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DEC FDDIcontroller/EISA
Release Notes

Part Number: EK–DEDDI–RN. A01

These release notes are intended for customer and
Digital Service personnel who install, service, or use the
DEC FDDIcontroller/EISA Class I laser single-mode fiber
(SMF) adapter.

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Introduction

This document describes the four single-mode fiber (SMF) adapters that have been added to the DEC FDDIcontroller/EISA (DEFEA) family of adapters. The installation, problem solving, and general information contained in the DEC FDDIcontroller/EISA installation manual (version C01 or later) applies also to the SMF adapters.

SMF Adapter Models

The following table describes the DEC FDDIcontroller/EISA SMF adapter models available from Digital Equipment Corporation.

Model	Description
DEFEA-SB	One card, single attachment station (SAS) adapter using Class I laser SMF duplex optics with SC connectors.
DEFEA-WB	One card, dual attachment station (DAS) adapter using a pair of Class I laser SMF duplex optics with SC connectors. This model contains an RJ-12 connector for an optional optical bypass relay (OBR) device.
DEFEA-FB	One card, mixed-media dual attachment station (DAS) adapter using Class I laser SMF duplex optics with SC connectors on the A port, and multimode fiber (MMF) duplex optics on the B port.
DEFEA-HB	One card, mixed-media dual attachment station (DAS) adapter using Class I laser SMF duplex optics with SC connectors on the B port, and MMF duplex optics on the A port.

Single-Mode Fiber-Optic SAS Adapter (DEFEA-SB)

The single-mode fiber-optic SAS adapter (Figure 1) plugs into a single
EISA I/O bus slot. A duplex SC connector **2** interfaces to FDDI
fiber-optic cable (from a concentrator such as the DECconcentrator
900MX).

The adapter contains onboard diagnostics that execute when power is
applied. The LED **1** on the adapter's mounting bracket indicates the
operating status of the adapter and its PHY port.

Figure 1   SMF SAS Adapter (DEFEA-SB)

LJ-5536.AI4
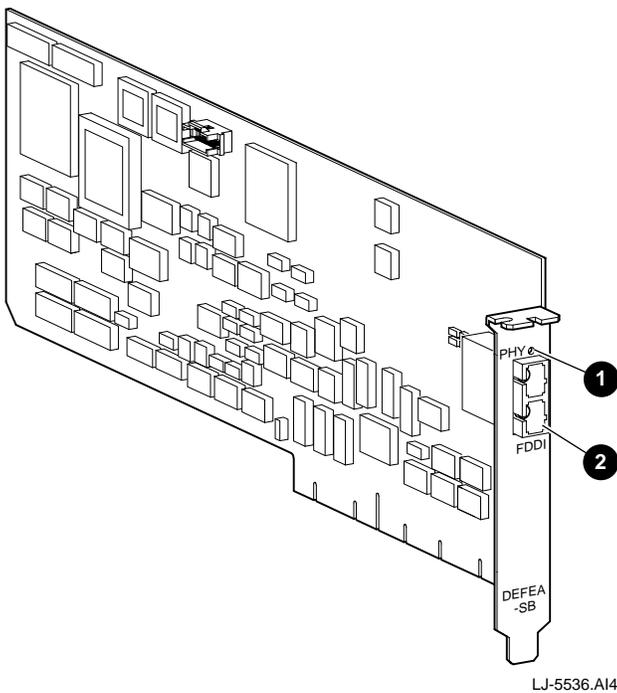
Single-Mode Fiber-Optic DAS Adapter (DEFEA-WB)

The single-mode fiber optic-DAS adapter (Figure 2) plugs into a single EISA I/O bus slot. Two duplex SC connectors, port B **3** and port A **4**, interface with the FDDI fiber-optic cable.

The adapter contains onboard diagnostics that execute when power is applied. The adapter's LEDs indicate the operating status of the adapter and its PHY ports, port A **1** and port B **2**. The RJ-12 connector **5** is used for inserting an optional optical bypass relay (OBR) device to maintain connectivity of the FDDI ring in the absence of power or during fault conditions in the node.

Figure 2 SMF DAS Adapter (DEFEA-WB)

LJ-5537.AI4

3
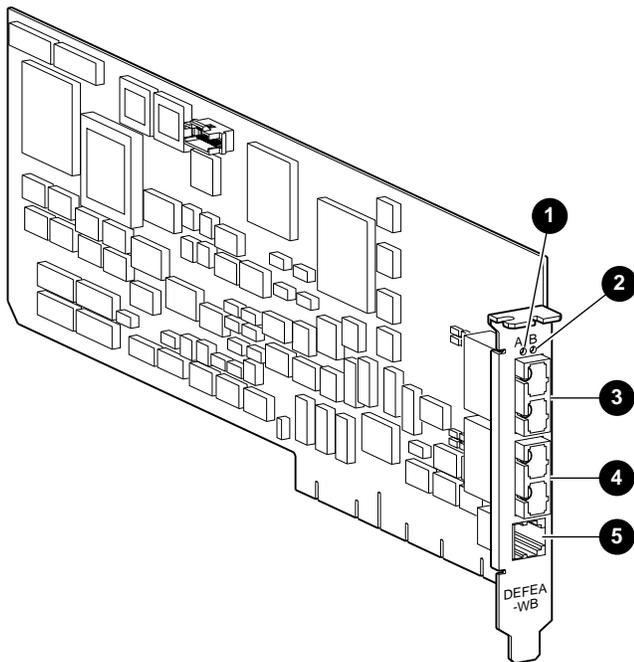
Mixed-Media DAS Adapter (DEFEA-FB)

The mixed-media fiber-optic DAS adapter (Figure 3) plugs into a single EISA I/O bus slot. Two duplex SC connectors, port A **4** using Class I laser SMF and port B **3** using MMF, interface with FDDI SMF and MMF cables respectively.

The adapter contains onboard diagnostics that execute when power is applied. The LEDs on the adapter's mounting bracket indicate the operating status of the adapter and its PHY ports, port A **1** and port B **2** .

Figure 3 Mixed-Media DAS Adapter (DEFEA-FB)
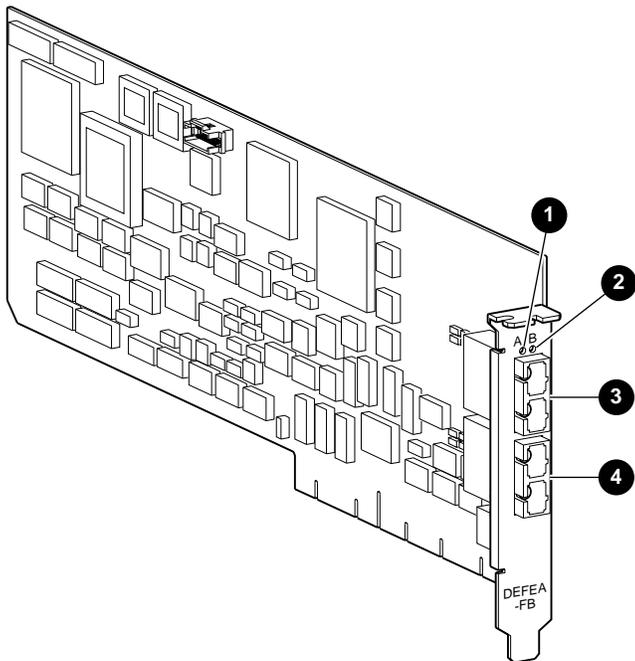
LJ-5539.AI4

Mixed-Media DAS Adapter (DEFEA-HB)

The mixed-media fiber-optic DAS adapter (Figure 4) plugs into a single EISA I/O bus slot. Two duplex SC connectors, port A **4** using MMF and port B **3** using SMF, interface with the FDDI MMF and SMF cables respectively.

The adapter contains onboard diagnostics that execute when power is applied. The LEDs on the adapter's mounting bracket indicate the operating status of the adapter and its PHY ports, port A **1** and port B **2** .

Figure 4   Mixed-Media DAS Adapter (DEFEA-HB)
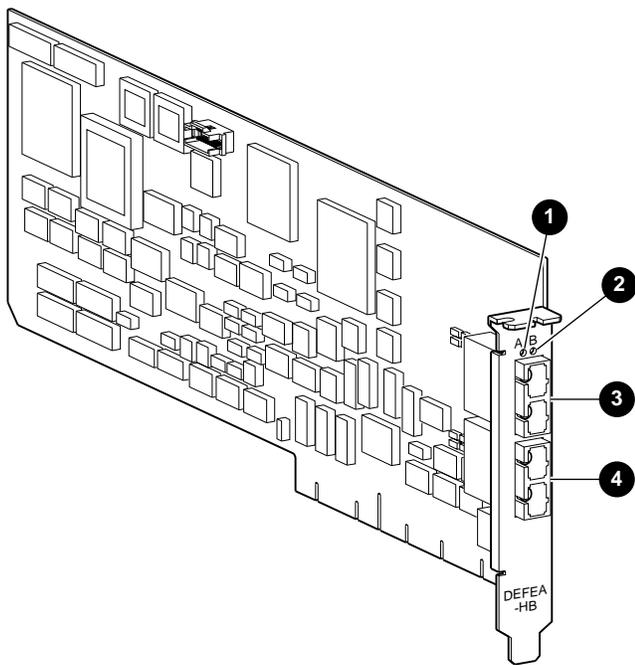
LJ-5538.AI4

Single-Mode Fiber Connections

The DEFEA and DEFPA SMF adapter models (-SB, -WB, -FB, and -HB) may be connected directly to each other without the use of a loss element or a hybrid connector adapter.

The maximum distance between stations connected to a DEFEA or DEFPA SMF port is 60 KM. This distance assumes an available power budget of 22 dB. The minimum loss budget of 12 dB may be required when a DEFEA or DEFPA SMF adapter is connected to a device other than one of these models.

Interconnecting products with mismatched connector types may require the use of a hybrid connector adapter. For example, the DEFEA and DEFPA SMF adapters use SC connectors; other products may use ST or FC connectors. The currently shipping SMF PMD, the DEFXS-BA, uses the ST connector. The previous version, the DEFXS-AA, used the FC connector.

The hybrid connector adapter and loss element may be combined into a single device.

Cable Vendors

This section lists some of the vendors that have adapter cable and couplers readily available.

Cable vendors:

   3M/Fiber Optics Products
   Anixter Brothers
   Computer Crafts, Inc.

SMF Fiber Attenuators:

   3M/Fiber Optics Products
   Amphenol Corporation
   Storm Products Co.

Distribution Diskette

The driver distribution diskettes are for systems that can read DOS-format diskettes. Additional diskettes containing product enhancements may be included in your shipment.

The distribution diskette contains the following:

- A `README.TXT` file in the root directory that explains how to access files and provides an overview of the diskette.

- A `RELEASE.NOT` file in the root directory that includes important software Release Notes.

- Subdirectories for each supported operating system. The subdirectories contain driver and installation procedures for that particular operating system.

- EISA configuration files:

  ```
  A:\!DEC3001.CFG
  A:\!DEC3002.CFG
  A:\!DEC3003.CFG
  ```

- System diagnostic INSTVER:

  ```
  A:\DIAG\INSTVER.EXE
  ```

- A Digital Local Management Application (DEClma) executable file for some supported operating systems.

Note

Software components will be added to this diskette throughout the product's life as new operating systems are supported. Refer to the `README.TXT` file in the root directory for the latest description of the diskette contents.

Configuring the Adapter

To configure the DEC FDDIcontroller/EISA adapter into your computer, perform the following steps:

1. Turn off power to your computer before running the EISA Configuration utility.

2. Determine whether you have any ISA hardware options (such as an ISA video adapter) installed in the EISA slots of the system. Refer to your computer system documentation to determine the slots available for EISA options. If any ISA options are located in EISA slots, record the slot number, interrupt-request (IRQ) level, and memory address settings for each of these ISA options. For the IRQ level and memory address settings information, refer to your computer documentation.

3. Read your computer documentation for information about using the EISA Configuration utility to add a new hardware option to your system.

4. Insert the EISA Configuration utility diskette (write-enabled) into the appropriate diskette drive. This diskette is packaged with your computer.

5. Turn on the power to your computer.

6. Follow your EISA Configuration utility instructions to copy the configuration files (`!DEC3001.CFG`, `!DEC3002.CFG`, and `!DEC3003.CFG`) from the distribution diskette to your EISA Configuration utility diskette.

_____ **Note** _____

There are three EISA configuration files provided for the adapters: `!DEC3001.CFG`, `!DEC3002.CFG`, **and** `!DEC3003.CFG`. The file you use to configure the system depends upon the part number of the adapter you are installing. The adapter's part number is marked on a label attached to the adapter.

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7. See the following table to determine which configuration file you need to use:

Adapter Part Number	Use Configuration File...
54-21497-0X	!DEC3001.CFG
54-21503-0X	!DEC3002.CFG
54-24239-0X	!DEC3002.CFG
54-24889-0X	!DEC3003.CFG Use this file for SMF adapters.

8. Configure the system. This process adds the configuration file information to the system configuration file.

9. Examine the slot number, memory address, and IRQ settings for the adapter. You may need to adjust these settings to avoid conflicts with the settings of other hardware options in your system. See the `\CONFIG\README.TXT` file for the recommended settings based on the device driver you plan to use.

10. Record the slot number, memory address, and IRQ settings for future reference.

11. Save the new configuration data, then exit the utility.

    For some Configuration utilities, you must examine system and new hardware option switch settings before you save the configuration data and exit the utility. The FDDI/EISA adapter has no switches or jumpers. Follow your EISA Configuration utility instructions before you exit the utility.

12. When the Configuration utility indicates it is safe to do so, turn off the power to your computer and install the adapter.