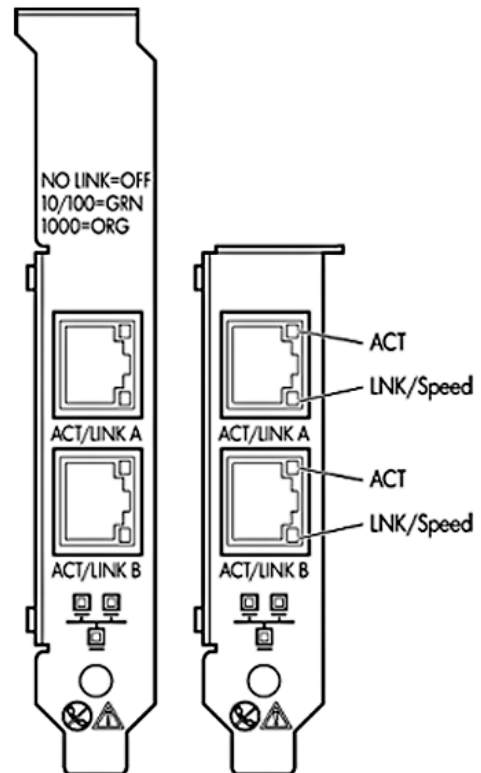
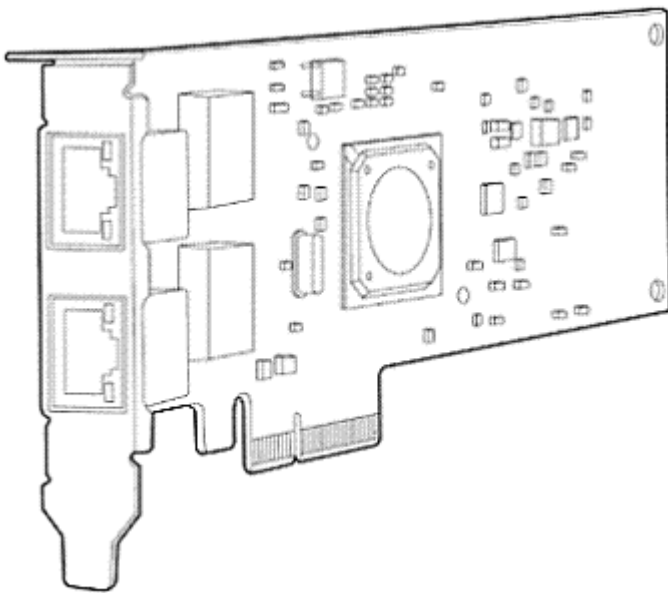


### Overview

HP NC382T is a high performance PCI Express (PCIe) Dual Port, copper, multifunction Gigabit Server Adapter for the discerning ProLiant customer used to optimum performance. It is the latest addition to the best selling line of HP dual port NICs, which enable customers to save valuable I/O slots. It makes use of the latest Broadcom 5709 silicon and is suitable for both standard and low profile slots. It will be a supported option on most ProLiant DL and ML servers at a highly competitive price.

Being a multifunction NIC, it supports TOE (TCP/IP Offload Engine) for Windows only and Accelerated Internet Small Computer System Interface (Accelerated iSCSI). Besides this it is also laden with features that ProLiant customers have come to expect like support for failover and load balancing, Wake on LAN, Pre-Boot Execution Environment (PXE), large send offload capability, multiple VLAN tagging, and auto-negotiated 10/100/1000Mbps Ethernet speeds.



### Models

HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter

458492-B21

### Kit Contents

1. HP NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter in an anti-static bag
2. Full height and half height brackets, the full height is pre-installed on the card
3. Quick install card
4. Product warranty statement
5. Drivers, user guide, and utilities via: <http://www.hp.com/cgi-bin/hpsupport/index.pl>

### Overview

**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 G6
- HP ProLiant DL160 G5
- HP ProLiant DL160 G5p
- HP ProLiant DL160 G6
- HP ProLiant DL165 G5
- HP ProLiant DL165 G5p
- HP ProLiant DL165 G6
- HP ProLiant DL170h G6
- HP ProLiant DL180 G6
- HP ProLiant DL185 G5
- HP ProLiant DL320 G6
- HP ProLiant DL360 G6
- HP ProLiant DL365 G5
- HP ProLiant DL370 G6
- HP ProLiant DL380 G6
- HP ProLiant DL385 G5
- HP ProLiant DL385 G5p
- HP ProLiant DL385 G6
- HP ProLiant DL580 G5
- HP ProLiant DL585 G5
- HP ProLiant DL585 G6
- HP ProLiant DL785 G5
- HP ProLiant DL785 G6

#### ProLiant ML (expansion-optimized):

- HP ProLiant ML110 G6
- HP ProLiant ML150 G6
- HP ProLiant ML330 G6
- HP ProLiant ML350 G6
- HP ProLiant ML370 G6

#### ProLiant SL (scalable line):

- HP ProLiant SL160z G6
- HP ProLiant SL165z G6
- HP ProLiant SL170z G6
- HP ProLiant SL2x170z G6

**NOTE:** This is a list of supported servers. Some may be discontinued.

### Overview

#### 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.

**NOTE:** Port enumeration on the NC382T is from the top down, i.e. the port near the top of the adapter is port #1 and the port closest to the gold teeth is port #2

##### TCP/IP Protocol Offloading

TCP/IP Offload Engine (TOE) for Windows 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 NC382T supports TOE when Windows TOE Chimney is installed. With TOE, network communications are improved, and server efficiency is increased.

##### Accelerated iSCSI

Accelerated iSCSI allows the NC382T to multi-function both as a network adapter and as a storage host bus adapter, thereby providing access to storage boxes and to servers over a single connection. Additionally, the NC382T offloads the iSCSI software to the hardware for improved performance. Accelerated iSCSI on 1GbE multifunction server adapters purchased as options ships as a standard feature, at no additional charge.

##### 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 install up to two NC382T adapters in a ProLiant server and aggregate their throughput up to a theoretical maximum of four Gigabits per second full-duplex transmission. The NC382T can be configured to work with other NC-series Ethernet server adapter teams supported on ProLiant servers.

##### Checksum and Segmentation Offloads and Interrupt Coalescing

The NC382T 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

##### Tri-Speed Support

Because the NC382T supports 10Mbps Ethernet and 100Mbps Fast Ethernet in addition to Gigabit Ethernet, users are guaranteed end-to-end protocol support across their enterprise. Like all HP server adapters, the NC382T adheres to industry open standards, insuring that it will perform seamlessly with any network devices that also support IEEE standards.

##### Network Fault Tolerance (NFT)

Network Fault Tolerance, sometimes called "failover" or "NIC redundancy", allows for the installation of multiple NC382T 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.

### Overview

#### Network Management

**Auto-negotiation** The NC382T automatically senses the speed of the device to which it is attached. It also automatically configures for half or full duplex, depending on the duplex mode of the switch, hub, or router at the other end of the cable.

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**Management Support** Like all HP server adapters, the NC382T 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.

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**Server Integration** HP Systems Insight Manager can recognize the NC382T 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 NC382T for critical event logging on HP servers.

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**Configuration Utilities** Each NC382T 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 2008 and 2003 operating systems. Support for scripted installations of teams in a Microsoft Windows environment allow for unattended OS installations.

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**LED Indicators** Bracket LED indicators show link integrity, network activity, and port 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

Gigabit Server Adapters	HP NC110T PCI Express Gigabit Server Adapter	434905-B21
	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
	HP NC373F PCI Express Multifunction Gigabit Server Adapter	394793-B21
	HP NC373T PCI Express Multifunction Gigabit Server Adapter	394791-B21
	HP NC375T PCI Express Quad Port Gigabit Server Adapter	538696-B21
	HP NC380T PCI Express Multifunction Gigabit Server Adapter	394795-B21

**NOTE:** Supported on a full length-full height slot only.

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10 Gigabit Server Adapter	HP NC522SFP Dual Port 10GbE Server Adapter	468332-B21
	<b>NOTE:</b> A minimum of two gigabyte (2 GB) of server memory is required per each NC522SFP adapter. <b>NOTE:</b> 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
	<b>NOTE:</b> A minimum of two gigabytes (2 GB) of server memory is required per each NC524SFP module. <b>NOTE:</b> Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. <b>NOTE:</b> NC524SFP is available only on DL370 G6 and ML370 G6.	

### Technical Specifications

Compliance	IEEE802.3, 802.3u, 802.3ab, 802.3x, 802.3ad, 802.1p, 802.1q x4 PCI Express v1.1 compliant x4 PCI Express 2.0 v1.0 ready	
General Specifications	Communications Processors	Broadcom 5709
	On-board memory	192KB
	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
	Interrupt levels	Automatically configured
	Connectors	RJ-45 (two) <b>NOTE:</b> Port enumeration on NC382T is top down i.e. the port nearest to the top of the adapter is port #1 and the port near the gold teeth is port 2
	Distance	Up to 328 ft (100 m)
	Wiring	Category 5 or better UTP
	Dimensions (L x W)	6.60 x 2.71 in (16.765 x 6.89 cm) without bracket
Power and Environmental Specifications	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: 1.1A @ 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 EU EN55022:1998 (CISPR 22), EN55024:1998, and IEC60950:1999 (EN60950:2000)
Operating System Support Standard Gigabit Ethernet	<ul style="list-style-type: none"> <li>● Microsoft Windows Server 2008 (32 and x64)</li> <li>● Microsoft Windows HPC Server 2008</li> <li>● Microsoft Windows Server 2003 and R2</li> <li>● Microsoft Windows Server 2003 Web Edition</li> <li>● Microsoft Windows Server 2003 Small Business Server</li> <li>● Microsoft certified miniport and teaming drivers</li> <li>● Microsoft Windows 2003 Standard (32 and x64)</li> <li>● Microsoft Windows 2003 Enterprise (32 and x64)</li> <li>● Red Hat Enterprise Linux</li> <li>● SUSE Linux Enterprise Server</li> <li>● Microsoft scalable Networking Pack (32 &amp; 64)</li> <li>● MS Virtual Server</li> <li>● Solaris 10</li> <li>● VMware ESX Server</li> </ul>	

### Technical Specifications

- NDIS 2 for DOS unattended operating system install (40K or less in size)
- NetWare 6.5
- Netware OES (6.5)

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

#### TCP/IP Offload

- Microsoft Windows Server 2008
- Microsoft Windows Server 2003, Standard and Enterprise
- Microsoft Windows Server 2003 x64 edition, Standard and Enterprise
- Microsoft certified miniport and teaming drivers

#### Accelerated iSCSI

- Windows Server 2008 Enterprise
- Windows Server 2008 x64 Enterprise
- Microsoft Windows Server 2003, Standard, and Enterprise
- Microsoft Windows Server 2003 x64 edition, Standard and Enterprise
- Microsoft certified miniport and teaming drivers

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#### 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.

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