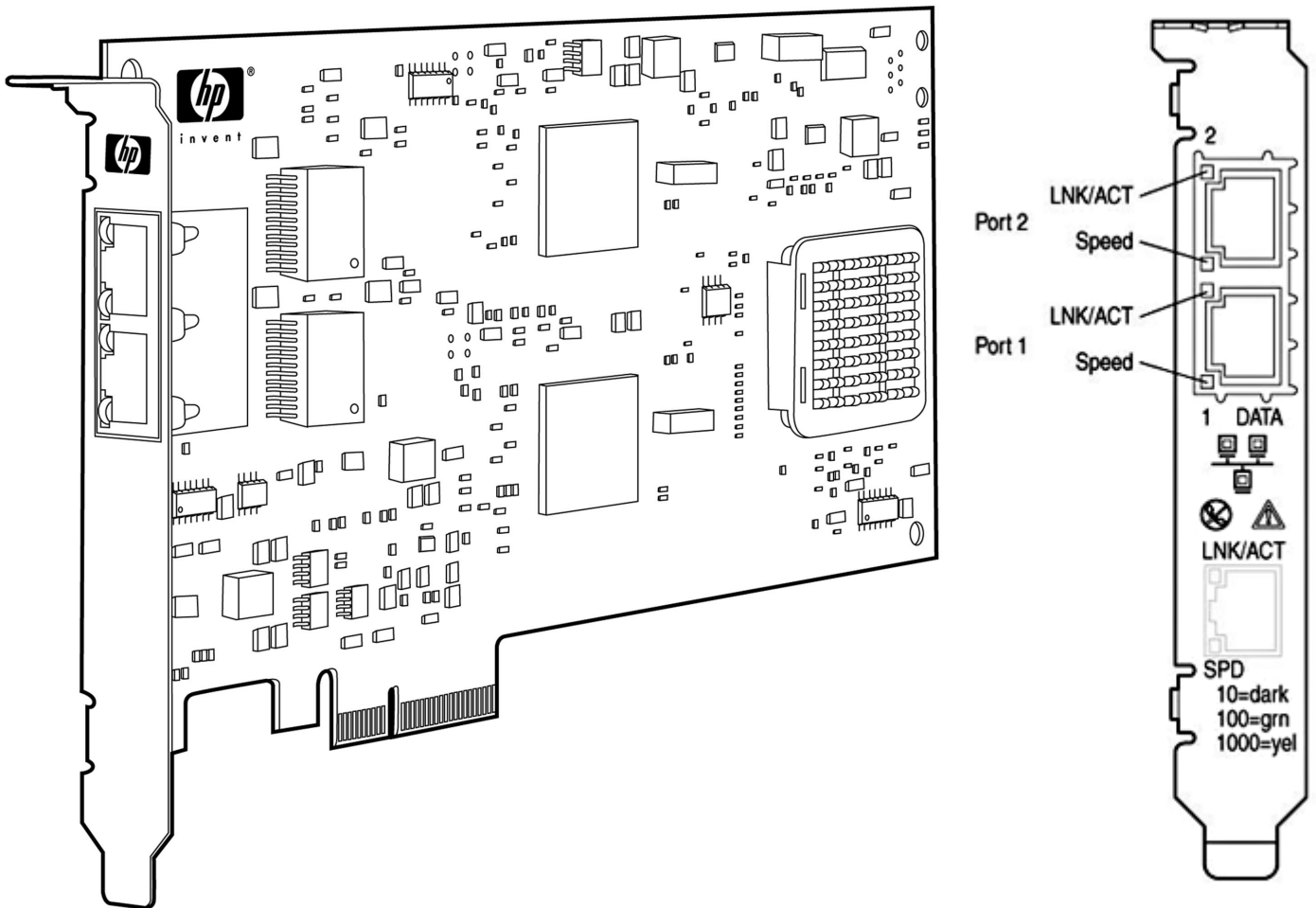


### Overview

The HP NC380T server adapter is the industry's first PCI Express dual port multifunction network adapter supporting TOE (TCP/IP Offload Engine) for Windows, and iSCSI (Internet Small Computer System Interface) over a single network connection. Each port on the NC380T is a four lane (x4) serial device designed for PCI Express slots. The NC380T comes with a total of 184KB onboard memory.

In addition to its multifunction capabilities, the NC380T 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, auto-negotiated 10/100/1000Mbps Ethernet speeds and IPv6 packet transmit and receive support (excluding all offload capabilities).



### Models

HP NC380T PCI Express Dual Port Multifunction Gigabit Server Adapter

394795-B21

**NOTE:** Supported on a Full Length-Full Height slot only

### Overview

#### Kit Contents

1. HP NC380T PCI Express Dual Port Multifunction Gigabit Server Adapter in an anti-static bag
2. Quick install card
3. Product warranty statement

**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 DL140 G3
- HP ProLiant DL145 G2
- HP ProLiant DL145 G3
- HP ProLiant DL160 G5
- HP ProLiant DL165 G5
- HP ProLiant DL180
- HP ProLiant DL180 G5
- HP ProLiant DL185 G5
- HP ProLiant DL320 G3
- HP ProLiant DL320 G4
- HP ProLiant DL320 G5
- HP ProLiant DL320 G5p
- HP ProLiant DL360 G4p
- HP ProLiant DL360 G5
- HP ProLiant DL365
- HP ProLiant DL365 G5
- HP ProLiant DL380 G4
- HP ProLiant DL380 G4 Packaged Cluster with MSA1000
- HP ProLiant DL380 G4 Packaged Cluster with MSA500 G2
- HP ProLiant DL380 G5
- HP ProLiant DL385 G2
- HP ProLiant DL580 G4
- HP ProLiant DL580 G5
- HP ProLiant DL585 G2
- HP ProLiant DL585 G5
- HP ProLiant DL785 G5
- HP ProLiant DL785 G6

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

- HP ProLiant ML310 G4
- HP ProLiant ML310 G5
- HP ProLiant ML310 G5p
- HP ProLiant ML350 G4p
- HP ProLiant ML350 G5
- HP ProLiant ML370 G4
- HP ProLiant ML370 G5
- HP ProLiant ML570 G3
- HP ProLiant ML570 G4

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

### Overview

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#### 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.

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##### 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 NC380T supports TOE when Windows TOE Chimney is installed. With TOE, network communications are improved, and server efficiency is increased.

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##### Accelerated iSCSI

Accelerated iSCSI allows the NC380T 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 NC380T 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.

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##### 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 NC380T adapters in a ProLiant server and aggregate their throughput up to a theoretical maximum of four Gigabits per second full-duplex transmission. The NC380T can be configured to work with other NC-series Ethernet server adapter teams supported on ProLiant servers.

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

The NC380T 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.

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#### Scalability and Reliability

##### Tri-Speed Support

Because the NC380T 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 NC380T adheres to industry open standards, insuring that it will perform seamlessly with any network devices that also support IEEE standards.

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##### Network Fault Tolerance (NFT)

Network Fault Tolerance, sometimes called "failover" or "NIC redundancy", allows for the installation of multiple NC380T 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.

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### Overview

#### Network Management

**Auto-negotiation** The NC380T 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 NC380T 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 NC380T 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 NC380T for critical event logging on HP servers.

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**Configuration Utilities** Each NC380T 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.

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**LED Indicators** 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

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 NC382T PCI Express Dual Port Multifunction Gigabit Server Adapter	458492-B21

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10 Gigabit Server Adapter	HP NC522SFP Dual Port 10GbE Server Adapter	468332-B21
	<b>NOTE:</b> A minimum of two Gigabytes (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.	

### Technical Specifications

Compliance	IEEE 802.3-2002, 802.3ab, 802.3ad, 802.1Q PCI Express ver 1.0a ACPI ver 2.0	
General Specifications	Communications Processors	Broadcom 5706 (two)
	On-board memory	184KB
	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	INTA
	Connectors	RJ-45 (two) <b>NOTE:</b> Port enumeration on NC380T is bottom up i.e. the port nearest to the gold teeth is port #1 and the port near the top of the adapter is port #2.
	Distance	Up to 328 ft (100 m)
	Wiring	Category 5 or better UTP
	Dimensions (L x W)	7.44 x 4.37 in (18.9 x 11.1 cm) without bracket <b>NOTE:</b> Supported on a Full Length-Full Height slot only.
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: 12V +/- 8% Maximum: 1.05A @ 12V(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 2000 Server</li> <li>● Microsoft Windows HPC Server 2008</li> <li>● Microsoft Windows Server 2003, Standard, and Enterprise</li> <li>● Microsoft Windows Server 2003 x64 edition, Standard and Enterprise</li> <li>● Microsoft certified miniport and teaming drivers</li> <li>● Red Hat Enterprise Linux</li> <li>● SUSE Linux Enterprise Server</li> <li>● SCO OpenServer 6.0.0</li> <li>● SCO UnixWare 7.1.3</li> <li>● SCO UnixWare 7.1.4</li> <li>● Solaris 9</li> <li>● Solaris 10</li> <li>● NDIS 2 for DOS unattended operating system install (43K or less in</li> </ul>	

### Technical Specifications

size)

**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>

#### 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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