



# Sun Blade™ 150

## *DIMM Installation Guide*

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# Installing DIMMs in the Sun Blade 150 System

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## Verifying the Current DIMM Configuration

Before you start to install additional DIMMs, perform the following procedures.

**1. Reboot your system.**

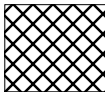
The banner screen is displayed at the top of your monitor screen as your system reboots (FIGURE 1).

**2. Read the banner screen on your monitor to verify the amount of memory already installed in your system.**

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**Note** – The Sun Blade 150™ system reports the CPU as an UltraSPARC™ IIe processor. The CPU in your system is an UltraSPARC III processor.

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Sun Blade 150, UltraSPARC-IIe 650 MHz, Keyboard Present.  
Copyright 1998-2002 Sun Microsystems, Inc. All rights reserved.  
OpenBoot 4.6, **128 MB memory installed**, Serial #54528.  
Ethernet address 8:0:20:1a:b3:c8, Host ID: 7200d500.

FIGURE 1 Banner Screen Example

## Supported DIMM Configurations

You must install either one DIMM, two DIMMs, or four DIMMs. The Sun Blade 150 system will not function properly with only three installed DIMMS. The first DIMM must be installed in slot 1.

## Preparing for Installation

Before installing any components, you must power off the system, remove the system cover, and attach an antistatic wrist strap.

## Powering Off the System

1. **Exit from any applications that are running.**
2. **Choose one of the two power off methods, orderly or immediate:**
  - To perform an orderly power off:
    - a. **Press the power switch and immediately release it (FIGURE 2).**

The system shutdown menu is displayed.

## **b. Select Shutdown.**

The system performs internal shutdown procedures.

- To perform an immediate power off, press and hold the power switch for four seconds before releasing it.



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**Caution** – The immediate power off method does not perform an orderly shutdown of the operating system and data might be lost.

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3. **Verify that the power-indicator LED on the power switch turns off.**
4. **Turn off power to the monitor and to all external devices.**

## **Removing the System Cover**

1. **Disconnect the system power cord to ensure that all power is removed from the system (FIGURE 2).**
2. **Disconnect any cables that are attached to external devices, such as the monitor, keyboard, and mouse.**



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**Caution** – Pressing the power switch does not remove all power from the system; a standby voltage remains in the power supply. To remove all power from the system, you must disconnect the system power cord.

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3. **At the system back panel, remove the two screws that secure the cover.**
4. **Slide the cover back to the end of the system chassis and lift the cover off.**

## **Attaching an Antistatic Wrist Strap**



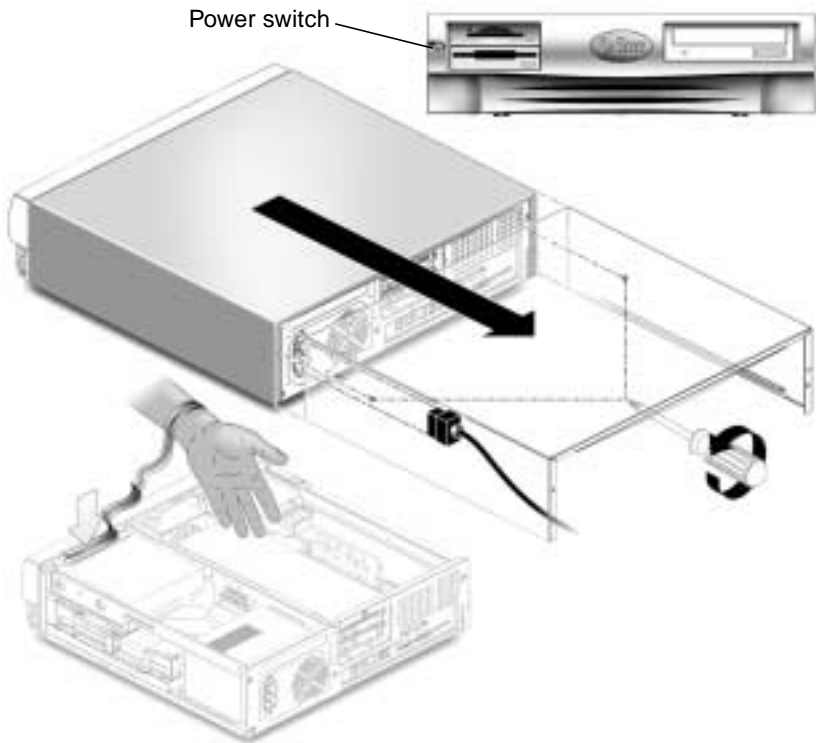
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**Caution** – When handling DIMMs or other internal components, always wear an antistatic wrist strap to equalize all electrical potentials within the system.

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1. **Unwrap the first two folds of the wrist strap and wrap the adhesive side firmly against your wrist.**
2. **Peel the liner from the copper foil at the opposite end of the wrist strap.**

- 3. Attach the copper foil end of the wrist strap to the system chassis to provide a ground for electrostatic discharge (FIGURE 2).**



**FIGURE 2** Preparing for DIMM Installation



## Installing the DIMMs

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**Note** – For maximum performance, the DIMMs in the Sun Blade 150 system have been specifically designed for it. Do not use DIMMs from a different system to upgrade or replace the DIMMs in this system. Verify with your Sun sales or service representative that the DIMMs you order have been certified by Sun for the Sun Blade 150 system.

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**Note** – You must install either one DIMM, two DIMMs, or four DIMMs. The Sun Blade 150 system will not function properly with only three installed DIMMs. The first DIMM must be installed in slot 1.

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1. **Power off the system, remove the cover, and attach an antistatic wrist strap as described in “Preparing for Installation” on page 2.**



**Caution** – DIMMs are extremely sensitive to static electricity. Ordinary amounts of static electricity from clothing or the work environment can destroy or damage DIMMs.

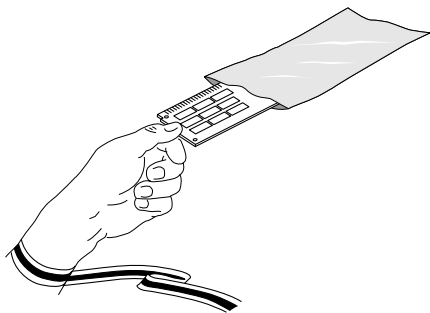
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**Caution** – Hold DIMMs only by the edges to avoid damaging them (FIGURE 3).

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**FIGURE 3** Unpacking the DIMM

- 2. Push apart the ejection levers at each end of an empty DIMM connector on the motherboard (FIGURE 5).**
- 3. Unpack the DIMM, holding it only by the edges (FIGURE 3).**

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**Note** – When installing additional DIMMs, first fill the connector closest to the motherboard edge, then fill towards the CPU (FIGURE 4).

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- 4. Position the DIMM in the connector, ensuring that the alignment notches on the bottom of the DIMM are aligned with the connector alignment keys (FIGURE 5).**
- 5. Press firmly on both DIMM top corners at the same time until the DIMM is fully seated.**

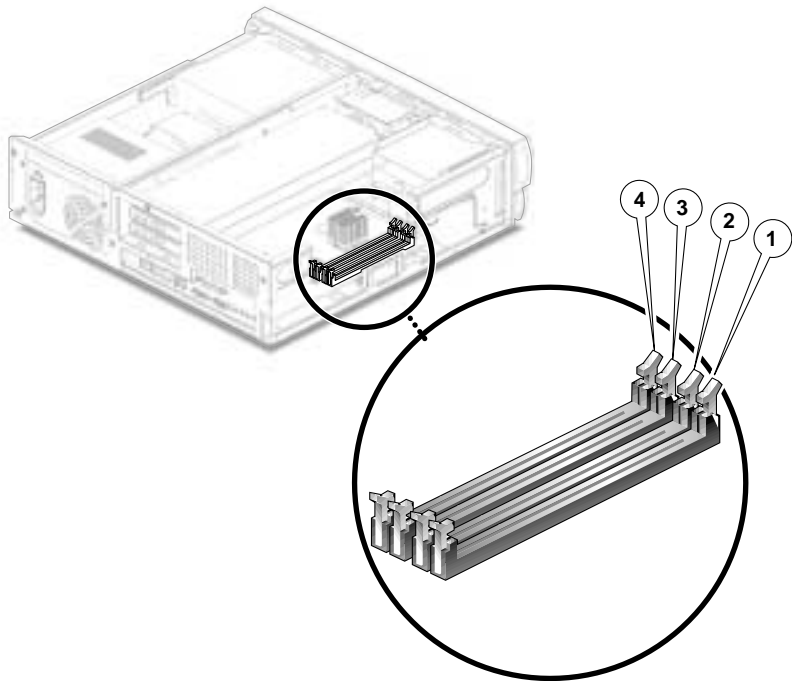


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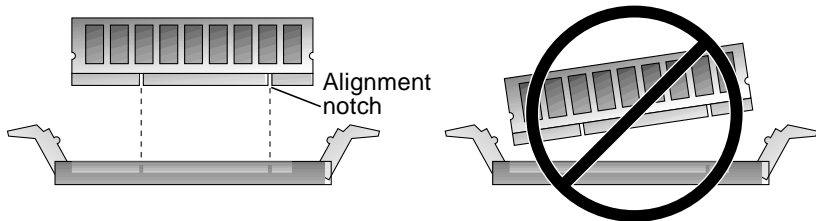
**Caution** – Seating the DIMM into a slot unevenly can cause short circuits that damage the system. Ensure that all contacts engage at the same time. Do not rock the DIMM into place. You should hear a "click" when the DIMM is properly seated (FIGURE 5).

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- 6. Verify that the ejection levers close over the notches on both ends of the DIMM.**



**FIGURE 4** DIMM Installation Order



**FIGURE 5** Correct DIMM Insertion

- 7. Repeat Steps 3 through 6 until you are finished installing the additional DIMMs.**
- 8. Complete the next section, “Finishing Component Installation” on page 11.**

## **Finishing Component Installation**

- 1. Reconnect the system power cord (FIGURE 2).**
- 2. Remove your antistatic wrist strap from the chassis.**
- 3. Replace the system cover onto the system chassis.**
- 4. Align the cover tabs with the slots on the system chassis, then slide the cover toward the front of the system until the front cover tabs lock.**

5. **Replace the two screws that secure the rear of the cover to the system chassis.**
6. **Reconnect the monitor cable and cables from any other external devices to the system.**

## **Verifying That the System Recognizes the New DIMMs**

1. **Turn on power to the monitor and to all external devices.**
2. **Press the system power switch on the front panel and release it.**
3. **After several seconds, verify that the power-indicator LED on the power switch is lit and listen to verify that the system fans are spinning.**  
The power-indicator LED on the power switch illuminates after the system begins the internal booting process.
4. **Check the banner screen on your monitor to verify that the system recognizes the additional memory.**  
The banner screen is displayed on the monitor a few seconds after you power on the system (FIGURE 1). The banner should now report the total Megabytes of memory for all the installed DIMMs.

# Troubleshooting Installed DIMMs

If your system banner does not indicate the correct amount of memory installed, perform these procedures.

- 1. Power off the workstation, remove the cover, attach an antistatic wrist strap, and disconnect the power cord.**
- 2. Verify that the DIMMs are firmly and evenly pressed into the connectors and the ejection levers are closed.**
- 3. Verify that 1, 2, or 4 DIMMs are installed.**  
The system will not function correctly with three installed DIMMs.
- 4. Verify that the DIMMS are installed in the correct order. See FIGURE 4.**
- 5. Close and power on the workstation as described in Finishing Component Installation.**

## Additional Information About Sun Blade 150 System DIMMs

The *Sun Blade 150 Service Manual*, 816-4379, contains information on DIMMs in the following sections.

- Chapter 4, “Troubleshooting”
- Chapter 8, “Removing and Replacing Components”
- Appendix C, Section C.9, “Memory Architecture”

Updates to all Sun Blade 150 documents can be found in the *Sun Blade 150 Product Notes*, 816-1163.

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