



Product Bulletin

Brocade FC8-64 Blade for DCX and DCX-4S Directors

Revision History

07 June 2010 - Initial version

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This product bulletin informs NetApp sales and NetApp partners about new or changed NetApp® products or services.

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1. Summary

This product bulletin announces the availability of the FC8-64 blade, part of Brocade's Fibre Channel (FC) portfolio for the DCX and DCX-4S directors, for First Customer Ship.

The FC8-64 blade is the highest density Fibre Channel blade on the market, with 64 ports, each capable of 8Gbps. The FC8-64 blade is designed for the DCX and DCX-4S directors, and is fully compatible with Brocade's other FC blades and switches. In order to fit 64 port connectors within the existing DCX/DCX-4S blade form factor, the FC8-64 blade utilizes a new mini-SFP (mSFP) and a 1.6mm diameter fiber cable as compared to the legacy 3mm cable infrastructure.

2. What's New?

The FC8-64 is a new FC blade for the DCX and DCX-4S. The FC8-64 was designed in response to customer demand for higher density and smaller footprint in the data centers. Up to four FC8-64 blades can be configured in a DCX or DCX-4S.

With the new mini-SFPs and the subsequent smaller fiber cables, there may be a need for customers to deploy patch panels and/or special cables for the 1.6mm diameter cables being used with the FC8-64 blade. Further information about patch panel options as well as cables is listed in section 5 (Product Information).

3. Sales and Customer-Ready Tools (Training, SE, Customer Presentations, Datasheets, Sales Guides)

[NetApp SalesEdge FC Switches and Directors](#)

[NetApp PartnerCenter FC SAN](#)

4. System Requirements

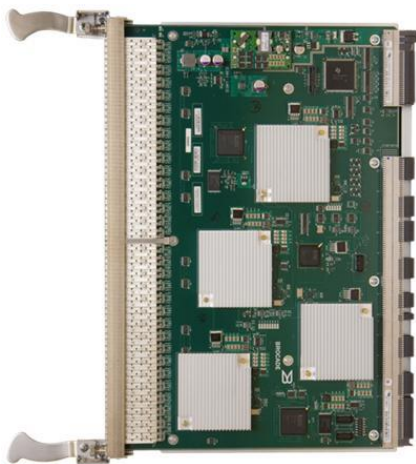
The latest Brocade support statements can be found at the NetApp Fibre Channel Switch Support Matrix:

[Support Matrix](#)

5. Product Information

The FC8-64 blade has the following technical characteristics:

- 64 x 8Gbps ports per blade
- Auto sensing 2/4/8Gbps port speeds
- Supports E, F, and M-port types
- 2:1 oversubscription ratio at 8Gbps
- 1:1 subscription ratio at 4Gbps
- Max 4 x FC8-64 blades per DCX/DCX-4S chassis
- Requires Brocade FOS Release 6.4 or later



The Brocade FC8-64 blade does not require a special license in order to be installed or configured in a DCX/DCX-4S chassis. There will be one part number for the blade, which includes short range mini-SFPs. There will not be an option for long range optics at this time. The same version of the blade will be used as a FRU for field replacement and support.

Part Number	Description	Discount Category Code
X-DCX-2164-R5	Blade,Brocade FC8-64 with 64 8Gbps SWL mSFP	C
X-000160-R6	SFP,Brocade 8Gbps SW mSFP	C

Software Subscription Plans

There are no additional software licenses or subscriptions required as part of the FC8-64 introduction.

Cables

The FC8-64 blade utilizes 1.6mm diameter cables as compared to the legacy 3mm cables for 70% space savings. Since existing cable infrastructure is likely to consist of 3mm cables, several third-party suppliers are making patch panels and special cables available for sale. These cables will not be available through NetApp or Brocade, but a list of the available suppliers and part numbers is shown below.

The special cables will consist of duplex LC connectors on one end and duplex mLC connectors at the other end. The cables will have a 1.6mm diameter, 50um, and are available from Corning, Molex and Amphenol.

Corning Patch Cables – mSFP to standard LC

Part Number	Description	Length
S50502S5120001M	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	1m
S50502S5120002M	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	2m
S50502S5120003M	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	3m
S50502S5120005M	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	5m
S50502S5120010M	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	10m

Corning Patch Cables – mSFP to mSFP

Part Number	Description	Length
S5S502S5120001M	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	1m
S5S502S5120002M	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	2m
S5S502S5120003M	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	3m
S5S502S5120005M	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	5m
S5S502S5120010M	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	10m

Molex Patch Cables – mSFP to standard LC

Part Number	Description	Length
106273-0525	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	1m
106273-0526	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	2m
106273-0527	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	3m
106273-0528	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	5m

106273-0529	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	10m
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Molex Patch Cables – mSFP to mSFP

Part Number	Description	Length
106273-0560	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	1m
106273-0561	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	2m
106273-0562	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	3m
106273-0563	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	5m
106273-0564	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	10m

Amphenol Patch Cables – mSFP to standard LC

Part Number	Description	Length
943-99865-10001	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	1m
943-99865-10002	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	2m
943-99865-10003	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	3m
943-99865-10005	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	5m
943-99865-100010	mSFP LC – standard LC, duplex, multi-mode, OM3, 50/125	10m

Amphenol Patch Cables – mSFP to mSFP

Part Number	Description	Length
943-99866-10001	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	1m
943-99866-10002	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	2m
943-99866-10003	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	3m
943-99866-10005	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	5m
943-99866-10010	mSFP LC – mSFP LC, duplex, multi-mode, OM3, 50/125	10m

Patch Panels

The other alternative for cable management is to use special patch panels. These patch panels are available from Corning, CommScope, Chatsworth, Connectivity Technologies, and Tyco. A picture of a patch panel is shown below. These patch panels will direct the routing of cables on a Brocade DCX-4S to the side of the rack, or under

a Brocade DCX using a cable tray.



For additional information regarding the cables and patch panels, please see the Brocade web site:
http://www.brocade.com/products-solutions/solutions/cable_management.page.

Downloading

For downloading all software, go to [NOW™ Download Software](#).

To download the latest Brocade FOS version, go to:

[Brocade Firmware Download Page](#).

Product Availability

The Brocade FC8-64 blade will be available to quote in the September 2010 release of the Quote Tool.

6. Regulatory Compliance

Products need to be validated against the NetApp Safety/EMI Regulatory Compliance List prior to order submission. This is required to make sure that products are being sold only in the countries in which NetApp has received regulatory compliance certification. This information can be found in the Field Portal by searching under “Compliance, Policies and Procedures” or following the links below:

- [RoHS Compliance](#)
- [Safety/EMI Regulatory Compliance \(XLS\)](#)
- [WEEE Compliance](#)

7. Warranty and Service

The warranty and extended warranty apply to the Brocade FC8-64 blade just as they do to storage controllers (FAS systems) and other Brocade switches already under NetApp SupportEdge services. The FC8-64 blade will be covered under the same service contract as the DCX/DCX-4S in which it is being installed, there is no separate service contract required for the blade itself.

8. Additional Information

Contact information: Please contact your NetApp sales or channel partner representative with questions

concerning this bulletin.

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