

Emulex 8Gb FC Single-port and Dual-port HBAs Product Guide

Streamlined installation and management, plus unrivaled scalability and industry-leading virtualization support make the Emulex 8Gb Fibre Channel single-port and dual-port host bus adapters ideal solutions for enterprise and mixed-OS environments. With powerful management tools, they deliver maximum performance in the widest range of applications and environments.

Figure 1 shows the single-port and dual-port adapters.

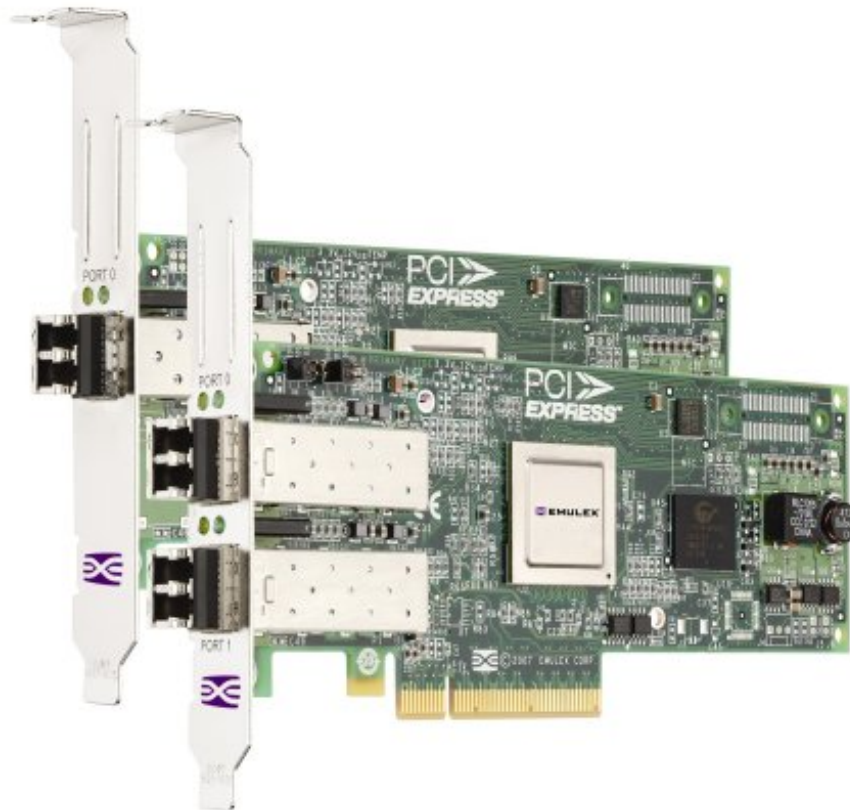


Figure 1. Emulex 8Gb Fibre Channel single-port and dual-port HBAs

Did you know?

The configuration of the Emulex 8 Gb HBAs is fully integrated in the UEFI interface which results in an easy to use and intuitive way to set up the adapter. The HBAs provide the ability to build high-performance, highly available SANs and are easy to set up and integrate into existing SAN configurations. Emulex 8Gb HBAs use passive cooling devices to deliver enhanced thermal protection for highest reliability and maximum server availability.

Part number information

Table 1. Ordering part numbers and feature codes

Description	Part number	Feature code
Emulex 8Gb FC Single-port HBA	42D0485	3580
Emulex 8Gb FC Dual-port HBA	42D0494	3581

The part numbers for the Emulex 8Gb FC Single-port and Dual-port HBAs include the following items:

- FC HBA adapter with one or two SFPs installed and 3U bracket attached
- Quick install guide
- Support CD
- 2U bracket
- Safety flyer

Features

The adapters have the following features:

- Based on the Emulex LPe12000 (single port) and LPe12002 (dual port) adapters
- Standard PCI Express card with low profile form factor
- One or two independent Fibre Channel ports with optical modules included
- PCI Express 2.0 host interface
- Support for both standard and low-profile PCI Express slots
- Auto-negotiation between 2 Gb, 4 Gb, or 8 Gb link attachments
- Processes over 200K I/O operations per second (IOPS), per port
- Support for up to 1600 MB per second maximum at full-duplex, per port

Fibre Channel specifications

- Full support for all Fibre Channel topologies, including point-to-point (N_Port), arbitrated loop (NL_Port), and switched fabric (N_Port)
- Support for F_Port and FL_Port login
- Full support for Fibre Channel services class 2 and 3
- Up to 4096 FC port logins and up to 4096 concurrent exchanges per FC port

Server support

The Emulex 8Gb FC Single-port and Dual-port HBAs are supported in the servers listed in the following tables.

Support for System x and dense servers with Xeon E5/E7 v4 and E3 v5 processors

Table 2. Support for System x and dense servers with Xeon E5/E7 v4 and E3 v5 processors

Part number	Description	x3250 M6 (3943)	x3250 M6 (3633)	x3550 M5 (8869)	x3650 M5 (8871)	x3850 X6/x3950 X6 (6241, E7 v4)	nx360 M5 (5465, E5-2600 v4)	sd350 (5493)
42D0485	Emulex 8Gb FC Single-port HBA	Y	Y	Y	Y	Y	Y	N
42D0494	Emulex 8Gb FC Dual-port HBA	Y	Y	Y	Y	Y	Y	N

Support for servers with Intel Xeon v3 processors

Table 3. Support for System x and dense servers with Intel Xeon v3 processors

Part number	Description	x3100 M5 (5457)	x3250 M5 (5458)	x3500 M5 (5464)	x3550 M5 (5463)	x3650 M5 (5462)	x3850 X6/x3950 X6 (6241, E7 v3)	nx360 M5 (5465)
42D0485	Emulex 8Gb FC Single-port HBA	Y	Y	Y	Y	Y	Y	Y
42D0494	Emulex 8Gb FC Dual-port HBA	Y	Y	Y	Y	Y	Y	Y

Support for servers with Intel Xeon v2 processors

Table 4. Support for servers with Intel Xeon v2 processors

Part number	Description	x3500 M4 (7383, E5-2600 v2)	x3530 M4 (7160, E5-2400 v2)	x3550 M4 (7914, E5-2600 v2)	x3630 M4 (7158, E5-2400 v2)	x3650 M4 (7915, E5-2600 v2)	x3650 M4 BD (5466)	x3650 M4 HD (5460)	x3750 M4 (8752)	x3750 M4 (8753)	x3850 X6/x3950 X6 (3837)	x3850 X6/x3950 X6 (6241, E7 v2)	dx360 M4 (E5-2600 v2)	nx360 M4 (5455)
42D0485	Emulex 8Gb FC Single-port HBA	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
42D0494	Emulex 8Gb FC Dual-port HBA	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

See ServerProven for the latest information on the adapters supported by each System x server type:
<http://www.lenovo.com/us/en/serverproven/xseries/sharedstorage/samatrix.shtml>

Operating system support

The Emulex 8Gb FC Single-port and Dual-port HBAs support the following operating systems:

- Microsoft Windows Server 2008 R2
- Microsoft Windows Server 2012
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server Version 1709
- Red Hat Enterprise Linux 5 Server Edition
- Red Hat Enterprise Linux 5 Server x64 Edition
- Red Hat Enterprise Linux 6 Server x64 Edition
- Red Hat Enterprise Linux 7
- SUSE Linux Enterprise Server 10 for AMD64/EM64T
- SUSE Linux Enterprise Server 10 for x86
- SUSE Linux Enterprise Server 11 for AMD64/EM64T
- SUSE Linux Enterprise Server 11 for x86
- SUSE Linux Enterprise Server 11 with Xen for AMD64/EM64T
- SUSE Linux Enterprise Server 12
- VMware ESX 4.1
- VMware ESXi 4.1
- VMware vSphere 5.0 (ESXi)
- VMware vSphere 5.1 (ESXi)
- VMware vSphere 5.5 (ESXi)
- VMware vSphere 6.0 (ESXi)
- VMware vSphere 6.5 (ESXi)

See ServerProven for the latest information about the specific versions and service packs supported:
<http://www.lenovo.com/us/en/serverproven/xseries/sharedstorage/samatrix.shtml>

Click the check mark that is associated with the System x server in question to see the details of operating system support.

Operating environment

The adapter is supported in this environment:

- Temperature:
 - Operating: 0° to 55°C (32° to 131°F) at 0 to 914 m (0 to 3,000 ft)
 - Storage: -40° to 70°C (-40° to 158°F) at 914 to 2,133 m (3,000 to 7,000 ft)
- Relative humidity:
 - 5% to 95%, non-condensing

Warranty

Three-year limited warranty. When installed in a System x server, these cards assume your system's base warranty and any warranty upgrade.

Related publications

For more information, refer to the following resources:

- US Announcement Letter
<http://ibm.com/common/ssi/cgi-bin/ssialias?infotype=dd&subtype=ca&&htmlfid=897/ENUS108-481>
- Lenovo product page for Fibre Channel HBAs:
<http://shop.lenovo.com/us/en/systems/servers/options/systemx/storage/raid-adapters/fibre-channel-hba/>
- ServerProven compatibility information for System x HBAs
<http://www.lenovo.com/us/en/serverproven/xseries/sharedstorage/samatrix.shtml>
- System x Configuration and Options Guide
<http://ibm.com/systems/xbc/cog/>
- Emulex 8Gb FC Single-port and Dual-port HBAs Quick Installation Guide
<http://ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5076984>
- Emulex 8Gb FC Single-port and Dual-port HBAs Installation and User's Guide
<http://ibm.com/support/entry/portal/docdisplay?Indocid=MIGR-5076983>

Related product families

Product families related to this document are the following:

- [Host Bus Adapters](#)

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