



HP 3PAR F200/F400 T400/T800 FC Microsoft Windows Server 2012 x64

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Overview

This document contains information regarding compatibility and interoperability for a "configuration set" of Storage Area Network (SAN) components. A configuration set is a collection of components that are compatible in a particular context. For example, configuration sets of type "array-os" contain components that are compatible from an array-os perspective. An example of an array-os config set is the "EVA4400 Microsoft Windows Server 2008 IA64" config set. It describes the components that are currently supported for the EVA4400 array in a Windows 2008 IA64 environment.

It is very important that you note the details of the components listed in these tables, as they describe the specific attributes of supported component versions. It is also very important to examine the notes in each section, because they may further limit or clarify supported configurations.

The contents of this document were generated from the SPOCK website, located at: <http://spock.corp.hp.com> (HP Employees) or <http://www.hp.com/storage/spock> (HP Customers and Partners) .

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General notes about this configuration set

For specific configuration guidelines and coexistence information, refer to the SAN Design Reference Guide at <http://h18000.www1.hp.com/products/storage/san/documentation.html>.

Links

[Solution Software: Application Notes](http://h20272.www2.hp.com/utility/document.aspx?docurl=Shared%20Documents/Solution_Software/All/SolSW_Application_Notes.pdf) -(http://h20272.www2.hp.com/utility/document.aspx?docurl=Shared%20Documents/Solution_Software/All/SolSW_Application_Notes.pdf)

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Disk Array (12)						
Name	Vendor	Family	Controller	Firmware	ProductId	Host Mode
HP 3PAR F200 Storage System	HP	3PAR		3PAR OS 3.1.1		2 (Generic-ALUA)
HP 3PAR F200 Storage System	HP	3PAR		3PAR OS 3.1.2		2 (Generic-ALUA)
HP 3PAR F200 Storage System	HP	3PAR		3PAR OS 3.1.3		15 (WindowsServer)
HP 3PAR F400 Storage System	HP	3PAR		3PAR OS 3.1.3		15 (WindowsServer)
HP 3PAR F400 Storage System	HP	3PAR		3PAR OS 3.1.2		2 (Generic-ALUA)
HP 3PAR F400 Storage System	HP	3PAR		3PAR OS 3.1.1		2 (Generic-ALUA)
HP 3PAR T400 Storage System	HP	3PAR		3PAR OS 3.1.1		2 (Generic-ALUA)
HP 3PAR T400 Storage System	HP	3PAR		3PAR OS 3.1.2		2 (Generic-ALUA)
HP 3PAR T400 Storage System	HP	3PAR		3PAR OS 3.1.3		15 (WindowsServer)
HP 3PAR T800 Storage System	HP	3PAR		3PAR OS 3.1.3		15 (WindowsServer)
HP 3PAR T800 Storage System	HP	3PAR		3PAR OS 3.1.2		2 (Generic-ALUA)
HP 3PAR T800 Storage System	HP	3PAR		3PAR OS 3.1.1		2 (Generic-ALUA)

Operating System (2)

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Name	OS Family	OS Version	Service Pack	Vendor	Architecture	Patch
Windows Server 2012 R2 x64	Windows Server 2012	All Editions		Microsoft	x64	
Windows Server 2012 x64	Windows Server 2012	All Editions		Microsoft	x64	

Notes:

General Operating System (2) Notes:

01) Windows Server 2012 and 2012 R2 supported as of 3PAR OS 3.1.1.MU2

02) SAN Boot is supported

03) Windows Server 2012 and 2012 R2 Hyper-V is supported

04) Windows Server 2012 and 2012 R2 Hyper-V Live Migration is supported

05) Windows Server 2012 and 2012 R2 Hyper-V Live Storage Migration is supported. From 3PAR OS 3.1.2 with Windows Server 2012 Live Storage Migrations using Cluster Shared Volumes requires Microsoft HotFix KB2796995 (Not required for Windows Server 2012 R2)

06) Windows Server 2012 and 2012 R2 disk optimization feature is not supported with 3PAR OS 3.1.1 MU2. For 3PAR OS 3.1.1 MU2 only, the native Windows Server 2012 Defrag and Optimize Tool must not be used to "Optimize Drives" and "Scheduled optimization" must be disabled. Disable "Scheduled optimization" via Server Manager -> Tools -> Defrag and Optimize Drives -> Scheduled optimization -> Change settings.

07) Windows Server 2012 requires KB2821052 installed to resolve issue with MPIO path failover

08) For Windows Server 2012 and 2012 R2, KB2894032 is required when supporting Live Migration with guest clustered virtual machines using Virtual Fibre Channel adapters.

09) HP 3PAR OS Upgrades prior to 3.1.3 require the execution of KB2849097 before upgrading. For further information, refer to HP 3PAR Windows Server 2012 and Windows Server 2008 Implementation Guide and HP 3PAR Operating System Upgrade Pre-Planning Guide.

10) HP 3PAR OS Upgrades to 3.1.3 or later require the use of host persona 15 after upgrading. For further information, refer to HP 3PAR Windows Server 2012 and Windows Server 2008 Implementation Guide and HP 3PAR Operating System Upgrade Pre-Planning Guide.

Cluster Management-High Availability (3)			
Name	Vendor	Software Version	Package
Microsoft Failover Clusters	Microsoft	Windows Server 2012	
Veritas Cluster Server	Symantec	6.0.2	
Veritas Cluster Server	Symantec	6.1	

Notes:

General Cluster Management-High Availability (3) Notes:

1) Up to 64 nodes are supported with Microsoft Failover Clustering

2) Symantec/Veritas Storage Foundation (VxDMP/VCS) is only supported in a FC-Fabric attach (FC-switched) configuration.

3) Microsoft Failover Clusters are not supported in Symantec Storage Foundation environments

Server (2)		
Name	Vendor	Architecture
Link for ProLiant AMD Opteron servers	HP	ProLiant
Link to ProLiant EM64T servers	HP	ProLiant

Notes:**General Server (2) Notes:**

- 1) Link to ProLiant AMD64 Notes: ProLiant Server Information for Windows-(<http://h18004.www1.hp.com/products/servers/windows/index.html>)
- 2) Link to ProLiant EM64T servers Notes: ProLiant Server Information for Windows-(<http://h18004.www1.hp.com/products/servers/windows/index.html>)
- 3) For Virtual Connect support information, refer to the Virtual Connect support streams on SPOCK.

Host Bus Adapter (HBA) (150)														
Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
403619-B 21	QLogic	PCle	4Gb	403619-B 21	5.06.04	2.16	QMH2462			1.96AF		9.1.10.25	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.10.26	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.10.27	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.11.20	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.11.23	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.11.24	Y	N
403619-B 21	QLogic	PCle	4Gb	403619-B 21	Loaded By Driver	3.13	QMH2462			2.03AF		9.1.11.20	Y	N

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
403621-B 21	Emulex	PCle	4Gb	403621-B 21	2.82x4		LPe1105			6.03a11		2.72.12.1	Y	N
403621-B 21	Emulex	PCle	4Gb	403621-B 21	2.82x4	3.20a1	LPe1105			6.10a7		2.74.009.001	Y	N
403621-B 21	Emulex	PCle	4Gb	403621-B 21	2.82x4	3.20a1	LPe1105			6.10a8		2.74.014.001	Y	N
403621-B 21	Emulex	PCle	4Gb	403621-B 21	2.82x4	3.20a1	LPe1105			6.10a8		2.76.002.001-2	Y	N
403621-B 21	Emulex	PCle	4Gb	403621-B 21	2.82x4	3.30a1	LPe1105			6.10a14		2.76.003.001	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562				3.60.04	9.1.11.20	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562			2.65.01		9.1.11.23	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562			2.65.01		9.1.11.20	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562			2.65.01		9.1.11.24	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	5.06.04	2.16	QMH2562		NA	2.39AF		9.1.10.25	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562			2.58AF		9.1.10.26	Y	N
451871-B 21	QLogic	PCle	8Gb	451871-B 21	Loaded By Driver	3.13	QMH2562			2.58AF		9.1.10.27	Y	N
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.00a4		LPe1205			6.03a11		2.72.12.1	Y	N
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.01 a4	3.20a1	LPe1205			6.10a7		2.74.009.001	Y	N
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.01 a4	3.20a1	LPe1205			6.10a8		2.74.014.001	Y	N

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.01 a4	3.20a1	LPe1205			6.10a8		2.76.002.001-2	Y	N
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.01a12	3.30a1	LPe1205			6.10a14		2.76.003.001	Y	N
456972-B 21	Emulex	PCle	8Gb	456972-B 21	2.01a12	3.30a2	LPe1205			6.10a15		2.76.003.001	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.65.01		9.1.11.24	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.65.01		9.1.11.20	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.65.01		9.1.11.23	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.59AF		9.1.10.27	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.59AF		9.1.10.26	Y	N
651281-B 21	QLogic	PCle	8Gb	651281-B 21	Loaded by Driver	3.13	QMH2572			2.59AF		9.1.11.20	Y	N
710608-B 21	QLogic	PCle	16Gb	710608-B 21	6.07.02	3.21	QMH2672 -HP-SP			2.02.47		9.1.11.20	Y	N
710608-B 21	QLogic	PCle	16Gb	710608-B 21	6.07.02	3.21	QMH2672 -HP-SP			2.02.47		9.1.11.24	Y	N
710608-B 21	QLogic	PCle	16Gb	710608-B 21	6.07.02	3.21	QMH2672 -HP-SP				3.90.02	9.1.11.24	Y	N
804	Brocade	PCle	8Gb	590647-B 21	Loaded by Driver	3.2.1.0	804					3.2.3.0	Y	N
804	Brocade	PCle	8Gb	590647-B 21	Loaded by Driver	3.2.1.0	804					3.2.1.0	Y	N
804	Brocade	PCle	8Gb	590647-B 21	Loaded by Driver	3.1.0.2	804					3.1.0.0	Y	N

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
81B	Brocade	PCle	8Gb	AP769A/B	Loaded by Driver	3.0.3.4	815					3.1.0.0	Y	N
81B	Brocade	PCle	8Gb	AP769A/B	Loaded by Driver	3.1.0.2	815					3.1.0.0	Y	N
81B	Brocade	PCle	8Gb	AP769A/B	Loaded by Driver	3.2.1.0	815					3.2.3.0	Y	N
81B	Brocade	PCle	8Gb	AP769A/B	Loaded by Driver	3.2.1.0	815					3.2.1.0	Y	N
81e	Emulex	PCle	8Gb	AJ762A/B	2.01 a4	2.12a9	LPe12000			5.20a2		2.76.002.001-2	Y	Y
81e	Emulex	PCle	8Gb	AJ762A/B	2.01 a4	2.12a9	LPe12000			5.20a2		2.74.014.001	Y	Y
81e	Emulex	PCle	8Gb	AJ762A/B	2.01a12	2.12a14	LPe12000			5.20a6		2.76.003.001	Y	Y
81e	Emulex	PCle	8Gb	AJ762A/B	2.00a4	2.12a9	LPe12000			5.20a0		2.72.12.1	Y	Y
81e	Emulex	PCle	8Gb	AJ762A/B	2.01 a4	2.12a9	LPe12000			5.20a0		2.74.009.001	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			2.58AF		9.1.10.27	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			2.58AF		9.1.10.26	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	5.06.04	2.16	QLE2560			2.39AF		9.1.10.25	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			2.65.01		9.1.11.20	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			6.23	3.60.02	9.1.11.24	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560				3.60.04	9.1.11.20	Y	Y
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			2.65.01		9.1.11.23	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
81Q	QLogic	PCle	8Gb	AK344A	Loaded By Driver	3.13	QLE2560			2.65.01		9.1.11.24	Y	Y
82B	Brocade	PCle	8Gb	AP770A/B	Loaded by Driver	3.2.1.0	825					3.2.3.0	Y	N
82B	Brocade	PCle	8Gb	AP770A/B	Loaded by Driver	3.2.1.0	825					3.2.1.0	Y	N
82B	Brocade	PCle	8Gb	AP770A/B	Loaded by Driver	3.0.3.4	825					3.1.0.0	Y	N
82B	Brocade	PCle	8Gb	AP770A/B	Loaded by Driver	3.1.0.2	825					3.1.0.0	Y	N
82e	Emulex	PCle	8Gb	AJ763A/B	2.00a4	2.12a9	LPe12002			5.20a0		2.72.12.1	Y	Y
82e	Emulex	PCle	8Gb	AJ763A/B	2.01 a4	2.12a9	LPe12002			5.20a0		2.74.009.001	Y	Y
82e	Emulex	PCle	8Gb	AJ763A/B	2.01 a4	2.12a9	LPe12002			5.20a2		2.76.002.001-2	Y	Y
82e	Emulex	PCle	8Gb	AJ763A/B	2.01 a4	2.12a9	LPe12002			5.20a2		2.74.014.001	Y	Y
82e	Emulex	PCle	8Gb	AJ763A/B	2.01a12	2.12a14	LPe12002			5.20a6		2.76.003.001	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			6.23	3.60.02	9.1.11.24	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562				3.60.04	9.1.11.20	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			2.65.01		9.1.11.23	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			2.65.01		9.1.11.24	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			2.65.01		9.1.11.20	Y	Y
82Q	QLogic	PCle	8Gb	AJ764A	5.06.04	2.16	QLE2562			2.39AF		9.1.10.25	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
82Q	QLogic	PCIe	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			2.58AF		9.1.10.27	Y	Y
82Q	QLogic	PCIe	8Gb	AJ764A	Loaded By Driver	3.13	QLE2562			2.58AF		9.1.10.26	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.11.23	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.11.20	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.10.27	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.10.26	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.11.24	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	Loaded By Driver	3.13	QLE2460		NA	2.03AF		9.1.11.20	Y	Y
FC1142SR	QLogic	PCIe	4Gb	AE311A	5.06.04	2.16	QLE2460			1.96AF		9.1.10.25	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	5.06.04	2.16	QLA2460			1.96AF		9.1.10.25	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.10.27	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.11.24	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.10.26	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.11.20	Y	Y
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.11.23	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
FC1143	QLogic	PCI-X 2.0	4Gb	AB429A	Loaded By Driver	3.13	QLA2460			2.03AF		9.1.11.20	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	5.06.04	2.16	QLE2462			1.96AF		9.1.10.25	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.11.23	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.11.24	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.10.26	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.10.27	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.11.20	Y	Y
FC1242SR	QLogic	PCIe	4Gb	AE312A	Loaded By Driver	3.13	QLE2462			2.03AF		9.1.11.20	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	5.06.04	2.16	QLA2462			1.96AF		9.1.10.25	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.10.26	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.10.27	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.11.20	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.11.23	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.11.24	Y	Y
FC1243	QLogic	PCI-X 2.0	4Gb	AE369A	Loaded By Driver	3.13	QLA2462			2.03AF		9.1.11.20	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
FC2142SR	Emulex	PCIe	4Gb	A8002A/B	2.82x4	2.12a9	LPe1150			5.20a0		2.76.003.001	Y	Y
FC2142SR	Emulex	PCIe	4Gb	A8002A/B	2.82x4	2.12a9	LPe1150			5.20a0		2.74.009.001	Y	Y
FC2142SR	Emulex	PCIe	4Gb	A8002A/B	2.82x4	2.12a9	LPe1150			5.20a0		2.74.014.001	Y	Y
FC2142SR	Emulex	PCIe	4Gb	A8002A/B	2.82x4	2.12a9	LPe1150			5.20a0		2.76.002.001-2	Y	Y
FC2142SR	Emulex	PCIe	4Gb	A8002A/B	2.82x4	2.12a8	LPe1150			5.03 a13		2.72.12.1	Y	Y
FC2143	Emulex	PCI-X 2.0	4Gb	AD167A	2.82x4	2.12a8	LP1150			5.03 a13		2.72.12.1	Y	Y
FC2143	Emulex	PCI-X 2.0	4Gb	AD167A	2.82x4	2.12a9	LP1150			5.20a0		2.76.003.001	Y	Y
FC2143	Emulex	PCI-X 2.0	4Gb	AD167A	2.82x4	2.12a9	LP1150			5.20a0		2.74.014.001	Y	Y
FC2143	Emulex	PCI-X 2.0	4Gb	AD167A	2.82x4	2.12a9	LP1150			5.20a0		2.74.009.001	Y	Y
FC2242SR	Emulex	PCIe	4Gb	A8003A/B	2.82x4	2.12a9	LPe11002			5.20a0		2.74.014.001	Y	Y
FC2242SR	Emulex	PCIe	4Gb	A8003A/B	2.82x4	2.12a9	LPe11002			5.20a0		2.76.002.001-2	Y	Y
FC2242SR	Emulex	PCIe	4Gb	A8003A/B	2.82x4	2.12a9	LPe11002			5.20a0		2.74.009.001	Y	Y
FC2242SR	Emulex	PCIe	4Gb	A8003A/B	2.82x4	2.12a9	LPe11002			5.20a0		2.76.003.001	Y	Y
FC2242SR	Emulex	PCIe	4Gb	A8003A/B	2.82x4	2.12a8	LPe11002			5.03 a13		2.72.12.1	Y	Y
FC2243	Emulex	PCI-X 2.0	4Gb	AD168A	2.82x4	2.12a8	LP11002			5.03 a13		2.72.12.1	Y	Y
FC2243	Emulex	PCI-X 2.0	4Gb	AD168A	2.82x4	2.12a9	LP11002			5.20a0		2.74.009.001	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
FC2243	Emulex	PCI-X 2.0	4Gb	AD168A	2.82x4	2.12a9	LP11002			5.20a0		2.76.003.001	Y	Y
FC2243	Emulex	PCI-X 2.0	4Gb	AD168A	2.82x4	2.12a9	LP11002			5.20a0		2.74.014.001	Y	Y
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.00a8	3.12a3	LPe1205 A			6.10a4		2.72.12.1	Y	N
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.00a8	3.20a1	LPe1205 A			6.10a7		2.74.009.001	Y	N
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.02x6	3.20a1	LPe1205 A			6.10a8		2.76.002.001-2	Y	N
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.02x6	3.20a1	LPe1205 A			6.10a8		2.74.014.001	Y	N
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.02x6	3.30a1	LPe1205 A			6.10a14		2.76.003.001	Y	N
LPe1205 A	Emulex	PCle	8Gb	659818-B 21	2.02x6	3.30a2	LPe1205 A			6.10a15		2.76.003.001	Y	N
LPe1605	Emulex	PCle	16Gb	718203-B 21	1.1.62.0	Contained in FW	LPe1605					2.76.003.001	Y	N
SN1000E 1P	Emulex	PCle	16Gb	QR558A	1.1.43.6	Contained in FW	LPe16000					2.76.002.001-2	Y	Y
SN1000E 1P	Emulex	PCle	16Gb	QR558A	1.1.62.0	Contained in FW	LPe16000					2.76.003.001	Y	Y
SN1000E 1P	Emulex	PCle	16Gb	QR558A	1.0.11.11 0	Contained in FW	LPe16000					2.72.12.1	Y	N
SN1000E 1P	Emulex	PCle	16Gb	QR558A	1.1.21.8	Contained in FW	LPe16000					2.74.009.001	Y	Y
SN1000E 2P	Emulex	PCle	16Gb	QR559A	1.1.21.8	Contained in FW	LPe16002					2.74.009.001	Y	Y
SN1000E 2P	Emulex	PCle	16Gb	QR559A	1.0.11.11 0	Contained in FW	LPe16002					2.72.12.1	Y	N

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
SN1000E 2P	Emulex	PCle	16Gb	QR559A	1.1.62.0	Contained in FW	LPe16002					2.76.003.001	Y	Y
SN1000E 2P	Emulex	PCle	16Gb	QR559A	1.1.43.6	Contained in FW	LPe16002					2.76.002.001-2	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.02.00	3.14	QLE2660		NA	2.00.47		9.1.10.26	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.07.02	3.21	QLE2660		NA	2.02.47		9.1.11.20	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.07.02	3.21	QLE2660		NA	2.02.47		9.1.11.24	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.07.02	3.21	QLE2660		NA	2.02.47		9.1.11.23	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.07.02	3.21	QLE2660		NA	6.20	3.90.01	9.1.11.24	Y	Y
SN1000Q 1P	QLogic	PCle	16Gb	QW971A	6.07.02	3.21	QLE2660				3.90.02	9.1.11.24	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.07.02	3.21	QLE2662				3.90.02	9.1.11.24	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.07.02	3.21	QLE2662		NA	6.20	3.90.01	9.1.11.24	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.07.02	3.21	QLE2662		NA	2.02.47		9.1.11.24	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.07.02	3.21	QLE2662		NA	2.02.47		9.1.11.23	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.07.02	3.21	QLE2662		NA	2.02.47		9.1.11.20	Y	Y
SN1000Q 2P	QLogic	PCle	16Gb	QW972A	6.02.00	3.14	QLE2662		NA	2.00.47		9.1.10.26	Y	Y
SN1100E 1P	Emulex	PCle	16Gb	C8R38A	1.1.43.6	Included in firmware	LPe16000b					2.76.002.001-2	Y	Y

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Name	Vendor	Bus	Speed	HP Part Number	Firmware Version	BIOS	Vendor Part Number	Old HP Part Number	EFI	Boot Image	UEFI	Driver Version	Boot Support	Direct Connect Support
SN1100E 1P	Emulex	PCle	16Gb	C8R38A	1.1.43.6	Included in firmware	LPe16000b					2.74.014.001	Y	Y
SN1100E 1P	Emulex	PCle	16Gb	C8R38A	1.1.62.0	Included in firmware	LPe16000b					2.76.003.001	Y	Y
SN1100E 2P	Emulex	PCle	16Gb	C8R39A	1.1.62.0	Included in firmware	LPe16002b					2.76.003.001	Y	Y
SN1100E 2P	Emulex	PCle	16Gb	C8R39A	1.1.43.6	Included in firmware	LPe16002b					2.74.014.001	Y	Y
SN1100E 2P	Emulex	PCle	16Gb	C8R39A	1.1.43.6	Included in firmware	LPe16002b					2.76.002.001-2	Y	Y

Notes:

General Host Bus Adapter (HBA) (150) Notes:

- 1) Emulex 4Gb HBAs LP11000 and LPe11000 are also supported using the same driver/firmware/bios combinations stated as supported for FC2143/LP1150 and FC2142SR/LPe1150 respectively.
- 2) Windows Server 2012 R2 supported from the following driver versions. These drivers are not supported with Windows Server 2012 non-R2:
 - 2a) Emulex: 2.76.002.001-2 (OOB)
 - 2b) Qlogic: 9.1.11.23 (OOB)
- 3) Windows Server 2012 R2 supported from Brocade driver version 3.2.3.0 (Inbox).

Converged Network Adapter (CNA) (121)																	
Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
526FLR	HP	LOM	10GbE		629138-B21		QDH8252-HP-SP					01.13.51	4.14.26	5.3.10.0808		Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
526FLR	HP	LOM	10GbE		629138-B21		QDH8252-HP-SP					01.13.51	4.14.26	5.3.10.0808	9.1.11.11	Y	N
526FLR	HP	LOM	10GbE		629138-B21		QDH8252-HP-SP					01.13.23	4.14.25	4.7.28.0523	9.1.10.19	Y	N
526FLR	HP	LOM	10GbE		629138-B21		QDH8252-HP-SP					2.60.06	4.14.28	5.3.10.1101	9.1.11.14	Y	N
534FLB	HP	LOM	10GbE		700741-B21					Contained in FW			7.8.79	7.8.52.0e	7.8.75.0	Y	N
534FLB	HP	LOM	10GbE		700741-B21					Contained in FW			7.8.24	7.8.51.0b		Y	N
534FLB	HP	LOM	10GbE		700741-B21					Contained in FW			7.8.24	7.8.51.0b	7.8.12.0	Y	N
534FLB	HP	LOM	10GbE		700741-B21					Contained in FW			7.8.24	7.8.21	7.8.12.0	Y	N
534FLB	HP	LOM	10GbE		700741-B21					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
534FLR	HP	LOM	10GbE		700751-B21					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
534FLR	HP	LOM	10GbE		700751-B21					Contained in FW			7.8.24	7.8.21	7.8.12.0	Y	N
534FLR	HP	LOM	10GbE		700751-B21					Contained in FW			7.8.24	7.8.51.0b	7.8.12.0	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
534FLR	HP	LOM	10GbE		700751-B21					Contained in FW			7.8.24	7.8.51.0b		Y	N
534FLR	HP	LOM	10GbE		700751-B21					Contained in FW			7.8.79	7.8.52.0e	7.8.75.0	Y	N
534M	HP	PCle	10 GbE		700748-B21					Contained in FW			7.8.79	7.8.52.0e	7.8.75.0	Y	N
534M	HP	PCle	10 GbE		700748-B21					Contained in FW			7.8.24	7.8.51.0b	7.8.12.0	Y	N
534M	HP	PCle	10 GbE		700748-B21					Contained in FW			7.8.24	7.8.21	7.8.12.0	Y	N
534M	HP	PCle	10 GbE		700748-B21					Contained in FW			7.8.24	7.8.51.0b		Y	N
534M	HP	PCle	10 GbE		700748-B21					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
554FLB	HP	LOM	10GbE							Contained in FW			4.1.450.7		2.72.12.1	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.1.450.16	4.2.313.0	2.72.01.2	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.2.401.6	4.2.390.6	2.74.00.9.001	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.2.401.605	4.2.390.6	2.74.00.9.001	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.2.401.2215	4.2.390.6	2.74.00.9.001	Y	N
554FLB	HP	LOM	10GbE							Contained in FW			4.1.450.1707	4.2.313.0	2.72.01.2	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.1.450.1707	4.2.313.0	2.72.01.2	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.2.401.2215	4.2.390.6	2.74.00.9.001	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.2.401.6	4.2.390.6	2.74.00.9.001	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.2.401.605	4.2.390.6	2.74.00.9.001	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.1.450.16	4.2.313.0	2.72.01.2	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
554FLR	HP	LOM	10GbE							Contained in FW			4.1.450.7		2.72.12.1	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.9.311.20	10.0.43.0.1109-2	2.76.00.3.001	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.6.247.5	4.6.203.1	2.74.01.4.001	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.43.0.1003-3	2.76.00.2.001-2	Y	N
554FLR	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.43.0.1003-3		Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.2.401.2215	4.2.390.6	2.74.00.9.001	Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.9.311.20	10.0.43.0.1109-2	2.76.00.3.001	Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.1.450.7		2.72.12.1	Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.1.450.16	4.2.313.0	2.72.01.2	Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.2.401.605	4.2.390.6	2.74.00.9.001	Y	N
554M	HP	PCle	10 GbE		647590-B21					Contained in FW			4.2.401.6	4.2.390.6	2.74.00.9.001	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
554M	HP	PCIe	10 GbE		647590-B21					Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
554M	HP	PCIe	10 GbE		647590-B21					Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
554M	HP	PCIe	10 GbE		647590-B21					Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
554M	HP	PCIe	10 GbE		647590-B21					Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
630FLB	HP	LOM	20GbE		700065-B21					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
630M	HP	PCIe	20 GbE		700076-B21					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.2.401.2215	4.2.390.6	2.74.009.001	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.2.401.6	4.2.390.6	2.74.009.001	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.2.401.605	4.2.390.6	2.74.009.001	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.1.450.16	4.2.313.0	2.72.012	Y	N
CN1000E	HP	PCIe	10 GbE		AW520 A/B					Contained in FW			4.1.450.7		2.72.12.1	Y	N
CN1000Q	HP	PCIe	10 GbE		BS668 A							1.11.35	4.12.11	4.7.19.1023	9.1.10.16	Y	N
CN1000Q	HP	PCIe	10 GbE		BS668 A							2.60.06	4.14.28	5.3.10.1101	9.1.11.14	Y	N
CN1000Q	HP	PCIe	10 GbE		BS668 A							01.13.23	4.14.25	4.7.28.0523	9.1.10.19	Y	N
CN1000Q	HP	PCIe	10 GbE		BS668 A							01.13.51	4.14.26	5.3.10.0808	9.1.11.11	Y	N
CN1000Q	HP	PCIe	10 GbE		BS668 A							01.13.51	4.14.26	5.3.10.0808		Y	N
CN1100E	HP	PCIe	10 GbE		BK835 A					Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N
CN1100E	HP	PCIe	10 GbE		BK835 A					Contained in FW			4.1.450.7		2.72.12.1	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.1.450.16	4.2.313.0	2.72.012	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.2.401.605	4.2.390.6	2.74.009.001	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.2.401.6	4.2.390.6	2.74.009.001	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.2.401.2215	4.2.390.6	2.74.009.001	Y	N
CN1100E	HP	PCIe	10 GbE		BK835A					Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
CN1100R	HP	PCIe	10 GbE		QW990A					Contained in FW			7.8.79	7.8.52.0e	7.8.75.0	Y	N
CN1100R	HP	PCIe	10 GbE		QW990A					Contained in FW			7.10.10	7.10.6.0c	7.10.3.0	Y	N
CN1100R	HP	PCIe	10 GbE		QW990A					Contained in FW			7.8.24	7.8.51.0b	7.8.12.0	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
CN1100R	HP	PCIe	10 GbE		QW990A					Contained in FW			7.8.24	7.8.51.0b		Y	N
CN1100R	HP	PCIe	10 GbE		QW990A					Contained in FW			7.8.24	7.8.21	7.8.12.0	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.2.401.2215	4.2.390.6	2.74.009.001	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.2.401.6	4.2.390.6	2.74.009.001	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.2.401.605	4.2.390.6	2.74.009.001	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
NC551i	HP	LOM	10GbE							Contained in FW			4.1.450.16	4.2.313.0	2.72.012	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
NC551i	HP	LOM	10GbE							Contained in FW			4.1.450.7		2.72.12.1	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.1.450.7		2.72.12.1	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.1.450.16	4.2.313.0	2.72.01.2	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.1.450.1707	4.2.313.0	2.72.01.2	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.2.401.605	4.2.390.6	2.74.00.9.001	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.2.401.6	4.2.390.6	2.74.00.9.001	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.6.247.5	10.0.43.0.1003-3	2.76.00.2.001-2	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.6.247.5	10.0.43.0.1003-3		Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.6.247.5	4.6.203.1	2.74.01.4.001	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.2.401.2215	4.2.390.6	2.74.00.9.001	Y	N
NC551m	HP	PCle	10 GbE		580151-B21					Contained in FW			4.9.311.20	10.0.43.0.1109-2	2.76.00.3.001	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
NC553i	HP	LOM	10GbE							Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.2.401.2215	4.2.390.6	2.74.009.001	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.2.401.6	4.2.390.6	2.74.009.001	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.2.401.605	4.2.390.6	2.74.009.001	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.1.450.16	4.2.313.0	2.72.012	Y	N
NC553i	HP	LOM	10GbE							Contained in FW			4.1.450.7		2.72.12.1	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.2.401.6	4.2.390.6	2.74.009.001	Y	N

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Name	Vendor	Bus	Ethernet Speed	FC Speed	HP Part Number	3PO Part Number	Vendor Part Number	CEE Firmware	FC Firmware	BIOS	EFI	Boot Image	Firmware	NIC Driver Version	Driver Version	Boot Support	Direct Connect Support
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.1.450.16	4.2.313.0	2.72.012	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.1.450.7		2.72.12.1	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.2.401.605	4.2.390.6	2.74.009.001	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.1.450.1707	4.2.313.0	2.72.012	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.2.401.2215	4.2.390.6	2.74.009.001	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.6.247.5	10.0.430.1003-3	2.76.002.001-2	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.6.247.5	10.0.430.1003-3		Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.6.247.5	4.6.203.1	2.74.014.001	Y	N
NC553m	HP	PCIe	10 GbE		613431-B21					Contained in FW			4.9.311.20	10.0.430.1109-2	2.76.003.001	Y	N

Notes:

General Converged Network Adapter (CNA) (121) Notes:

- 1) HP Broadcom based CNA's (CN1100R, 534FLB, 534FLR, 534M) are supported as of HP 3PAR OS 3.1.2
- 2) Windows Server 2012 R2 supported from the following driver versions. These drivers are not supported with Windows Server 2012 non-R2:
 - 2a) Emulex: 2.76.002.001-2 (OOB)
 - 2b) Qlogic: 9.1.11.11 (OOB)

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3) Windows Server 2012 R2 is supported from Broadcom driver version 7.8.75.0 (OOB). This driver is supported with Windows Server 2012 non-R2.

Fibre Channel Switch (54)					
Name	Class	Vendor	Bandwidth	Port Count	Vendor Part Number
Brocade 16Gb/16 SAN Switch for HP BladeSystem c-Class	Embedded Switch	Brocade	16Gb/s	16 ports active any combo/16 Internal, 12 External	6548
Brocade 16Gb/28 SAN Switch for HP BladeSystem c-Class	Embedded Switch	Brocade	16Gb/s	16 Internal, 12 External	6548
Brocade 16Gb/28 SAN Switch Pwr Pk+ for HP BladeSystem c-Class	Embedded Switch	Brocade	16Gb/s	16 Internal, 12 External	6548
Brocade 4Gb SAN Switch for HP c-Class BladeSystem, Brocade 4/12 SAN Switch	Embedded Switch	Brocade	4Gb/s	8 internal, 4 external	4024
Brocade 4Gb SAN Switch for HP c-Class BladeSystem, Brocade 4/24 SAN Switch	Embedded Switch	Brocade	4Gb/s	16 internal, 8 external	4024
Brocade 8Gb SAN Switch for HP BladeSystem c-Class, 8/12c	Embedded Switch	Brocade	8Gb/s	12	5480
Brocade 8Gb SAN Switch for HP BladeSystem c-Class, 8/24c	Embedded Switch	Brocade	8Gb/s	24	5480
Brocade 8Gb SAN Switch for HP BladeSystem c-Class, 8/24c Pwr Pack+	Embedded Switch	Brocade	8Gb/s	24	5480
Cisco MDS 8Gb Fabric Switch for HP BladeSystem c-Class	Embedded Switch	Cisco	8Gb/s	16 internal, 8 external	
Cisco MDS 9124 Fabric Switch	Edge	Cisco	4Gb/s	24	MDS9124
Cisco MDS 9124e Fabric Switch for c-Class BladeSystem	Embedded Switch	Cisco	4Gb/s	8 internal, 4 external	MDS9124e

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Name	Class	Vendor	Bandwidth	Port Count	Vendor Part Number
Cisco MDS 9134 Fabric Switch	Edge	Cisco	4Gb/s	32	MDS9134
HP SN3000B 16Gb 24/12 Fibre Channel Switch	Edge	Brocade	16Gb/s	24	6505
HP SN3000B 16Gb 24/24 Fibre Channel Switch	Edge	Brocade	16Gb/s	24	6505
HP SN6000B 16Gb 48-port/24-port Active Fibre Channel Switch	Edge	Brocade	16Gb/s	48	6510
HP SN6000B 16Gb 48-port/24-port Active Power Pack+ Fibre Channel Switch	Edge	Brocade	16Gb/s	48	6510
HP SN6000B 16Gb 48-port/48-port Active Fibre Channel Switch	Edge	Brocade	16Gbs	48	6510
HP SN6000B 16Gb 48-port/48-port Active Power Pack+ Fibre Channel Switch	Edge	Brocade	16Gb/s	48	6510
HP SN6000C Fibre Channel Switch (Cisco MDS 9148 Fabric Switch)	Edge	Cisco	8Gb/s	48	MDS9148
HP SN8000B 16Gb 32-port Fibre Channel Blade	Module	Brocade	16Gb/s	32	FC16-32
HP SN8000B 16Gb 48-port Fibre Channel Blade	Module	Brocade	16Gb/s	48	FC16-48
HP SN8000B 4-Slot Power Pack+ SAN Director Switch	Director	Brocade	16Gb/s	32 to 256	DCX 8510-4
HP SN8000B 4-Slot SAN Director Switch	Director	Brocade	16Gb/s	32 to 256	DCX 8510-4
HP SN8000B 8Gb 32-port Enhanced Fibre Channel Blade	Module	Brocade	8Gb/s	32	FC8-32E

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Name	Class	Vendor	Bandwidth	Port Count	Vendor Part Number
HP SN8000B 8Gb 48-port Enhanced Fibre Channel Blade	Module	Brocade	8Gb/s	48	FC8-48E
HP SN8000B 8-Slot Power Pack+ SAN Backbone Director Switch	Director	Brocade	16Gb/s	32 to 512	DCX 8510-8
HP SN8000C 13-Slot Director Switch (Cisco MDS 9513 Multilayer Director Switch)	Director	Cisco	4Gb/s	528	MDS9513
HP SN8000C 6-Slot Director Switch (Cisco MDS 9506 Multilayer Director Switch)	Director	Cisco	4Gb/s	192	MDS9506
HP SN8000C 9-Slot Director Switch (Cisco MDS 9509 Multilayer Director Switch)	Director	Cisco	4Gb/s	336	MDS9509
HP StorageWorks 8/20q Fibre Channel Switch	Edge	QLogic	8Gb/s	20	n/a
HP StorageWorks 8/24 SAN Switch	Edge	Brocade	8Gb/s	24	300
HP StorageWorks 8/40 SAN Switch	Edge	Brocade	8Gb/s	40	5100
HP StorageWorks 8/8 Base SAN Switch	Edge	Brocade	8Gb/s	8	300
HP StorageWorks 8/8 SAN Switch	Edge	Brocade	8Gb/s	8	300
HP StorageWorks 8/80 Power Pack	Edge	Brocade	8Gb/s	80	5300
HP StorageWorks 8/80 SAN Switch	Edge	Brocade	8Gb/s	80	5300
HP StorageWorks DC SAN Backbone Director Switch	Director	Brocade	8Gb/s	16 to 384	DCX
HP StorageWorks DC SAN Director 16 Port 8Gb FC Blade (FC8-16)	Director	Brocade	8Gb/s	16	FC8-16

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Name	Class	Vendor	Bandwidth	Port Count	Vendor Part Number
HP StorageWorks DC04 Power Pack+ SAN Director Switch	Director	Brocade	8Gb/s	16 to 192	DCX-4S
HP StorageWorks DC04 SAN Director Switch	Director	Brocade	8Gb/s	16 to 192	DCX-4S
HP StorageWorks Encryption SAN Switch	Edge	Brocade	8Gb/s	32	BES
HP StorageWorks SAN Switch 4/32B Base	Edge	Brocade	4Gb/s	32	5000
HP StorageWorks SAN Switch 4/32B Base Full	Edge	Brocade	4Gb/s	32	5000
HP StorageWorks SAN Switch 4/32B Power Pack	Edge	Brocade	4Gb/s	32	5000
HP StorageWorks SAN Switch 4/64 Base	Edge	Brocade	4Gb/s	64	4900
HP StorageWorks SAN Switch 4/64 Base Power Pack	Edge	Brocade	4Gb/s	32/48/64	4900
HP StorageWorks SAN Switch 4/64 Power Pack	Edge	Brocade	4Gb/s	64	4900
HP StorageWorks SN6000 Fibre Channel Switch	Edge	QLogic	8Gb/s	24	SB5800V, SB5802V
HP StoreFabric SN6500B 16Gb 96/48 FC Switch	Edge	Brocade	16Gb/s	48	6520
HP StoreFabric SN6500B 16Gb 96/48 Power Pack+ FC Switch	Edge	Brocade	16Gb/s	48	6520
HP StoreFabric SN6500B 16Gb 96/96 FC Switch	Edge	Brocade	16Gb/s	96	6520
HP StoreFabric SN6500B 16Gb 96/96 Power Pack+ FC Switch	Edge	Brocade	16Gb/s	96	6520
HP StoreFabric SN8500C 48-port 16Gb FC Module	Module	Cisco	16 Gbs	48	DS-X9448H768K9

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Name	Class	Vendor	Bandwidth	Port Count	Vendor Part Number
HP StoreFabric SN8500C 8-slot 16Gb FC Director	Director	Cisco	16 Gbs	384	MDS9710

Fibre Channel over Ethernet (FCoE) Switch (8)							
Name	Vendor	Class	FC Port Speed	FC Port Count	Ethernet Port Speed	Ethernet Port Count	Vendor Part Number
Cisco Nexus 5010 Converged Network Switch	Cisco	Edge	4Gb/s	8	10Gb/s	26	
Cisco Nexus 5020 Converged Network Switch	Cisco	Edge	4Gb/s	16	10Gb/s	52	
Cisco Nexus 5548UP Converged Network Switch	Cisco	Edge	8Gb/s	48	10Gb/s	48	N5K-C5548UP-OSM
Cisco Nexus 5596UP Converged Network Switch	Cisco	Edge	8Gb/s	96	10Gb/s	96	N5K-C5596UP-OSM
HP FlexFabric 5900CP	HP	Edge	8Gb/s	48	10GbE / 40GbE	48 / 4	JG838A
HP StorageWorks 2408 FCoE Converged Network Switch	Brocade	Edge	8Gb/s	8	10Gb/s	24	8000
HP StorageWorks 2408 FCoE Power Pack+ Converged Network Switch	Brocade	Edge	8Gb/s	8	10Gb/s	24	8000
HP StorageWorks DC SAN Director Switch 10/24 FCoE Blade	Brocade	Module	8Gb/s	n/a	10Gb/s	24	FCOE10-24

Router (7)								
Name	Vendor	Class	Port Speed	Port Count	Port Type	Ethernet Port Speed	Ethernet Port Count	Vendor Part Number
HP StorageWorks 1606 Base Extension SAN Switch	Brocade	Router-Gateway	8Gb/s (FC/FCR)	16 (FC/FCR, 4 licensed)	FC/FCR/FCIP	1Gb/s	6 (2 licensed)	7800
HP StorageWorks 1606 Full Extension SAN Switch	Brocade	Router-Gateway	8Gb/s (FC/FCR)	16 (FC/FCR)	FC/FCR/FCIP	1Gb/s	6	7800
HP StorageWorks 1606 Power Pack+ Extension SAN Switch	Brocade	Router-Gateway	8Gb/s (FC/FCR)	16 (FC/FCR)	FC/FCR/FCIP	1Gb/s	6	7800
HP StorageWorks 400 Multi-protocol Router 7500	HP	Router-Gateway	4Gbit	16	FC/FCR/FCIP	1Gbit	2	
HP StorageWorks DC SAN Director Switch Multiprotocol Extension Blade	Brocade	Router-Gateway	8Gb/s (FC/FCR)	12 (FC/FCR)	FC/FCR/FCIP	1Gb/s and 10Gb/s	ten 1Gb/s and two 10Gb/s	FX8-24
HP StorageWorks Multi-protocol RouterBlade FR4-18i	HP	Router-Gateway	4Gbit	16	FC/FCR/FCIP	1Gbit	2	
HP StoreFabric Enhanced Multiprotocol Extension Blade	Brocade	Router-Gateway	8Gb/s (FC/FCR)	12 (FC/FCR)	FC/FCR/FCIP	1Gb/s and 10Gb/s	ten 1Gb/s and two 10Gb/s	FX8-24E

Path Management (3)

Name	Vendor	Category	Software Version
Microsoft MPIO DSM	Microsoft	Multipath	
Veritas DMP (Dynamic Multipathing)	Symantec	Multipath	6.0.2
Veritas DMP (Dynamic Multipathing)	Symantec	Multipath	6.1

Notes:**General Path Management (3) Notes:**

- 1) Symantec/Veritas Storage Foundation (VxDMP/VCS) is only supported in a FC-Fabric attach (FC-switched) configuration.
- 2) Symantec Dynamic Multi-pathing (VxDMP) is not supported as a stand-alone multipath solution. It's only supported when part of a Storage Foundation suite