Compaq ProLiant*Ô* 8500 Overview

700-MHz Model Overview

The 700-MHz model ProLiant 8500 is available as a new server using the Pentium III Xeon processor. The 700-MHz ProLiant 8500 contains all the features of the 550-MHz model, and in addition, provides virtual power button capability used with a Remote Insight Lights Out Edition board.

The 550-MHz models are upgradeable to support 700-MHz processors by purchase of an Upgrade Kit option (see below)

Table 1 identifies the 700-MHz model servers.

Table 1: Part Numbers and Configuration Codes for the 700-MHz model ProLiant 8500

Description	Part Number	Configuration Code
ProLiant 8500 700/2 M (8P @ 2MB, 4 GB SDRAM)	168758-001	DR61
ProLiant 8500 700/2M (4P @ 2MB, 2 GB SDRAM)	159378-001	DR51
ProLiant 8500 700/1 M (2P @ 1MB, 1 GB SDRAM)	159380-001	DR41
ProLiant 8500 CTO	128408-999	DKVZ

Distinctive Features of the Upgraded ProLiant 8500 Server

Changes that these new models bring to the ProLiant 8500 Pentium III line include:

- 700 MHz processors with 1 MB or 2 MB integrated Level 2 cache

- An updated ROMPaq image dated 05/25/2000 or later, accessible via the Compaq website:

  http://www.compaq.com/support/files/server

  Click on the "SoftPaqs" link.

- Full support for virtual power button feature of the Remote Insight Lights Out Edition board (p/n 157866-001 (NA), 157866-021 (Euro), 157866-371 (APD + JP)

Switch Settings

Implementation of the 700-MHz model, either as an optional upgrade or as a newly procured system, does not require modification to any internal switch settings.

Upgrade Path to the 700-MHz Model ProLiant 8500

The upgrade for the ProLiant 8500 is a service event and should not be done by customers but rather an authorized Compaq service representative. The upgrade kit for the ProLiant 8500 includes a new processor drawer containing four 700 MHz/2 M processors already installed, a ROMPaq diskette with the system ROM update, and a replacement BootBlock ROM for the I/O drawer. The I/O board, in the I/O drawer, does not have to be replaced; however, the BootBlock ROM on the system board needs to be replaced. The upgrade kit includes the new BootBlock ROM and a tool to remove and replace the BootBlock ROM.

The upgrade is a service event and must be performed by an Authorized System Service Provider, or equivalent in Compaq Customer Services. The person who performs the installation should be an ASE trained on the ProLiant 8500. Training for the installation is available on the Learning Utility and available to partners registered with Compaq University as well as internal personnel in North America.

▲ **Note**

When upgrading to either a 700-MHz system, the System I/O Board does not have to be changed; however, you must run ROMPaq to upgrade the ROM.

Upgrade Options

Table 2 lists the upgrade option kit. Spares for the assemblies contained within the upgrade kit are the same for the ProLiant 8500. Refer to TechInfo for a complete list of options and part numbers.

Table 2: Option and Spare Part Numbers for the 700-MHz Processor Upgrades

Description	Part Number	Option or Spare
Xeon 700/2MB – Pentium III Processor Upgrade Kit for ProLiant 8500	200799-B21	Option

The upgrade kit consists of the following:

- 4 700 MHz/2 MB Processor option kits
- 4 Processor Power Modules
- 4 processor terminator boards, all installed in a Processor drawer
- BootBlock ROM for chip swap on the I/O board
- ROM BootBlock removal tool
- ROMPaq dated 5/25/00 or later

There are no special spares for the upgrade kit components. If a spare is needed for the various components of the upgrade, here are the spares:

System drawer (with processor board)	122216-001
I/O (drawer)	122229-001
700 MHz processor with 2-MB cache and heatpipe	178944-001

Performing the Upgrade

▲ **Note**

The upgrade is described in detail in the document "Adding Processors to ProLiant 8500 Servers." The part number is 201342-001. This whitepaper provides a brief description of the upgrade. The document "Adding Processor to the ProLiant 8500 Servers" can be found on the following website: http://csnet.compaq.com/TechInfo/TechInfo.htm follow this path:

Enterprise →ProLiant → ProLiant 8500 → Reference Library → Reference Guides → 700MHz Processor Upgrade Guide

Preparing the Server for Upgrade

- Back up your server data

- Shut down the system

- Insert the ROMPaq diskette and boot the system

- Update the system ROM (this needs to be done to support the new processors)

▲ **Note**

Since this system has a redundant System ROM, and since support for new processors is added, both sides of the System Rom have to be re-programmed.

Replacing the BootBlock ROM

- Determine if the BootBlock ROM needs replacing

- View the BootBlock ROM date through the IMD or Inspect utility. If the ROM date is earlier than 4/17/00, then the BootBlock ROM needs to be replaced. If the BootBlock ROM date is later than 4/17/00, then do NOT replace the BootBlock ROM and proceed to Replacing the Processor and Memory Module.

- The BootBlock ROM chip is located on the I/O board, which is in the I/O module. To gain access to the chip you must:

- Power off the system

- Slide the server out of the rack until it is fully extended

- Lift the front edge of the top access panel. Then slide the panel toward the front of the server.

- Remove the cable management arm

- Back the I/O module out of the rear of the chassis approximately 2 inches to gain access to the fan cage assembly

- Remove the BootBlock ROM chip using the extraction tool provided in the kit

- Insert new chip

- Reinstall the I/O module components

- Reconnect the cable management arm

Replacing the Processor and Memory Module

- Remove the memory board, redundant Processor Power Module, and Cache Accelerators (if installed) from the existing processor and memory module. Install these components in the new module.

- Install the new processor and memory module in the server.

- Slide the server back into the rack and secure it with thumbscrews

Software Supported

The 700-MHz model supports the same operating systems as the 550-MHz model, specifically:

The ProLiant 8500 (with support for a maximum of eight PIII Xeon processors) supports the following operating systems:
- Microsoft Windows NT Server 4.0, Enterprise Edition
- Microsoft Windows NT Server 4.0, Terminal Edition for Compaq 8-Way Servers (1-to-8 processor support is only available from Compaq, 1-to-4 processor support is available from Microsoft)
- Microsoft Windows 2000 Advanced Server
- Microsoft Windows 2000 Data Center (available at a later date)
- Novell NetWare 4.11, 4.2, and 5.0 SMP
- SCO OpenServer 5.0.4 and 5.05
- SCO UnixWare 7.0.1, 7.1, and 7.1.1

▲ **Note**

Other operating systems are supported (including Windows NT Server 4.0 and Windows 2000 Server), but only with a maximum of four processors.

Power Requirements

High-line input voltage (208VAC) is recommended for the ProLiant 8500. Some configurations of this product may not have fully redundant power operation when using low-line input power (120VAC).

Cooling Requirements

The processors used in the ProLiant 8500 require increased airflow, which is provided by the Compaq Rack 9000 Series: the 42U Rack (Compaq Part Number 120663-B21), the 36U Rack (Compaq Part Number 120664-B21), and the 22U Rack (Compaq Part Number 120665-B21). When the ProLiant 8500R is installed in a Compaq Rack 7000 or 4000 Series, the processor also requires the Compaq High-Airflow Rack Door Insert, Compaq Part Number 327281-B21 (42U) or Compaq Part Number 157847-B21 (22U).

Important Notes

> **!** **Important**
>
> Class B Regulatory Information - Your server currently complies with the FCC Class B requirements for digital devices. In order to maintain compliance with Class B regulations, the enclosed material must be installed according to the instructions of this upgrade kit. Failure to follow these instructions may void the user's authority to operate the equipment.