



EK-DS10M-IN. C01

## MEMORY OPTION INSTALLATION CARD

Use this card as a quick reference when installing the 3X-MS310-XX memory options in an AlphaServer DS10, or AlphaStation DS10 or XP900 system (page 3), or into an AlphaServer DS10L (page 7). Review Configuration Rules before you begin (page 2).

**WARNING:** *To prevent injury, access is limited to persons who have appropriate technical training and experience. Such persons are expected to understand the hazards of working within this equipment and take measures to minimize danger to themselves or others.*

*CPU and memory modules and the CD-ROM/floppy drive have parts that operate at high temperatures. Wait 2 minutes after power is removed before touching any module.*

*Wear an antistatic wrist strap when working on this system.*

**ACHTUNG:** *Um Verletzungen zu vermeiden, ist der Zugriff nur Personen gestattet, die eine entsprechende technische Schulung vorweisen können und über die notwendige Erfahrung verfügen. Des weiteren sollten die Gefahren, denen diese Personen bei der Arbeit mit dem Gerät ausgesetzt sein könnten, bekannt sein, und die folgenden notwendigen Schritte eingeleitet werden, um das Gefahrenrisiko für sowohl diese als auch andere Personen zu minimieren:*

- 1. Entfernen Sie leitfähigen Schmuck.*
- 2. Schalten Sie das System vor dem Zugriff auf den Systemkartenbehälter aus. Warten Sie zwei Minuten, bis sich die Komponenten abgekühlt haben.*
- 3. Tragen Sie bei der Berührung von internen Komponenten ein Antistatikarmband.*

## Overview

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## Before You Begin

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

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

## Configuration Rules

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- A memory option consists of two DIMMS.
- Both DIMMs in a bank must be the same capacity; it is recommended that they be from the same manufacturer.
- **DS10 and XP900:** Always fill at least one bank, bank 0 or 1, as shown in Figure 3, and as shown on the text on the motherboard.
- **DS10L:** Only Bank 0 is used. Install the left DIMM riser card in J15 and right one in J17. See Figure 6.

## Installing Memory in an AlphaServer DS10, or AlphaStation DS10 or XP900

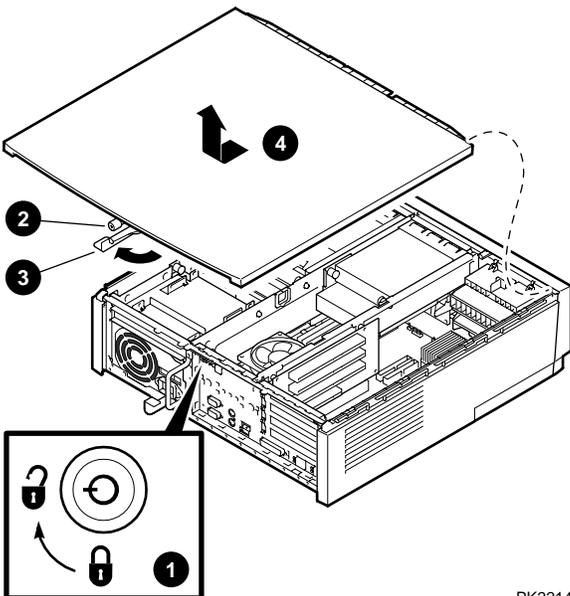
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### Open the DS10/XP900 System

Remove the top cover to gain access to the system.  
See Figure 1.

1. Shut down the operating system and power down the system.
2. Unplug the power cord.
3. Unlock the top cover ❶.
4. Loosen the captive screw at the top of the bulkhead ❷.
5. Push down on the lever to the right of the screw and pull it out, perpendicular to the system ❸.
6. Slide the cover toward the back of the system. Lift it off.

Figure 1 Opening the DS10/XP900 System

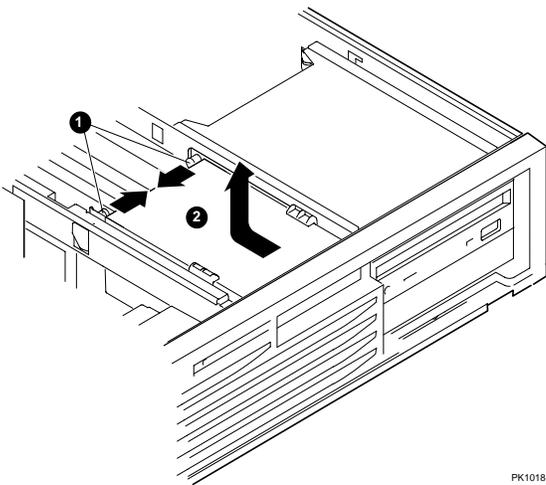


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## Remove the Floppy Disk Drive

To access the memory slots in the DS10/XP900 systems, remove the floppy disk drive.

**Figure 2 Removing the Floppy Disk Drive (DS10/XP900)**

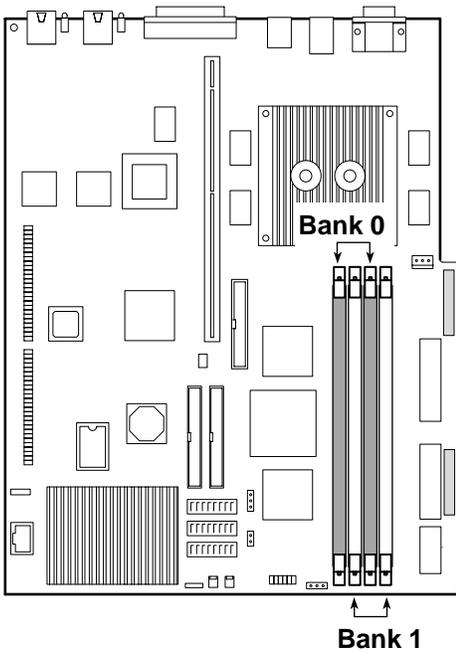


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1. Hold on to the cylinder pins, which secure the floppy disk drive unit. Pull them toward the center (see Figure 2) **1**.
2. Pull the floppy drive unit back and up **2**, removing it from the front panel. Place the unit on top of the CD-ROM drive.

Figure 3 shows the location of the DIMM slots on the system motherboard.

**Figure 3 DS10 and XP900 Memory Slot Locations**

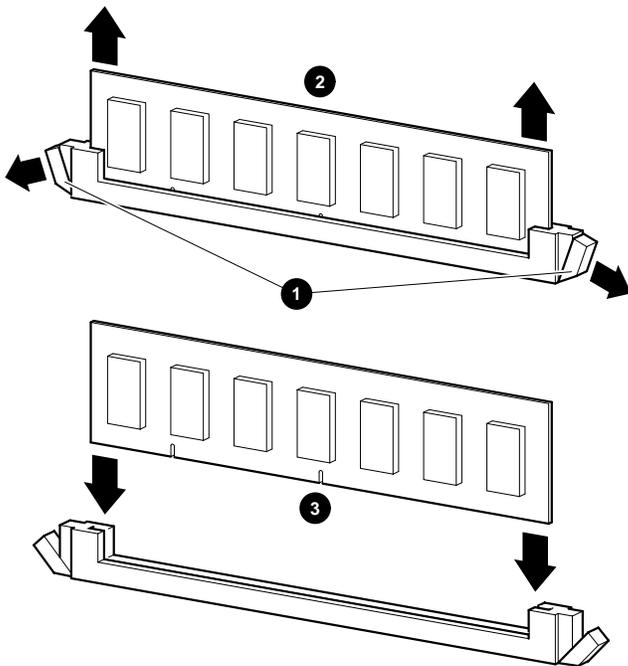


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### **Install the Memory Option**

1. Identify the slot locations for the option you are installing. (Note that the DS10L system uses only Bank 0.) See Figure 3.
2. Open the memory connector by pushing the levers down and outward. See Figure 4 ❶.
3. If you are replacing an existing module, remove it by pulling upward ❷.
4. Align each DIMM in the connector and press down ❸. The connector levers close.

**Figure 4 Installing Memory in the DS10 and XP900**



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### **Restart the System**

1. Replace the floppy disk drive and secure it with the cylinder pins.
2. Replace the system cover by placing it on the system and gently push it down and forward. Fasten the cover using the captive screw at the back of the system.
3. Lock the system.
4. Plug the power cord back in.
5. Turn the system on.

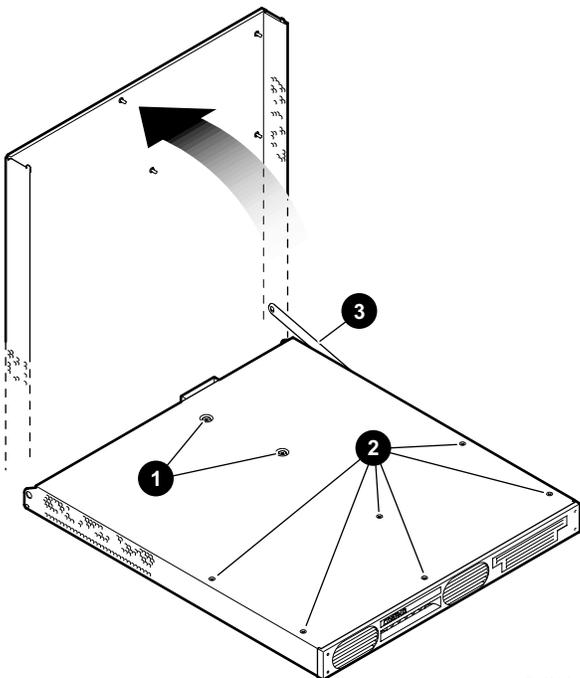
## Installing Memory in an AlphaServer DS10L

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### Open the DS10L System

1. Shut down the operating system and power down the system.
2. Unplug the power cord.
3. Loosen the six (6) captive quarter-turn screws on the cover. See Figure 5 **1**.
4. Loosen the two captive screws on the cover **2**.
5. Lift the cover and secure it on the cover side hold-open bracket **3**, perpendicular to the base (90°).

Figure 5 Opening the DS10L System



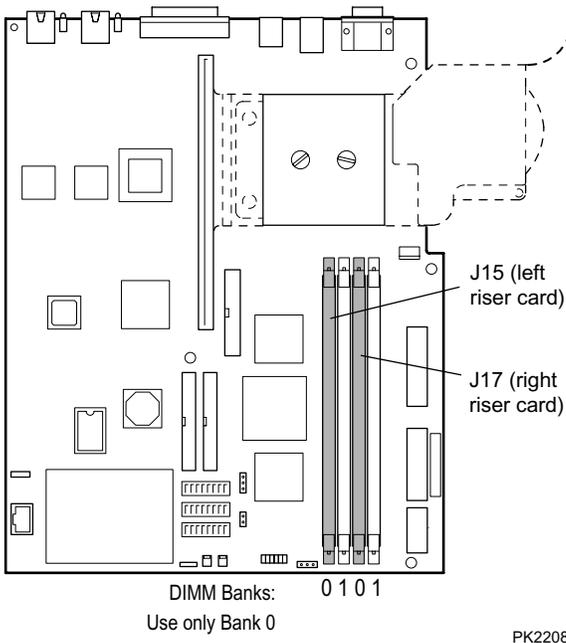
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## Install the Memory Option

The AlphaServer DS10L uses a memory riser card to accommodate its 1U width. The riser card releases/reseats using the same connectors as the DIMMs.

Note that the DS10L uses only Bank 0 for memory. Bank 1 is not used. See Figure 6.

**Figure 6 DS10L Memory Slot Location**

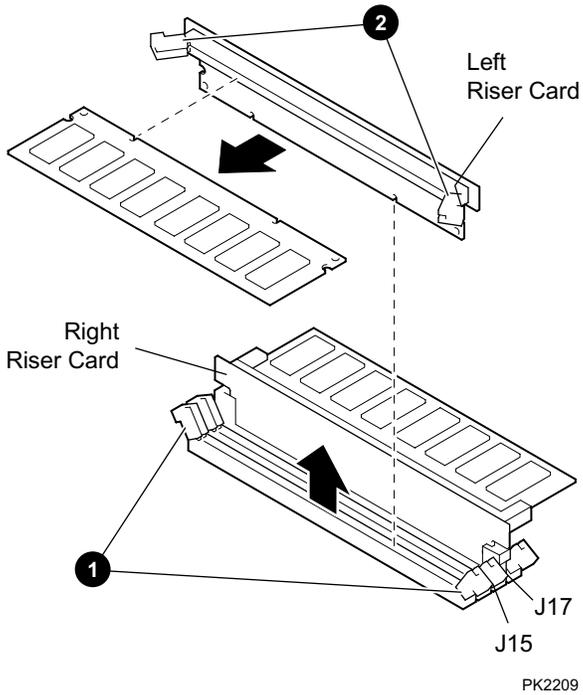


1. Wearing an anti-static strap, release both memory riser cards by pushing the levers at each end down and outward. Pull the riser card up out of the system. See Figure 7 ❶.
2. Release the DIMM from the riser card by pushing the levers at each end down and outward ❷.
3. Align each DIMM in a riser card and press down to close the levers.

Each DIMM riser card is silkscreened with its key position of right or left riser.

4. Align the left DIMM riser card in the J15 connector for Bank 0 and press down. The connector levers close.
5. Align the right DIMM riser card in the J17 connector for Bank 0 and press down to close the levers ❶.

**Figure 7 Installing Memory in the DS10L**



### Restart the System

1. Release the cover from the notch on the hold-open bracket and lower the cover onto the top of the system.
2. Check the sides, to ensure that they are guided into place in the front bezel.
3. Secure the two captive screws.
4. Secure the six quarter-turn screws.
5. Restore system power and restart the system.

### Verify the Installation

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Tru64 UNIX and OpenVMS systems will power up in the SRM console. At the console prompt,

- 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 supported options list from the URL:

<http://www.compaq.com/alphaserver/>