



DIGITAL Personal Workstation

Pentium® II Processor Upgrade Instructions

Introduction

Your DIGITAL Personal Workstation is designed to support up to two processors, and processor speeds up to 533MHz. This document details how to upgrade the processor(s).

Installing a Higher Performance Processor

Your workstation is equipped with either a single or dual Intel Pentium® II processor module installed in the appropriate Slot 1 socket on the Processor module. Total workstation performance is based upon your workstation main logic board design, speed and L2 cache of the processor module(s), amount of workstation memory, video controller type and amount of video memory, and performance characteristics of your hard disk drive.

If your workstation was purchased with a single Pentium® II processor and you wish to upgrade to a faster processor, or to a dual processor configuration, consider the following information prior to upgrading your workstation.

1. Your workstation processor module contains:
 - An Intel 440LX memory and PCI controller
 - Switch selectable processor clock input frequencies up to 533 MHz (Refer to Appendix A in your System Reference Manual, for switch settings)
2. Single Pentium® II processor modules must be installed in the primary Slot 1 socket (Processor 1) and have a termination card installed in the second Slot 1 socket (Processor 2). The termination card must be removed prior to installing a second processor.



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3. Pentium® II processor modules are available with 512 KB L2 cache memory. Dual processor configurations must have matching L2 caches.
4. A VRM must be installed for each Pentium® II processor installed in the Pentium® II processor module.
5. DIGITAL recommends that dual processor configurations use Pentium® II processors with identical stepping (manufacturing revision). Processors with different stepping might not function properly.
6. Higher performance Pentium® II processors might require loading the latest BIOS firmware revision.



NOTE: Current versions of Windows 95 does not support dual processors. If you wish to upgrade your workstation to a dual processor configuration, you will also need to change operating systems. Microsoft Windows NT 3.51 and 4.0 support dual processors.

Contact your DIGITAL sales representative or reseller for future processor upgrades and BIOS revisions.

To upgrade from a single-processor configuration to a dual-processor configuration

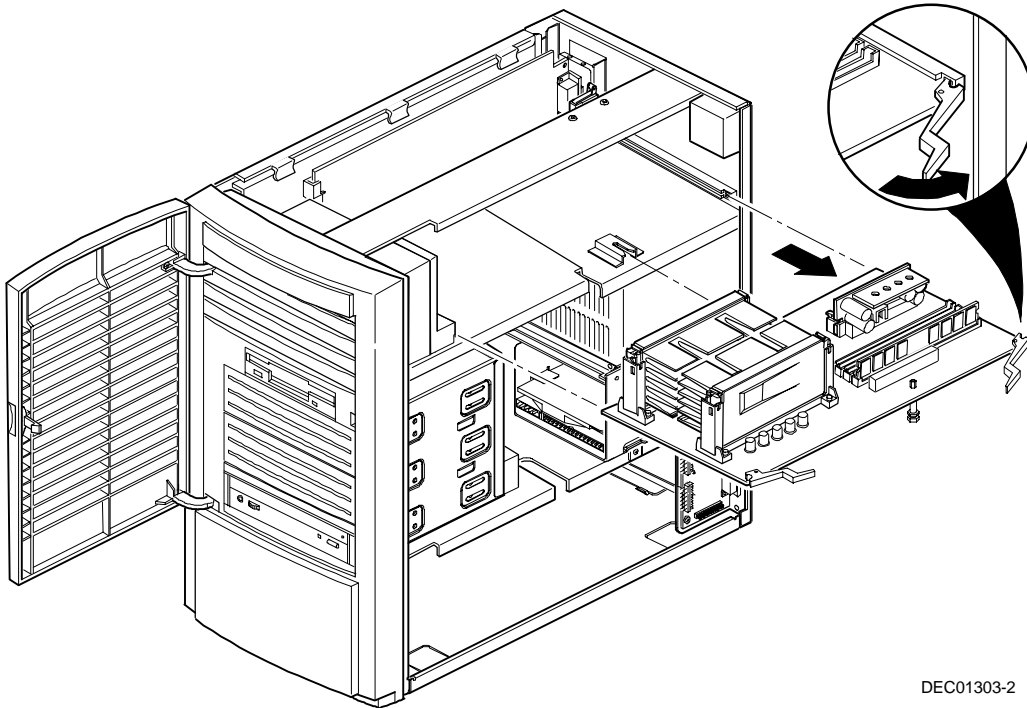
1. Turn off your workstation and monitor.
2. Disconnect all external devices, ac power, and monitor power.
3. Remove the outside cover.



STATIC SENSITIVE: Static electricity collects on non-conductors such as paper, cloth, or plastic. A static discharge can be damaging even though you often cannot see or feel it. To prevent damage to the processor. Touch the metal frame of your workstation to discharge any static electricity.

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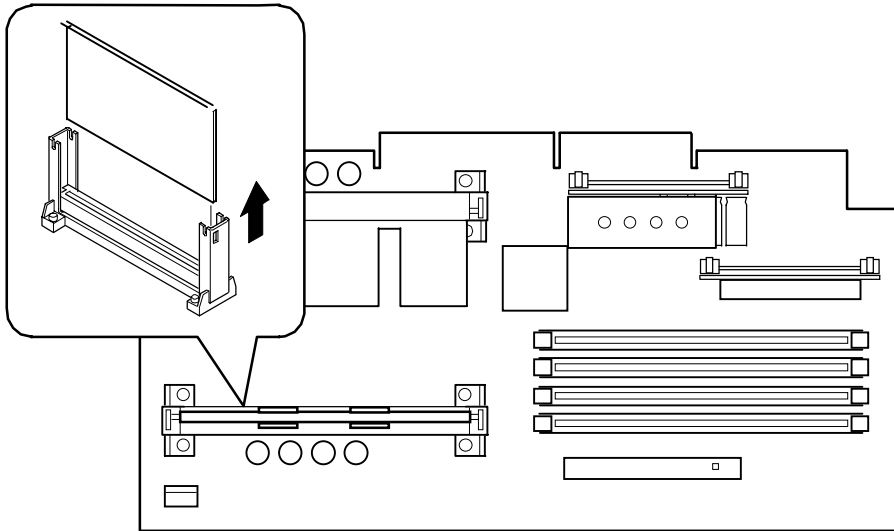
4. Push out on the two plastic ejectors to release the Pentium® II processor module from the main logic board.



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Figure 1-1. Removing the Pentium® II Processor Module

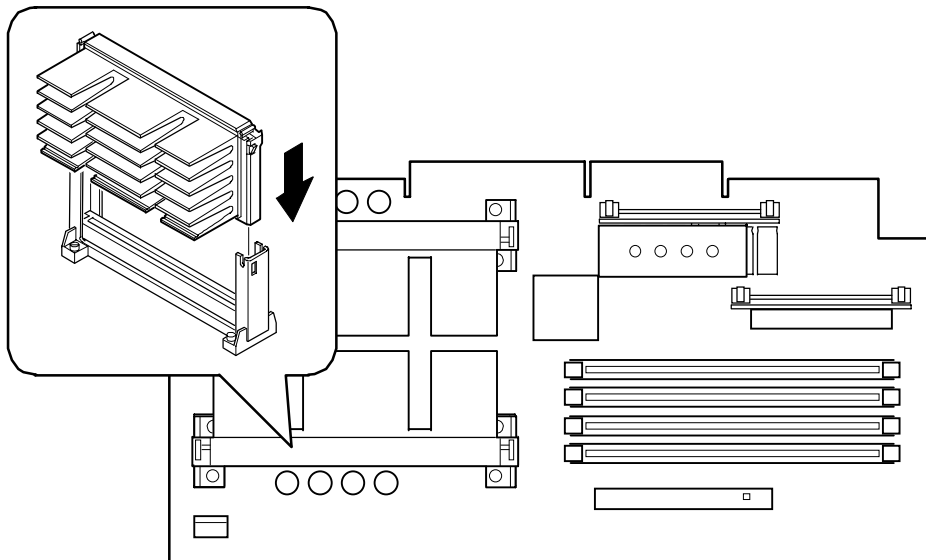
5. Remove the terminator card from the Pentium® II processor module (see Figure 1-2). Grasp the terminator by the plastic tab provided.



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Figure 1-2. Removing the Terminator Module

6. Remove the new Pentium® II processor from its shipping container.
7. Insert the new processor into this slot (see Figure 1-3).
8. Secure the new Pentium® II processor to its socket by pushing out on the two plastic tabs at each side.



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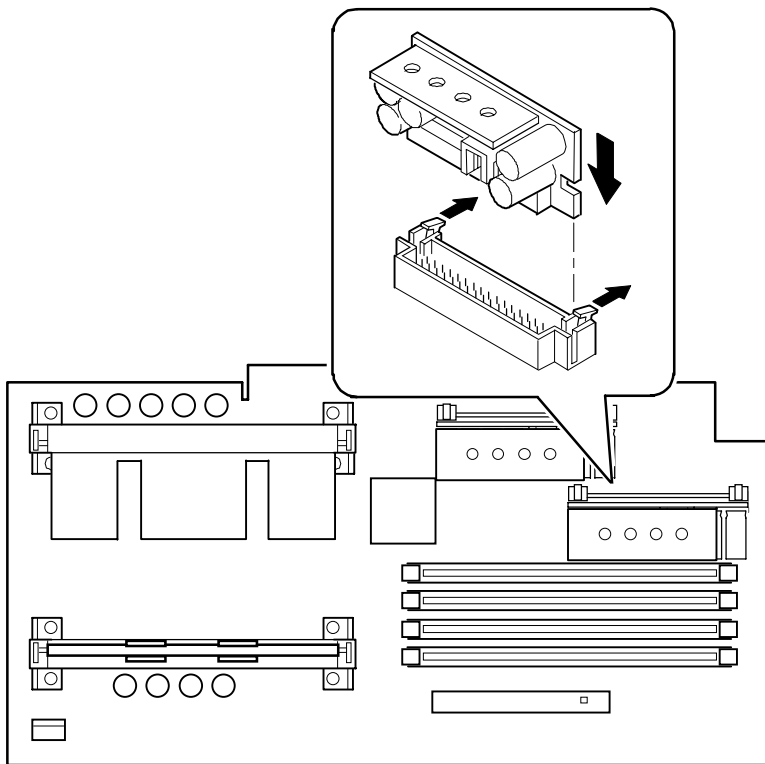
Figure 1-3. Installing the Second Pentium® II Processor

9. Remove the new VRM from its shipping container.

10. Install the second VRM into the empty VRM socket (see Figure 3-12).



NOTE: A VRM must be installed for each Pentium® II processor installed in the Pentium® II processor module.



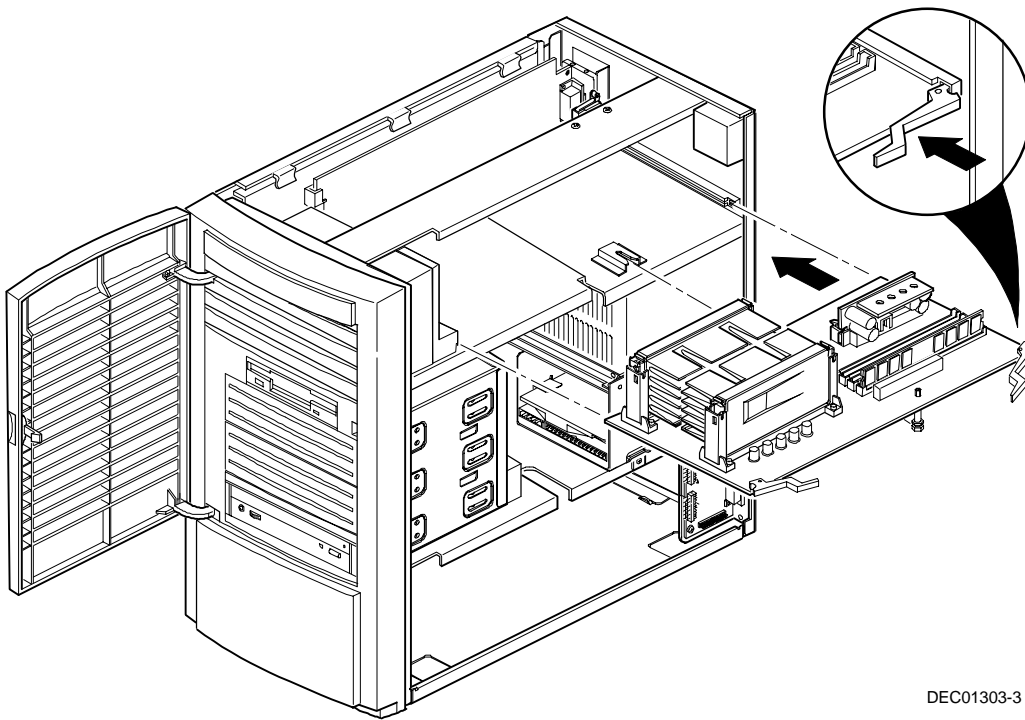
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Figure 1-4. Installing a VRM

11. Set all appropriate switch settings on the Pentium® II processor module.

Refer to Appendix A, "Technical Specifications," in your Workstation's System Reference Manual for switch location settings with the "Processor Clock Speed Switch Settings" table.

12. Replace the Pentium® II processor module.



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Figure 1-5. Replacing the Pentium® II Processor Module

13. Replace the outside cover.
14. Connect all external devices and restore power.

Operating System Modifications

If you have Windows NT 4.0 installed in your system, refer to the “Pentium® II Processor Upgrade Kit Upgrade Instructions” document (Document Part Number: ER-B30WWCA), included with your upgrade kit. This document will instruct you as to how you can upgrade your NT operating System so that it support Dual Processors. If you are running Windows 95 as your operating system, you will need to upgrade to Windows NT 4.0, to utilized a second processor in your system. Windows 95 does not support multiprocessor based systems. A copy of Windows NT 4.0 was supplied with your Workstation along with all of the system device drives.