HP NetServer LH 3/LH 3r
DIMM Installation Guide

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Preface

Purpose of This Guide

This guide describes how to install DIMMs (Synchronous Dynamic Random Access Memory Dual In-Line Memory Modules), HP Product Numbers D6097A, D6098A, and D6099A, in an HP NetServer LH 3 or LH 3r.

Contents of This Guide

This guide includes the following topics:

- An Introduction, including verifying the contents of the shipping box, and important precautionary warnings
- Preparation instructions, such as removing the chassis side cover, and removing the system board (for NetServer LH 3r only)
- Instructions for installing DIMMs on the system board
- Hardware warranty information

Intended Audience

This guide is intended for the person who installs, administers, and troubleshoots network servers. Hewlett-Packard Company assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.

Related Documentation

The following documents describe the HP NetServer LH 3/LH 3r:

- The *HP NetServer LH 3/LH 3r User Guide*
- The *HP NetServer LH 3 Installation Road Map*, or the *HP NetServer LH 3r Installation Road Map*
- The *HP NetServer LH 3 and LH 3r Technical Reference Card*
- The *HP NetServer Online Documentation CD-ROM*

WARNING	Before removing the cover, always disconnect the power cord and unplug telephone cables. Disconnect the power cord to avoid exposure to high energy levels that may cause burns when parts are short-circuited by metal objects, such as tools or jewelry. Disconnect telephone cables to avoid exposure to shock hazard from telephone ringing voltages. Note that the power switch does not turn off the standby power. Disconnect the power cord to turn off standby power. If the backlight on the LCD display is still on, standby power is still on.

CAUTION	Wear a wrist strap and use a static-dissipating work surface connected to the chassis at all times.

1 Introduction

Verifying Contents

The contents of the shipping box include:

- One HP qualified DIMM.
- The *HP NetServer LH 3/LH 3r DIMM Installation Guide.*

CAUTION	To avoid damaging the DIMM with electrostatic discharge, handle the DIMMs in a static-free environment only. Hold the module by its edges and avoid touching its components. When you set down a DIMM, always place it on its anti-static container.

Prepare for Installation

Gather the tools and the documentation you need to install the DIMMs before removing them from their packaging.

Tools You Need

To install DIMMs, you need an anti-static service kit (3M™ 8501/8502/8503 or equivalent). This kit includes a static-dissipating Installation Instructions

2 Preparation

This chapter includes guidelines and instructions for installing DIMMs in the specified sequence on the system board.

Removing the Cover (NetServer LH 3)

To remove a cover:

1. Turn off the HP NetServer and disconnect the power cord and telephone cord.
2. Unlock the bezel lock with the key from the key bag located on the rear of the HP NetServer (see Figure 2-1).
3. To remove the front bezel, pull the top of the bezel away from the chassis, and then lift the bezel up and off of the chassis.
4. Loosen the thumbscrew at the front of cover 3 and pull the cover forward, using the handle on the cover, and then lift it off the chassis (see Figure 2-1).

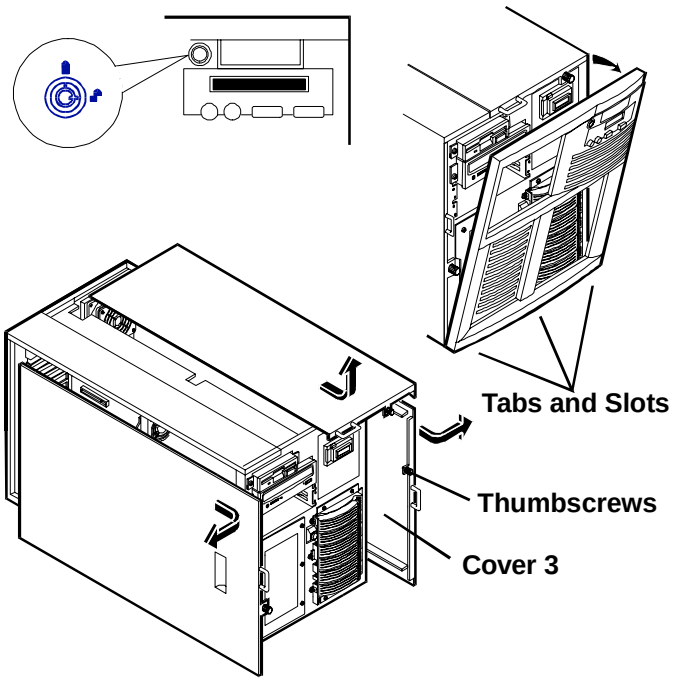

Figure 2-1. Removing the Cover (NetServer LH 3)

Removing the Cover (NetServer LH 3r)

1. Turn off the HP NetServer and disconnect all power and telephone cords.
2. Remove the bezel, the bezel hinge, and the screws securing the latch plate to the front-right rack upright (see Figure 2-2).
3. Slide out the NetServer until the rail locks "click" into place.

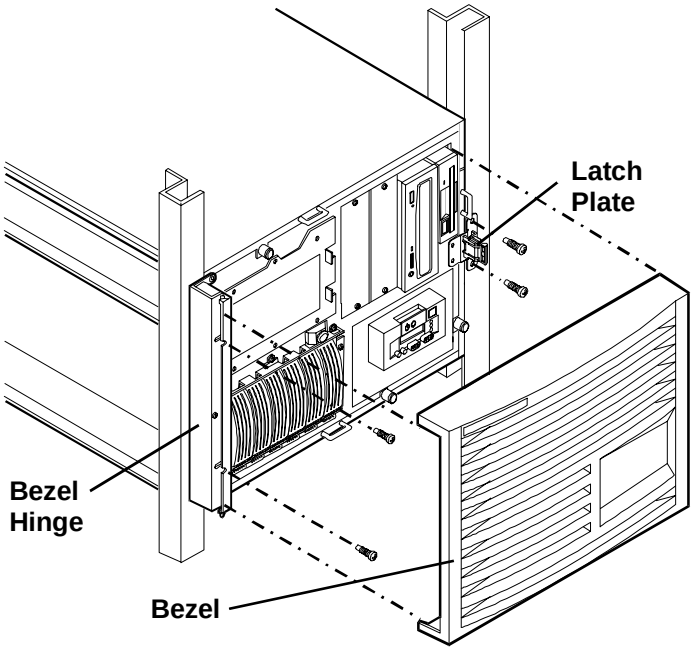

Figure 2-2. Sliding Out the NetServer From the Rack

4. Loosen the thumbscrew at the front of cover 2 and pull the cover forward, using the handle on the cover, and then lift it off the chassis (see Figure 2-3).

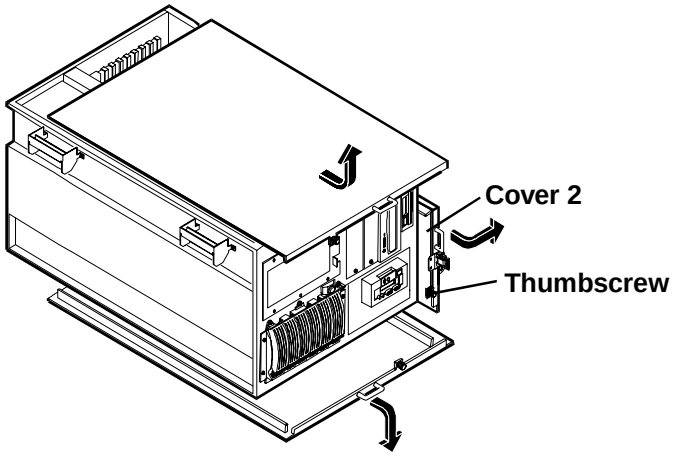

Figure 2-3. Removing the Cover (NetServer LH 3r)

Removing the System Board (NetServer LH 3r)

To remove the system board from the LH 3r:

1. Rotate the system board retaining latches until they point away from the chassis, and the system board has come out of its socket (see Figure 2-4).
2. Slide the system board out of the chassis and place it on a static-dissipating work surface (see Figure 2-5).

CAUTION	Place the NetServer LH 3r system board on the work surface so that the metal bracket extends off of the work surface (see Figure 2-5). Failure to orient the system board this way may result in damage to the system board when installing memory.

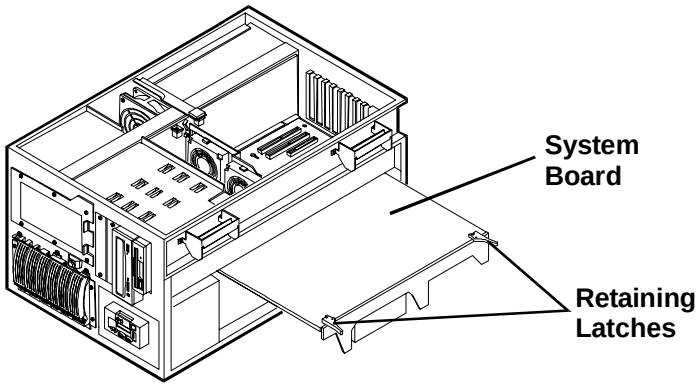

Figure 2-4. Removing the System Board (NetServer LH 3r)

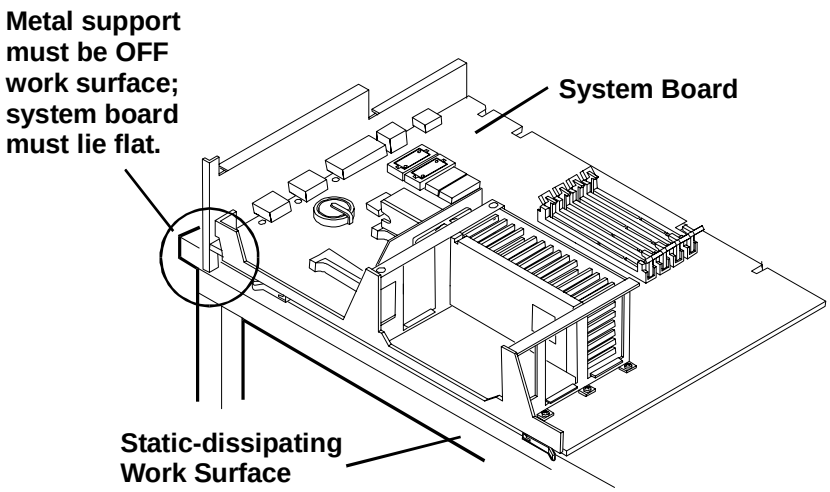

Figure 2-5. Orienting the System Board (NetServer LH 3r)

3 Installing DIMMs

This chapter includes guidelines and instructions for installing DIMMs in the specified sequence on the system board.

CAUTION	Use only DIMMs acquired from HP. Contact HP Customer Support for a list of qualified DIMMs. HP will not warranty or support configurations that use non-HP DIMMs.

Installation Guidelines

You can use 64 MB, 128 MB, and 256 MB DIMMs for a maximum capacity of 1 GB of RAM. Note the following installation guidelines before adding memory:

- The minimum memory configuration for the NetServer LH 3/LH 3r is one 128 MB DIMM.
- The system board DIMM sockets are numbered from 0 to 3, as shown in Figure 3-1.

- DIMMs may be installed in any quantity and in any DIMM socket on the system board. DIMMs that differ in capacity can be mixed.

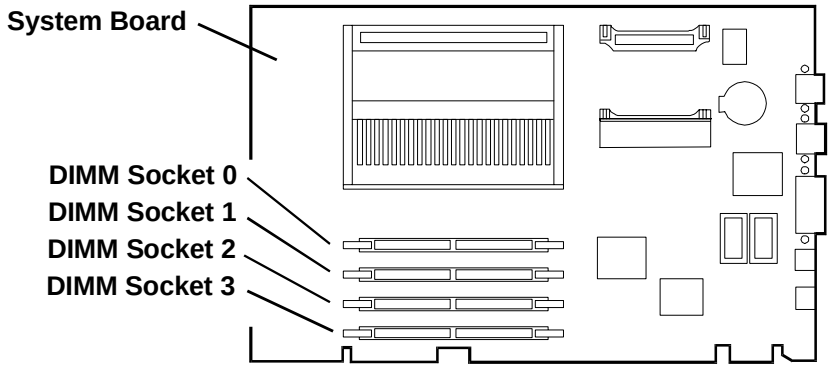

Figure 3-1. DIMM Socket Location

Installing DIMMs

1. Remove an HP DIMM from its container, handling the module by its ends; do not touch the pins. Lay it on an anti-static surface.
2. Locate the socket in which you will install the DIMM. Spread the two retaining clips outward (see Figure 3-2).

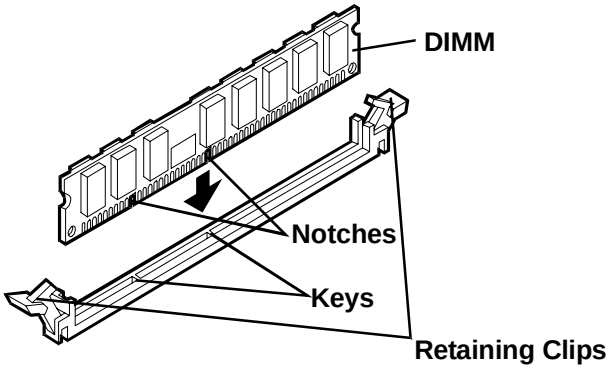

Figure 3-2. Installing the DIMM In a Socket

3. Align the notches on the DIMM with the keys in the socket (see Figure 3-2).

4. Hold the DIMM at a 90-degree angle to the system board.
5. Insert the DIMM carefully into the socket. The retaining clips will close automatically if it is inserted properly.

CAUTION	*Do not rock the DIMM into place, but apply firm and even pressure directly downward*. If the retaining clips do not close, remove the module and repeat Steps 3 through 5.

6. Repeat Steps 1 through 5 to install all DIMMs.
7. On the NetServer LH 3r, reinstall the system board.
8. Replace the cover and bezel.

4 Replacing the Cover

After installing the memory, replace the cover and bezel.

HP NetServer LH 3

1. Insert the tabs inside the cover into the slots in the chassis and slide the side cover toward the rear. Tighten the thumbscrew at the front of the cover.
2. To replace the bezel, insert the tabs at the bottom of the bezel into the slots at the bottom of the chassis front and press the top of the bezel to the chassis until it snaps into place. Lock the bezel lock with the key provided.

HP NetServer LH 3r

1. Insert the tabs inside the cover into the slots in the chassis and slide the side cover toward the rear. Tighten the thumbscrew at the front of the cover.
2. Unlock the rail locks and slide the NetServer back into the rack chassis.

3. Reinstall the latch plate, bezel hinge, and bezel (see Figure 2-2).
4. Replace all power, telephone, and I/O cables.

5 Warranty and Support

This HP NetServer accessory is covered by a limited hardware warranty for a period of one year from receipt by the original end-user purchaser.

Once installed in an HP NetServer, this accessory may carry the longer of either a one-year warranty or the remainder of the warranty period for the NetServer in which it is installed.

This accessory may be serviced through expedited part shipments. In this event, HP will prepay shipping charges, duty and taxes; provide telephone assistance on replacement of the component; and pay shipping charges, duty and taxes for any part that HP asks to be returned.

The customer may be required to run HP-supplied configuration and diagnostic programs before a replacement will be dispatched or an on-site visit is authorized.

Refer to the warranty statement provided with your original HP NetServer system documentation for the warranty limitations, customer responsibilities, and other terms and conditions.

HP Repair and Telephone Support

Refer to the *Service and Support* chapter of your HP NetServer system documentation for instructions on how to obtain HP repair and telephone support