



AlphaStation™ 255 Family

Media Adapter Unit Installation Information

Order Number: EK-VLLXA-MI. B01

Digital Equipment Corporation
Maynard, Massachusetts

August 1996

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FCC Information - Class B

FCC ID: AO9-PSPBHALO

This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

The user may find the following booklet prepared by the Federal Communications Commission helpful: *How to Identify and Resolve Radio-TV Interference Problems*. This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402. Stock No. 004-00398-5.

All external cables connecting to this basic unit need to be shielded. For cables connecting to option boards, see the option manual or installation instructions.

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the radio interference regulations of the Canadian Department of Communications.

Contents

Preface

AlphaStation 255 Family Media Adapter Unit.....	vii
Audience	vii
Abbreviations	vii
Special Notices.....	viii
Additional Information Resources	viii

Installing the Media Adapter Unit

Introduction.....	1
Upgrade Kit Inventory.....	2
Installing the MAU	4
Selecting the ThinWire Port	8
Troubleshooting	8

Figures

1 Kit Contents	2
2 Unlocking and Removing System Cover	3
3 Using the Antistatic Wrist Strap	4
4 Removing the Metal Access Plate	5
5 Connecting the Cable to the MAU.....	5
6 Motherboard MAU Connector Keying.....	6
7 MAU Installed in System	7

Tables

1 System Troubleshooting	8
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Preface

AlphaStation 255 Family Media Adapter Unit

This booklet guides you through the installation of your Digital AlphaStation 255 Family media adapter unit (MAU). The MAU adds ThinWire capability to the embedded Ethernet controller.

Audience

The information included here is intended for anyone installing the MAU in an AlphaStation 255 Family system.

Abbreviations

This guide uses the following abbreviations:

Abbreviation	Meaning
CPU	Central processing unit.
ESD	Electrostatic discharge.
MAU	Media adapter unit.
MHz	Megahertz.
SRM	The console firmware for OpenVMS and Digital UNIX systems.

Preface

Special Notices

This guide uses the following notices to emphasize specific information:

CAUTION

A CAUTION indicates the presence of a hazard that can damage hardware or that might corrupt software.

NOTE

A NOTE provides information on general topics, such as compatibility with other products, or pointers to other sources.

Additional Information Resources

You may wish to consult the following resources for information on your Digital AlphaStation 255 Family system:

- *Digital AlphaStation™ 255 Family Installation Information* (order number EK-VLLXA-II) presents a graphical overview of the Digital AlphaStation 255 Family installation.
- *Digital AlphaStation™ 255 Family User Information* (order number EK-VLLXA-UI). This manual contains information to start, use, update, troubleshoot, and configure your Digital AlphaStation 255 Family system. You can also find general system information such as console commands and system care here.

Contact your distributor or Digital representative for other available product-related information.

Installing the Media Adapter Unit

Introduction

Installing the media adapter unit (MAU) in your AlphaStation 255 Family system consists of three relatively simple tasks:

1. Removing the cover plate.
2. Connecting the MAU to the motherboard.
3. Mounting the MAU on the rear bulkhead.

CAUTIONS

While performing the upgrade, you must touch some electronic components. Treat these high-performance components with care.

To prevent damage to components from electrostatic discharge (ESD), use the wrist strap included in the upgrade kit.

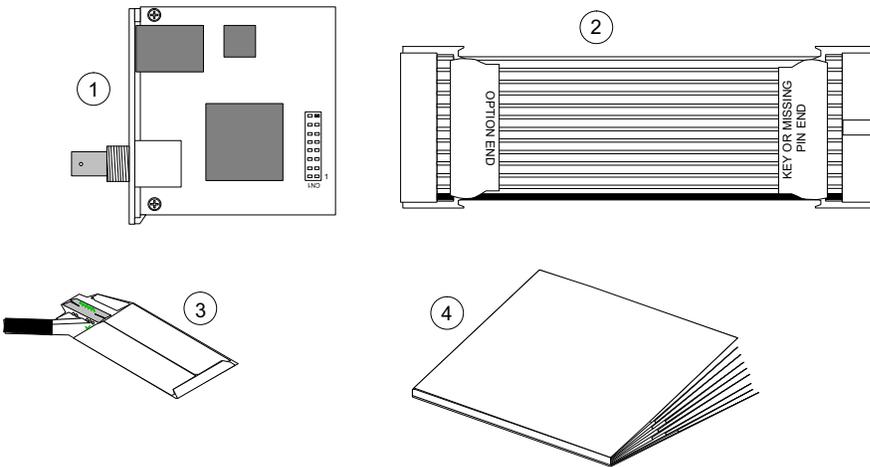
Media Adapter Unit Installation

Upgrade Kit Inventory

The AlphaStation 255 Family MAU installation kit (PBXDF-BA) contains the following items, shown in Figure 1:

- ① Media adapter unit (MAU).
- ② Ribbon cable.
- ③ Antistatic wrist strap.
- ④ Documentation.

Figure 1. Kit Contents

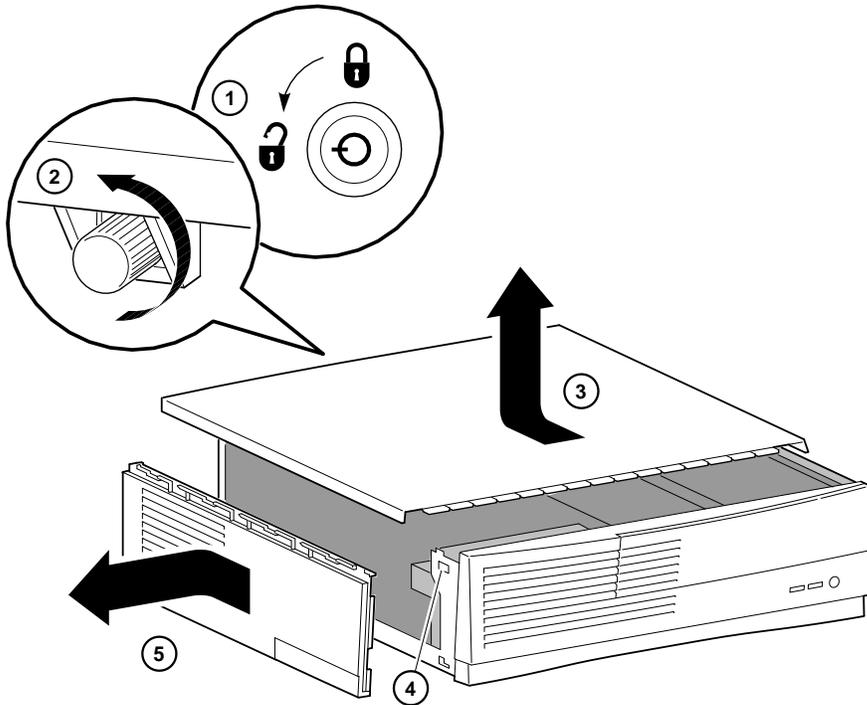


Media Adapter Unit Installation

To prepare your system for the MAU installation, refer to Figure 2 and perform the following steps:

1. Back up your hard disk(s).
2. Shut down the operating system using the appropriate command.
3. Turn off the power and unplug the power cable.
4. Facing the rear of the unit, unlock the chassis lock ①.
5. Locate and loosen the thumb screw ② that fastens the top cover to the rear panel. Place your thumbs on the upper corners of the rear panel, pull back on the cover, and lift the cover ③ up and away from the enclosure. (The side panel can be removed by pressing in the left-side tab ④ to release the panel. Then, slide the panel ⑤ toward the rear of the system unit to remove it.)

Figure 2. Unlocking and Removing System Cover



Media Adapter Unit Installation

Installing the MAU

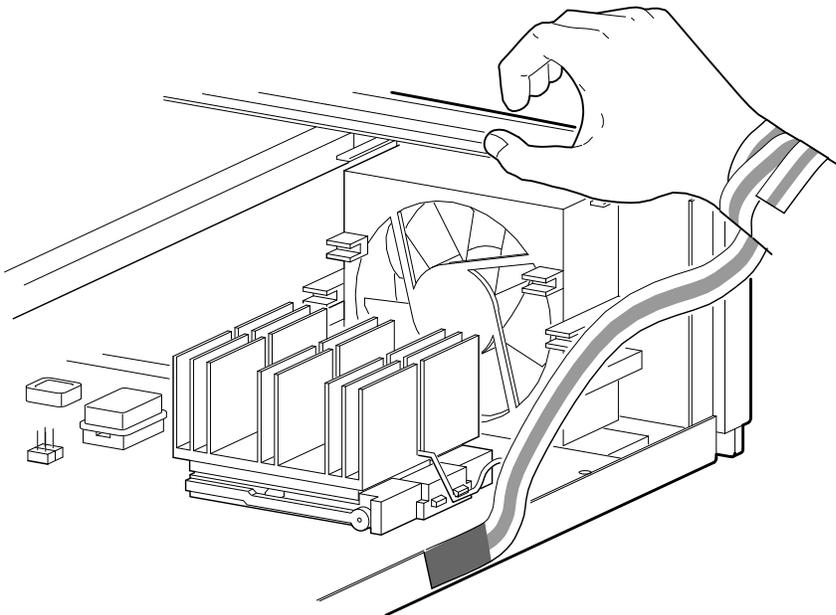
This section takes you through the steps to install the MAU. Exercise care when connecting the cable and mounting the MAU.

CAUTION

Do not touch any electronic component unless you are wearing the antistatic wrist strap and the strap is attached to the system. A static discharge can permanently damage electronic components.

1. Put the antistatic strap around your bare wrist and attach it to the system, as Figure 3 shows.

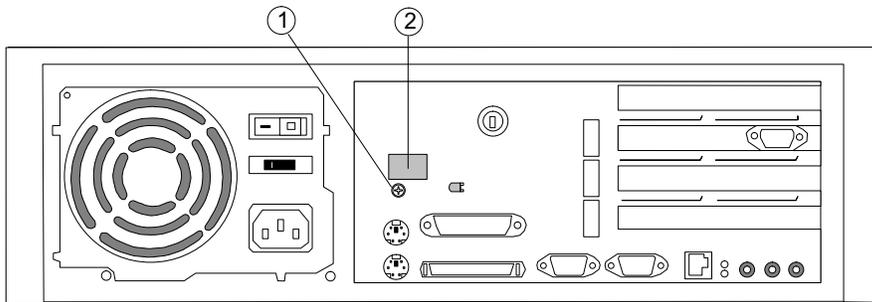
Figure 3. Using the Antistatic Wrist Strap



Media Adapter Unit Installation

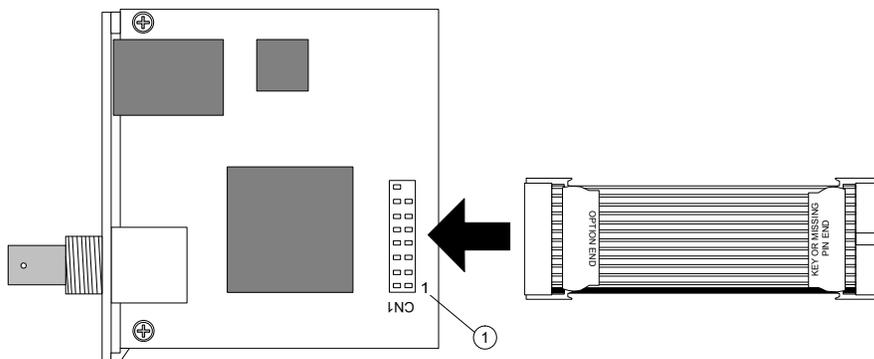
2. The MAU access opening is covered with a metal plate. Remove the screw ① holding the metal plate ② in place, as Figure 4 shows. Set the screw aside for reuse.

Figure 4. Removing the Metal Access Plate



3. In the upgrade kit, locate the MAU and the ribbon cable. While referring to Figure 5, orient the red stripe at the OPTION END of the cable toward pin 1 of connector CN1 ①. Gently insert the cable connector onto the pins.

Figure 5. Connecting the Cable to the MAU



Media Adapter Unit Installation

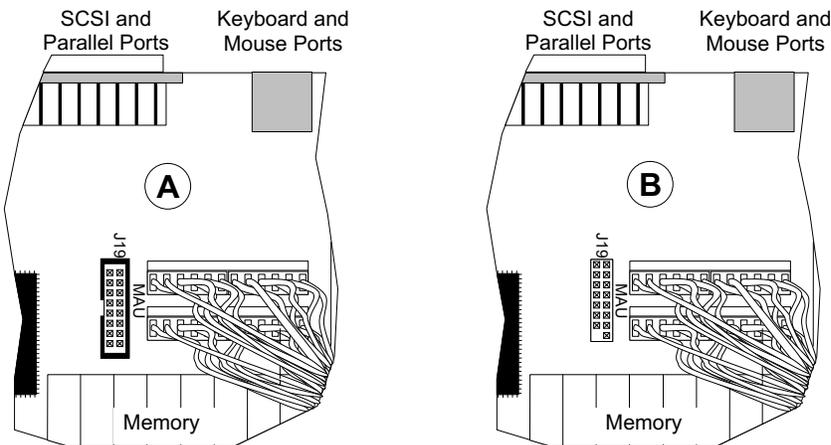
4. Most motherboards include a shroud that surrounds J19 to ensure proper orientation of the ribbon cable (Figure 6.A). Early versions of the motherboard use a missing pin technique in J19 for keying (Figure 6.B); there is no shroud.

The ribbon cable included with the MAU is not keyed for the early motherboards. Therefore, it can easily be installed incorrectly.

CAUTION

Orientation of the ribbon cable is critical. Make sure the red stripe is oriented to the rear of the system.

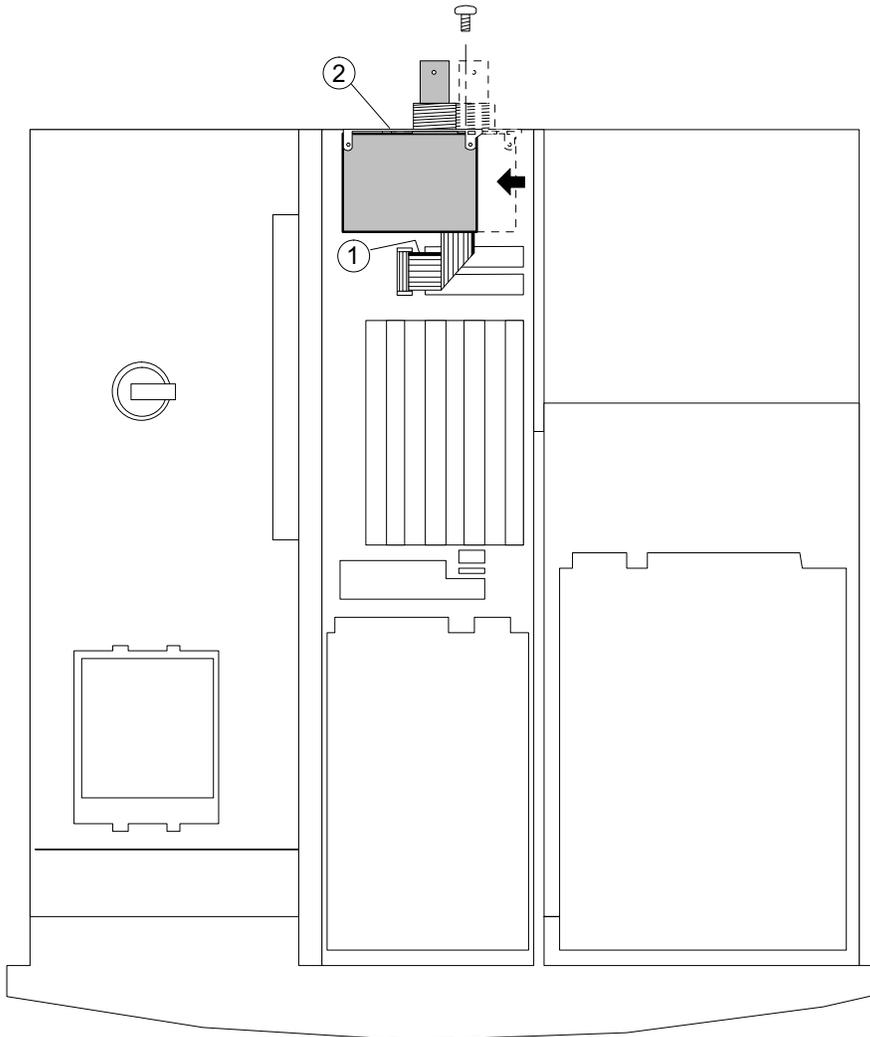
Figure 6. Motherboard MAU Connector Keying



5. Refer to Figure 7 and plug the cable end labeled KEY OR MISSING PIN END into J19 on the motherboard. Orient the red stripe ① of the cable so it faces toward the rear of the system.
6. Refer to Figure 7 and mount the MAU onto the rear bulkhead. Initially insert the MAU toward the power supply (as shown in the dashed-line view). Hook the MAU on the tab ② and slide it away from the power supply (as the arrow shows). Insert and tighten the mounting screw.

Media Adapter Unit Installation

Figure 7. MAU Installed in System



7. Disconnect the antistatic wrist strap from the system and remove it from your wrist.
8. Replace the system cover (and the side cover, if removed).
9. Replace the power cord and turn the power on. Proceed to the next section, Selecting the ThinWire Port.

Media Adapter Unit Installation

Selecting the ThinWire Port

OpenVMS or Digital UNIX AlphaStation 255 Family systems must be told to use the ThinWire Ethernet port. Connect your system to the network using the appropriate port. Change the port types by using the following SRM console commands:

```
>>>set ewa0_mode twisted      (for the twisted pair [10Base-T] port)
```

```
>>>set ewa0_mode AUI          (for the ThinWire port)
```

After changing the port, type `>>>init` or power cycle the machine.

The Windows NT operating system autosenses which network port is connected.

Troubleshooting

This section describes what to do if the system exhibits problems after the flashROM upgrade is completed.

It is assumed that the system was functioning normally before the upgrade installation. Refer to Table 1 to identify and solve problems that occurred after the upgrade installation.

Table 1. System Troubleshooting

Problem	Possible Cause	Action
Power indicator not on.	System not plugged in.	Turn off the system, plug it in, and then turn it back on again.
	No power at the wall outlet.	Use another wall outlet.
	Power supply failure.	Contact your service representative.
Power is on, but there is no screen display.	Brightness and contrast controls were inadvertently changed.	Adjust the brightness and contrast controls.
	Monitor is off.	Turn on the monitor.
System does not boot.	Loose cables.	Secure all cable connections.
Network not recognized.	Ethernet is set to AUI when using Twisted-Pair or Twisted-Pair when using AUI (ThinWire).	For OpenVMS and Digital UNIX systems, use the SRM firmware command: >>>set ewa0_mode twisted-pair <i>or</i> >>>set ewa0_mode AUI
	Ribbon cable reversed at J19 on the early version of the motherboard.	The MAU has been destroyed. Replace the MAU.