# QuickSpecs

#### **Overview**

#### **HPE 8Gb PCIe FC HBAs**

The HPE 8Gb PCIe Fibre Channel Host Bus Adapters brings datacenter infrastructure components to a higher level of performance and efficiency with the ability to deliver twice the I/O performance of 4Gb HBAs. An 8Gb FC HBA purchased today is backward compatible with 4 and 2 Gb storage networks and will protect future investments. When using storage intensive applications, such as backup/restore, database transactions, virtualization, and rich media, the increased performance of the 8 Gb infrastructure enables more rapid storage and retrieval of critical information.

Finally, 8Gb PCIe FC Host Bus Adapters provide a number of features that work together to reduce power consumption, thus delivering a "green" benefit within the server.

#### What's New

- HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter (P9D91A)
- HPE StoreFabric 84E 4P 8Gb Fibre Channel Host Bus Adapter (E7Y63A)
- Key Features and Benefits
- Performance
- The PCle 8Gb Fibre Channel Host Bus Adapters deliver twice the I/O performance of 4Gb FC HBAs
- Moving to 8 Gb technology provides the infrastructure required for the more powerful servers and data intensive applications of the future.
- When using storage intensive applications like backup/restore, database transactions, virtualization and rich media, the improved I/O performance enables faster storage and retrieval of data.
- Support for greater Server Virtualization
- Ideal for high density server virtualization environments
- Enables more applications and VMs to run on a single server and Fibre Channel port, resulting in reduced cabling and a higher return on IT investment
- Provides HPE ProLiant
  - Connectivity to Storage
  - And Network
- Robust interoperability testing
- Provides an HPE-branded HBA solution which has undergone extensive HPE interoperability testing for connecting HPE ProLiant servers into storage and networking environments.
- Optimal for connecting to HPE's 8Gb FC edge/core network switches.
- Smart SAN support
- Smart SAN is a protocol agnostic application embedded in SAN components that enables the 3PAR to orchestrate configuration, settings and policies in a SAN. HPE Smart SAN's Target Driven Zoning enables you to configure zones accurately in minutes and not in hours and its automatic discovery mechanism creates a powerful platform which would enable real-time diagnostics with self-healing in the near future.



### Overview

#### Models

	Part Number
Emulex	
HPE 81E 8Gb 1-port PCle Fibre Channel Host Bus Adapter	AJ762B
HPE 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ763B
HPE StoreFabric 84E 4-port 8Gb Fibre Channel Host Bus Adapter	E7Y63A
QLogic	
HPE 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AK344A
HPE 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ764A
QLogic	
HPE StoreFabric 84Q 4-port 8Gb Fibre Channel Host Bus Adapter	P9D91A

#### Service and Support

#### **HPE Support Services and Warranty Information**

#### Protect your business beyond warranty with HPE Support Services

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Our integrated portfolio of Services for storage help customers reduce costs, optimize data, streamline storage management, and improve backup and recovery. HPE Support Services enable you to choose the right service level, length of coverage and response time as you purchase your new storage solution, giving you full entitlement for the support for need for your IT and business.

#### **Recommended Services**

Support for this adapter is at the level of server it is a part of. Please check the quickspecs of the server.

#### **Parts and Materials**

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

#### Learn More:

To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner

HPE Support Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners.

#### http://www.hpe.com/services

#### Warranty

3-0-0 Three-year parts exchange warranty. Additional warranty protection can be purchased.

HPE Global Services provides a three-year, limited warranty, fully supported by a worldwide network of resellers and service providers and toll-free 7 x 24 hardware technical phone support for the duration of the warranty. In addition, available service offerings include a full range of HPE Care Pack packaged hardware and software services.

NOTE: Certain restrictions and exclusions apply. Consult the HPE Customer Support Center for details.

## **Technical Specifications**

	84E	84Q	81E	82E	81Q	82Q	
Number of channels	Single	Dual	Single	Dual	Single	Dual	
Port Speed	8 Gbps	8 Gbps	8 Gbps	8 Gbps	8 Gbps	8 Gbps	
Slot type supported	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0		PCI Express 2.0	PCI Express 2.0 to	
OS Supported	10 1 1010 0110111101	1.0	1.0.1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	1.0.1.0.0.0.10.11.10.	10 1 10 0 0 1 10 10 10 10 10 10 10 10 10	1 1010 0110111101	
NOTE: Always refer to the	HPE Sinale Poin	t of Connectivity	Knowledge for H	PE Storage Produ	ucts at:		
http://www.hpe.com/sto	_			_			
Windows Server 2008	x86, x64, R2,	x86, x64, R2,	x86, x64, IA64,	x86, x64, IA64,	x86, x64, IA64,	x86, x64, IA64,	
	SP1, SP2	SP1, SP2	R2,SP1, SP2	R2,SP1, SP2	R2,SP1, SP2	R2,SP1, SP2	
Windows Server 2012	x64, R2	x64, R2	x64, R2	x64, R2	x64, R2	x64, R2	
VMware 5.1/5.5/6.0	YES	YES	YES	YES	YES	YES	
RHEL 5/6/7	x86, x64	x86, x64	x86, x64	x86, x64	x86, x64	x86, x64	
SLES 10/11/12	x86, x64	x86, x64	x86, x64	x86, x64	x86, x64	x86, x64	
Ubuntu 14.04	x86	x86	x86	x86	x86	x86	
Citrix Xen Server 6.5	x86	x86	x86	x86	x86	x86	
0.1111/1/(0.1100.1101.010	Always refer to the HPE Single Point of Connectivity Knowledge for HPE Storage Products						
			•	<b>k</b> for specific prod	•	•	
Servers Supported	1	<u> </u>		n9, Gen 8 and G7			
oci veio oupporieu	NO			or details regardir		ions.	
Array Platforms	1			<b>ock</b> for specific p			
Supported	1.6161.10	·····p·//		ror speeme p	rodder sapport in	Torriditori	
What's Included in the	8 Gbps HBA	8 Gbps HBA	8 Gbps HBA	8 Gbps HBA	8 Gbps HBA	8 Gbps HBA with	
Box?	with standard	with standard	with standard	with standard	with standard	standard bracket	
	bracket, four 8	bracket, four 8	bracket, one 8	bracket, two 8	bracket, one 8	two 8 Gbps SFP+	
	Gbps SFP+, low-	Gbps SFP+, low-	Gbps SFP+, low-	Gbps SFP+, low-	Gbps SFP+, low-	low-profile	
	profile bracket,	profile bracket,	profile bracket,	profile bracket,	profile bracket,	bracket,	
	documentation	documentation	documentation	documentation	documentation	documentation	
Environmental -	32° to 122° F	32° to 122° F	32° to 131° F	32° to 131° F	32° to 131° F	32° to 131° F	
Operating Temperature	(0° to 50° C)	(0° to 50° C)	(0° to 55° C)	(0° to 55° C)	(0° to 55° C)	(0° to 55° C)	
	(ary buib) (ary buib)			(			
Environmental - Storage	-40° F to 163° F	-40° F to 163° F	-20° to 158° F	-20° to 158° F	-20° to 158° F	-20° to 158° F	
Temperature	(-43° to 73° C)	(-43° to 73° C)	(-40° to 70° C)	(-40° to 70° C)	(-40° to 70° C)	(-40° to 70° C)	
F	(dry bulb)	(dry bulb)			1	<u> </u>	
Environmental - Relative	5% to 93%	5% to 93% (relative, non-	5% to 95% non-	- 5% to 95% non-	10% to 90% non-		
, , ,		condensing)	Congensing	condensing	condensing	condensing	
Product Dimensions	12.08 x 16.76 x		6.60 x 2.71 in	6.60 x 2.71 in	6.60 x 2.54 in	6.60 x 2.54 in	
(HxW)	11.12 cm     12.08 × 10.76 × (16.76 / × 6		(167.64 x 68.8	(167.64x 68.8	(167.64 x 64.4	(167.64 x 64.4	
(I IXVV)	11.12 (11)	11.12 cm	mm)	mm)	mm)	mm)	
Media	Multi-mode	Multi-mode	Multi-mode	Multi-mode	Multi-mode	Multi-mode Optic	
- 10414	Optic (SFP+)	Optic (SFP+)	Optic (SFP+)	Optic (SFP+)	Optic (SFP+)	(SFP+)	
Connector	1 1			Short wave laser			
	with LC type	with LC type	with LC type	with LC type	with LC type	with LC type	
	connector	connector	connector	connector	connector	connector	
PCIe Connector	PCle x8	PCle x8	PCle x8	PCle x8	PCle x8	PCle x8	
	Max x4 lanes	Max x4 lanes	Max x4 lanes	Max x4 lanes	Max x4 lanes	Max x4 lanes	
	Gen2	Gen2	Gen2	Gen2	Gen2	Gen2	
	Max x8 lanes	Max x8 lanes	Max x8 lanes	Max x8 lanes	Max x8 lanes	Max x8 lanes	
	Gen1	Gen1	Gen1	Gen1	Gen1	Gen1	
Auto-negotiation	8/4/2 Gbps   8/4/2 Gbps		8/4/2 Gbps	8/4/2 Gbps	8/4/2 Gbps	8/4/2 Gbps	

## **Summary of Changes**

Date	Version History	Action	Description of Change		
15-Oct-2018	Version 19	Changed	Obsolete SKUs were removed.		
			Overview, Service and Support and Technical Specifications sections were updated		
23-Oct-2017	Version 18	Changed	Care Pack naming and Service and Support- Parts and Materials updated		
07-Oct-2016	Version 17	Changed	Changes made to the Technical Specification Section		
27-May-2016	Version 16	Changed	Changes made to the Technical Specification and Overview Sections.		
31-Mar-2016	Version 15	Changed	Changes made to the Overview and Tech Specs Sections		
09-May-2014	Version 14	Changed	Support was revised.		
13-Aug-2012	Version 13	Changed	Changed were made in Overview, Models, Service and Support, HPE Pointnext operational and Warranty Information and in Technical Specifications sections.		
04-Nov-2011	Version 12	Changed	Changes made to the Technical Specifications section only.		
14-Oct-2011	Version 11	Changed	Array Platforms Supported was revised in the Technical Specifications chart.		
09-Jun-2011	Version 10	Removed	Mentions of StorageWorks were removed.		
01-Apr-2011	Version 9	Changed	Servers Supported was completely revised in Technical Specifications.		
15-Oct-2010	Version 8	Changed	PCI-e was changed to PCIe throughout, including in the title Servers Supported and Array Platforms Supported were revised, U5 was added to VMware 3.5 and VMware 4.1 was added in Technical Specifications		
08-Jan-2010	Version 7	Added	VMware ESX Server 3.5 and 4.0, Windows Server 2003 R2 and 2008 R2, EVA6400 and EVA8400, XP disk Arrays and HPE ProLiant DL785 G5/G6 were added.		
18-Sep-2009	Version 6	Changed	Changes were made throughout the QuickSpecs. Note the title has changed.		
28-May-2009	Version 5	Changed	The QuickSpecs was rebuilt.		
22-Sep-2008	Version 4	Changed	Changes were made to the Overview: Models and the Features and Benefits: Key Features sections.		
11-Jul-2008	Version 3	Changed	PCI-E to PCIe throughout the entire QuickSpecs, including the Title Revised Benefits At A Glance in the Features and Benefits section Changes made to the Chart in the Technical Specifications section include: Addition of Microsoft Windows Server 2008, Red Hat Enterprise Linux 4.5/4.6 and 5.1/5.2 and SUSE Linux Enterprise Server 9 Removal of EVA 3000 and EVA 5000 Array Platforms		
16-Jun-2008	Version 2	Changed	Changes were made throughout the QuickSpecs including, Models and Product Description in the Overview section, Benefits in the Features and Benefits section and the Chart in Technical Specifications and adding Key Features for Emulex LPe 12000/LPe 12002 to the Technical Specifications section. NOTE also the title has changed.		
26-Feb-2008	Version 1	New	New QuickSpecs.		

### **Summary of Changes**





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