CPU Installation

Product Update

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Warranty and Support

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

HP Repair and Telephone Support

Refer to the *Warranty & Support for your HP Server* booklet supplied with your HP Server system documentation for instructions on how to obtain HP repair and telephone support.

Related Documents. The HP Server Documentation CD-ROM has been provided with your server. It contains a complete documentation set for the server, including localized versions of key documents. Included on the CD-ROM are the *Site Preparation* and *Operations and Maintenance* guides, which contain in-depth troubleshooting, installation, and repair information.

In addition, the latest versions of all these documents, and any product updates to these documents, are posted under the appropriate server, at:

http://docs.hp.com

1 CPU Installation

Problems have been encountered when installing CPU modules on processor extender boards in the field. The most common problem is bent processor pins, which can short out processor circuits. This notice emphasizes the proper method of CPU installation and cautions against potential errors. Read these instructions and use care to ensure a successful CPU installation.

CPU modules are delivered in protective packaging that shields processor pins and braces the module against shock and rough handling. Verify that the packaging is intact before proceeding. If damage is noted, contact the shipper. Do not attempt to repair damage or straighten pins.

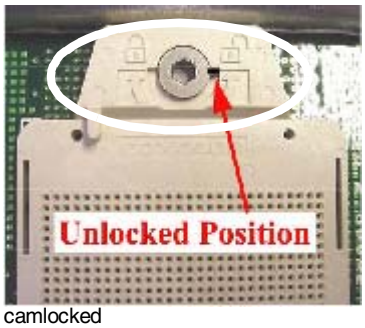
Important Steps

- Locate the ESD kit and CPU Installation Tool before beginning installation.
- Follow the instructions in the ESD kit to ensure proper ESD procedures are used.
- Do not remove the cover from processor pins until you are ready to install the CPU module.
- Refer to product documentation for instructions to remove the processor extender from the chassis, to remove existing CPU module(s) from the processor extender, to determine the location of CPU module installation, and to install a CPU module. Read all instructions before you begin, to ensure familiarity with installation requirements.
- Visually inspect the pins of each CPU module before installation. (Use ESD precautions when handling the CPU module.) All pins should be straight and free of dirt and debris.

NOTE Do not attempt to straighten bent pins. If bent pins are observed, contact your HP representative for instructions on how to return the CPU assembly.

- Visually inspect the processor extender board socket. Make sure all holes are clear of obstructions. If blocked holes are observed, contact your HP representative for instructions.
- Installation order is important. If 2 or more CPU modules are to be installed, always install CPU1 before installing CPU0. If 4 CPU modules are to be installed, always install CPU3 before installing CPU2.
- Use the CPU Installation Tool to ensure the socket is in the **unlocked** position. If installation is attempted when the socket is locked, pins may be bent during installation.

Figure 1-1 Socket - Unlocked Position



camlocked

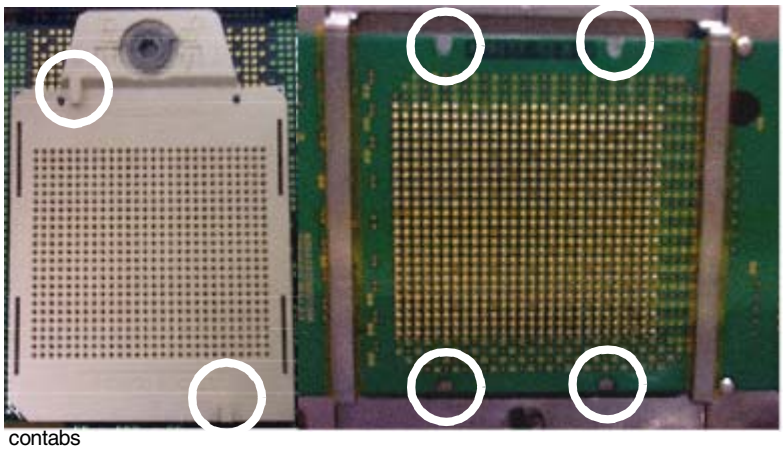
When installing the CPU module, use care to insert all processor pins into the socket simultaneously. The two connectors must be parallel as the pins are inserted in to the sockets.

When pins are bent during installation, the damage usually occurs at a corner of the connector. Do not allow the pins at one corner of the connectors to be joined before the remaining pins enter the socket. Careful handling is required to protect the pins during installation.

Pin Alignment Aids

1. The processor sockets on extender boards include alignment tabs to ensure that processor pins are correctly aligned during CPU module installation. These tabs fit into cutouts in the connector on the CPU module. Check that the tabs and cutouts are intact and free of debris before installation.

Figure 1-2 CPU Tabs and Cutouts


contabs

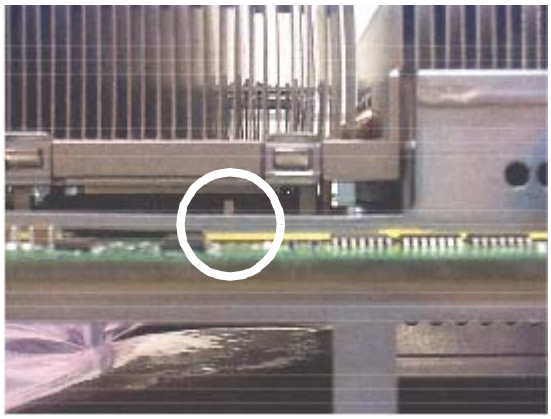
2. Guide pins are provided on the processor extender board to assist in alignment. While these pins do not assure precise alignment, they will position the CPU module for installation. Check that the guide pins intact and free of debris before starting. Check that the corresponding holes in the CPU module are clean and free of debris before starting.

Figure 1-3 CPU Guide Pins

guidepins

3. When installing a CPU module, visually confirm that the CPU assembly is parallel to the processor extender board and that socket tabs mate with the corresponding cutouts in the processor connector.

Figure 1-4 CPU Module Seating



conseating