

EK-MS340-IN, B01

# MEMORY OPTION INSTALLATION CARD

Use this card as a quick reference to install MS340-XX memory options in AlphaServer / AlphaStation DS20 and DS20E systems.

WARNING: CPU modules and memory modules have parts that operate at high temperatures. Wait 2 minutes after power is removed before touching any module.

CAUTION: Wear an antistatic wrist strap when working on this system.

#### Overview

- Open the cabinet.
- Review the configuration rules.
- Locate the memory slots.
- Install the memory option.
- Verify the installation.

# **Before You Begin**

Keep these points in mind when installing a memory option or replacing a memory module:

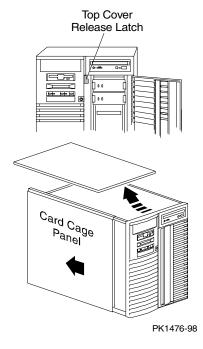
- The four modules in a memory option must be the same size. However, the options within a system box can be a mix of sizes.
- Memory options are installed in specific slots designated for each option.

## Open the Cabinet.

#### **DS20 Systems**

- 1. Shut down the operating system and power down the system.
- 2. Unplug the power cord(s).
- 3. Remove the covers to gain access to the system card cage. See Figure 1.
  - a. Unlock and open the front door.
  - b. Pull the top cover latch down to release the latch.
  - Using the groove at the rear of the top cover, pull the cover back about two inches, and lift it off.
  - d. Pull the card cage panel back and lift it away from the cabinet.

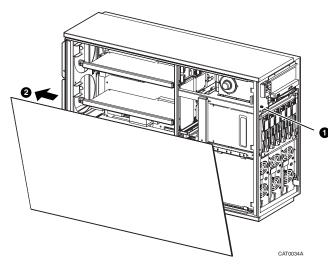
# Figure 1 Opening the DS20 Cabinet



### **DS20E Systems**

- 1. Shut down the operating system and power down the system.
- 2. Unplug the power cord(s).
- 3. Remove the cover to gain access to the system card cage. See Figure 2.
  - a. Open the front bezel.
  - b. Loosen the captive screw **1** attaching the side panel to the chassis.
  - c. Remove the panel with a rearward motion **2**.

Figure 2 Opening the DS20E Cabinet



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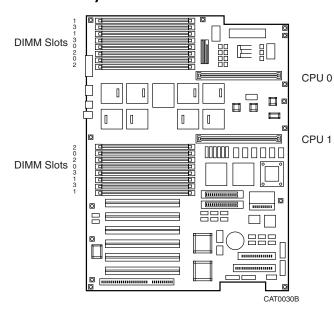
## **Review the Configuration Rules.**

- A memory option consists of four DIMMs.
- All four DIMMs in an option must be the same size.
- Convention places the largest memory option in slots marked 0 on the system board. SeeFigure 3.
  Convention also calls for other memory options to be the same size or smaller than the first memory option.
- Memory options must be installed in slots designated for each bank. The first bank goes into slots marked 0, the second bank into slots marked 1, and so on.

## **Locate the Memory Slots.**

Figure 3 shows the location of the 16 DIMM slots in DS20/DS20E systems. Two of the four DIMMs in each option go above the D chips and two go below the D chips. When installing additional memory, place DIMMs in the four slots labeled with the same slot number.

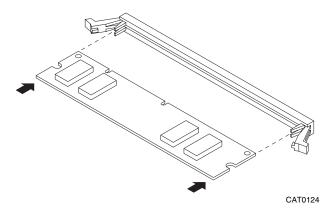
Figure 3 Memory Slot Locations on the System Board



## **Install the Memory Option.**

- 1. If necessary, remove either CPU to access the DIMM slots necessary for the installation.
- 2. Identify the slot locations for the option you are installing. See Figure 3
- 3. Open each memory connector by pushing the levers outward. See. Figure 4.
- 4. Align each DIMM in the connector and press down. The connector levers close.

Figure 4 Memory Card Installation



## Verify the Installation.

• Issue the **show memory** command to display the status of the system memory.

Part numbers for options can be found on the Internet. Using a Web browser, follow links to the appropriate AlphaServer / AlphaStation DS20 and DS20E supported options list from the URL:

http://www.digital.com/info/alphaserver/products.html