COMPAQ   EK–CCMFB–IN. B01

MEMORY CHANNEL INSTALLATION CARD

Use this card as a quick reference to install CCMFB fiber optics and CCMLB linecard modules in Memory Channel systems.

Refer to *Memory Channel Service Information* (EK-PCIMC-SV) for more information.

CAUTION: Wear an antistatic wrist strap when handling modules.


This card describes the following:

- Installing the CCMFB fiber optics module in a virtual hub configuration (no hub present).

- Installing the CCMLB linecard in the CCMHB hub with no fiber optics.

- Installing the CCMFB optics module in a standard hub configuration (hub present).

Installing the CCMFB Fiber Optics Module in a Virtual Hub Configuration

Required Components
- CCMFB Fiber Optics Module
- BN34R Fiber Optics Cable
- BN39B-01 Link Cable

CCMFB Fiber Optics Module

PCI Endplate (74-52532-01)   Side View

D

A

C   B

E

Hub Endplate (74-52531-01)   MCIC1-99
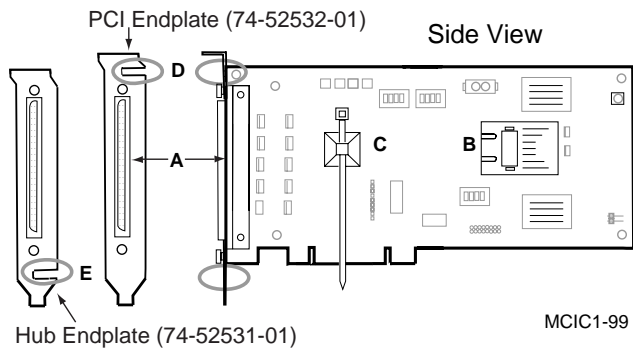
The CCMFB fiber optics module occupies one slot in a system's PCI or in a system's CCMHB hub. One CCMFB module is paired with each CCMAB that uses fiber. The CCMFB module has two connectors:

- a 100-pin connector (see A, CCMFB Fiber Optics Module figure) on the end of the module, for the 1-meter black BN39B link cable
- an SC duplex connector on the front of the transceiver (see B) into which the BN34R fiber cable is plugged

The CCMFB comes with two endplates. The one attached is for virtual hub mode. Use the alternate endplate (74-52531-01) when installing the CCMFB in a hub.

BN34R Fiber Optics Cable
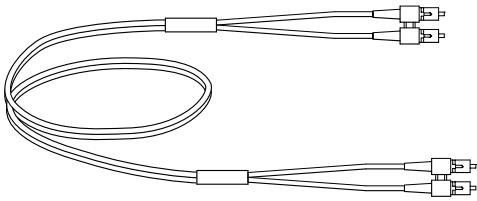
MCIC2-98

CAUTION: Handle fiber optics cables with care. Avoid sharp bends to avoid damage to the fiber. The minimum recommended bend radius for the BN34R cable is 5.08 cm (2 inches). Do not touch the unprotected plug ends.

One BN34R fiber optics cable connects two CCMFB modules directly together when two systems are connected in a virtual hub configuration. The keyed Simplex connectors are inserted into the transceiver on the CCMFB (see B, CCMFB Fiber Optics Module figure) and the cable is tie-wrapped (see C) to provide strain relief.

The cable is available in two lengths: 10 meters (32.8 feet) and 31 meters (101.7 feet). If longer distances are required, an appropriately terminated drop cord can be used to connect to existing premises wiring. To be compatible with the CCMFB optical transceiver, a low-profile SC duplex connector must be used. A connector with a height of 9.7 mm (0.380 inches) is readily available.

BN39B Link Cable

MCIC3-98
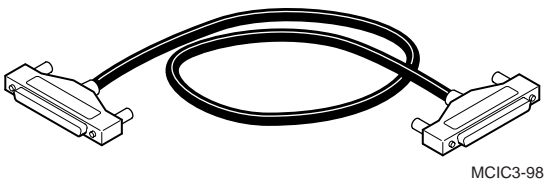
The BN39B cable is available in three lengths:

- BN39B-10 (10-meter/32.8-ft)
- BN39B-4 (4-meter/13.1-ft)
- BN39B-01 (1-meter/3.3-ft).

The BN39B-01 cable is used to connect the CCMFB module to the CCMAB adapter. Two BN39B-01 cables are required when two systems are connected in virtual hub mode using fiber optics.

Virtual Hub Configuration with Fiber Optics

Node 0

CCMAB

BN39B-01

Node 1

CCMFB

CCMAB

BN39B-01

CCMFB

BN34R

MCIC4-98

4
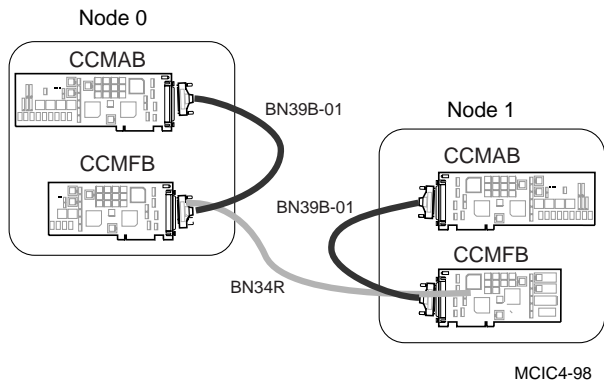
For a virtual hub configuration, install one CCMFB in each system's PCI card cage, as follows:

1. Perform an orderly shutdown of the systems.

2. Thread one end of the BN34R fiber optics cable through the PCI bulkhead slot.

3. Thread the optics cable through the slot near the top of the endplate (see D, CCMFB Fiber Optics Module figure). Remove the cable tip protectors and insert the Simplex connectors into the transceiver housing until they click in place. Tie-wrap the cable to the module (see C).

4. Seat the CCMFB fiber optics module firmly into the PCI backplane and secure the module to the PCI card cage with the mounting screw.

5. Attach the 1-meter BN39B link cable from the CCMAB adapter to CCMFB connector A.
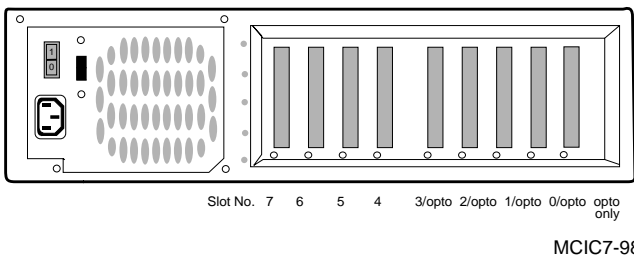*NOTE: Make certain CCMAB jumpers J10 and J11 are set to Fiber On (jumper pins 2-3).*
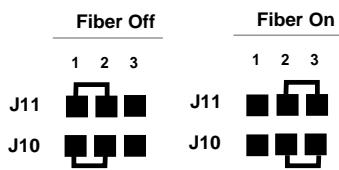
MCIC5-98

6. Repeat steps 1 through 5 at remote node or at second system.

7. Power up and verify the systems.

**Installing the CCMLB Linecard in the CCMHB Hub
With No Fiber Optics**

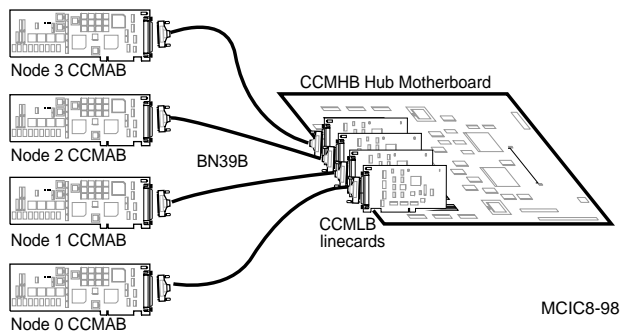J3 J2 3 2 1 See page 10 for settings.

MCIC6-98
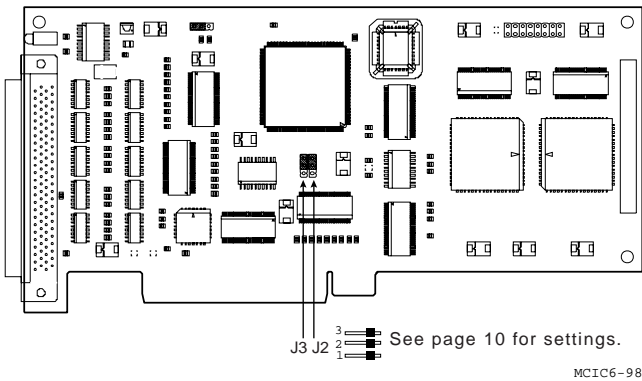
The CCMLB linecard, used in standard hub mode, occupies
one slot in a CCMHB hub. Each CCMLB linecard has a
100-pin connector that attaches to a black BN39B cable.
This cable then attaches to a CCMAB adapter module
installed on each system's PCI bus.

CCMHB Hub (Rear View)

Slot No. 7   6   5   4   3/opto 2/opto 1/opto 0/opto opto
                                                          only

MCIC7-98

The CCMHB hub has nine slots. The slot marked "opto
only" is reserved for the CCMFB module. CCMLB linecards
can be installed in the other eight slots: slots 0/opto, 1/opto,
2/opto, 3/opto, 4, 5, 6, and 7.

Standard Hub Mode with No Fiber Optics

Node 3 CCMAB

CCMHB Hub Motherboard

Node 2 CCMAB

BN39B

Node 1 CCMAB
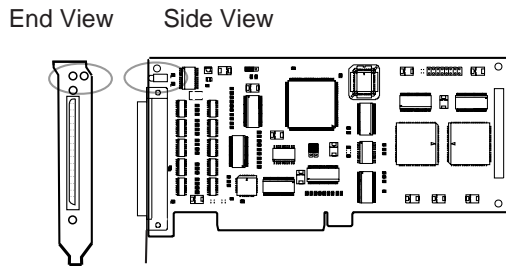
CCMLB
linecards

Node 0 CCMAB

MCIC8-98

Install the CCMLB linecard as follows:

1. Perform an orderly shutdown of the systems.

2. Power down the hub and remove the top panel by loosening the thumbscrew in the center of back panel. Gripping the lip of the top panel, pull rearward and slightly upward to remove.

3. Seat the linecard firmly in the connector on the motherboard and secure it to the card cage with the mounting screw.

4. Attach one end of the BN39B link cable to the linecard and the other end to the CCMAB PCI adapter. Repeat for each CCMLB linecard/CCMAB adapter pair.

5. Reinstall the top panel.

6. Power up and check the LEDs.

NOTE: The default settings of the CCMLB J2 and J3 jumpers are fiber off.

Check CCMLB LEDs

End View   Side View

| LEDs			Condition
Off	Off	○ ○	Power off, or faulty linecard module.
Amber	Amber	◐ ◐	Properly connected to remote node. Normal power up state.
Green	Green	● ●	Online, in use by operating system.
Off	Amber	○ ◐	Not connected to remote node. Normal when not connected to remote node or remote node powered off. Check standard mode jumper setting, Fiber on jumper settings on CCMLB and CCMAB, and for bent pins on both ends of cable connector.

MCIC9-99

Left LED - ⌐   ⌐ Right LED -
closest to etch   component side

The CCMLB linecard has two LEDs, located in the upper corner near the connector. These LEDs shown the connection status. Use these LEDs to verify all nodes and hubs are properly connected.

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Installing the CCMFB Optics Module in a Standard Hub Configuration

**Mixed BN39B (copper) and BN34R (fiber) Configuation**
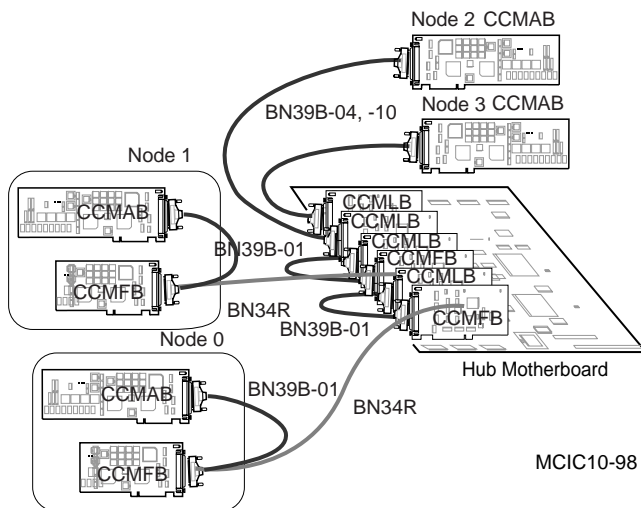
Install the CCMFB module as follows:

1. Perform an orderly shutdown of the systems; remove the hub's top panel.

2. Thread one end of the BN34R fiber optics cable through the slot of the CCMHB hub in which the CCMFB will be installed. CCMFB modules can be installed in five slots: opto only, 0/opto, 1/opto, 2/opto, and 3/opto.
   NOTE: If more than four fiber nodes are needed, install all optics cards in a second hub.

3. Remove the CCMFB endplate and replace it with the alternate endplate. Use a 3/16-inch nutdriver to remove the two hex-head standoff fasteners. Holding the module with the endplate up, remove the two Phillips screws on side 2 (back side) of the module.

Lift the endplate off carefully, making certain the EMI gasket between the endplate and module remains in position. Slip the alternate endplate (having slot E at the bottom) over the connector and attach it with the same screws and fasteners.

4. Thread the optics cable through the CCMFB endplate slot E. Remove the cable tip protectors and insert the Simplex connectors into the transceiver housing until they click in place. Tie-wrap the cable to the module (see C, CCMFB Fiber Optics Module figure).

5. Seat the CCMFB module firmly into the motherboard slot and secure it to the hub with the mounting screw.

6. Connect the CCMFB module and the CCMLB linecard, using the 1-meter BN39B link cable.
   NOTE: Make certain CCMLB jumpers J2 and 3 are set to Fiber On (jumper pins 1-2).

MCIC11-98
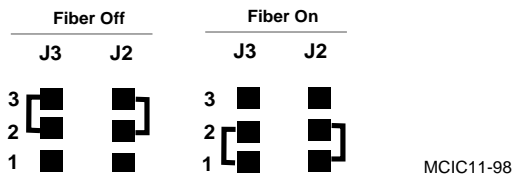
7. Repeat steps 2 through 5 of the virtual hub mode installation at each remote node connected to the hub using fiber optics.

8. Repeat steps 3 and 4 of the standard hub installation at each remote node connected to the hub using the BN39B link cable.

9. Reinstall the hub top panel.

10. Power up and verify the systems.