digital™

Digital Personal Workstation

Pentium Pro to Pentium™ II 266i Upgrade Kit

Introduction

This document provides installation instructions to upgrade a Digital Personal Workstation (i-Series with Pentium Pro) to a higher speed Pentium ™ II main logic board.

This upgrade process involves removing the original main logic board and installing a support bracket and a new main logic board that supports a new Pentium ™ II Processor.

Upgrade Kit Contents

Your Digital Personal Workstation Pentium Pro to Pentium™ II Upgrade Kit consists of the following items. Please review the kit contents and ensure that all of the parts are present.

- Main Logic Board with Processor installed (1)

- Main Logic Board Support Mounting Bracket (1)

- Fan

- Processor Area Air Duct (1)

- 266i Speed Button (1)

- Screws (2)

- Nylon Washers (2)

- This Installation Guide (1)

ER-B30WW-BA. A01

Tools Required

A medium size Phillips Screwdriver is required to secure the new main logic board's support bracket to the system chassis. No other tools are needed.

Instruction Overview

The following sections of this manual cover:

- Upgrade Preparation

- Removing the Pentium Pro Main Logic Board

- Installing the new Pentium™ II Main Logic Board

- System Restoration

Instructions - Upgrade Preparation

1. Power down your system.

2. Unplug all power cords, peripherals, the mouse, keyboard, etc. from the rear of the system.

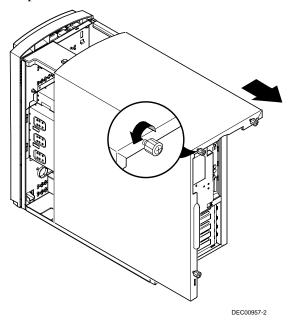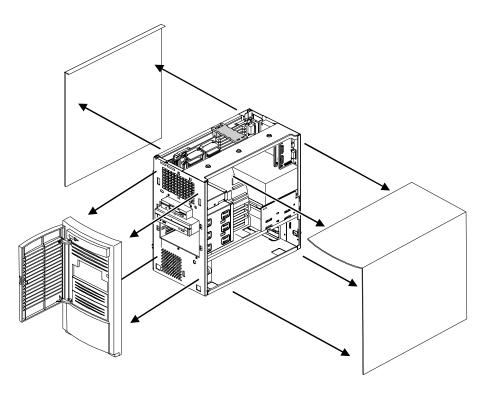3. Remove the side panel and outer skin from the chassis frame.

DEC00957-2

Figure 1-1. Removing the Side Panel Cover

4.   Remove the front bezel as shown in the figure below.

DEC00758-10

Figure 1-2. Removing the Front Bezel

DEC01017-3INT

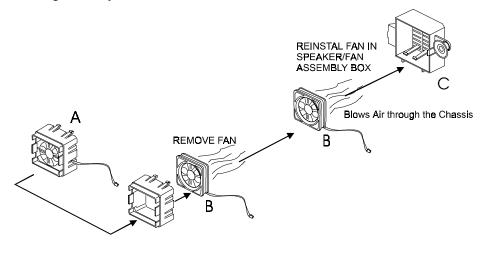**Figure 1-3. Removing Bezel, Side Cover and Left Side Skin Panel**

5. Remove the main logic board support brace (labeled "A" in Figure 1-4), from the top-rear of the chassis.

6. Remove the rear fan housing assembly (labeled "B" in Figure 1-4), located in the top section.

7. Remove the front fan box and speaker assembly (labeled "C" in Figure 1-4), located in the bottom section.

8. Remove the front air flow guide (labeled "D" in Figure 1-4), located in the top section.

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Figure 1-4. Subassembly Removal.

9. Remove the fan from the fan assembly box (labeled "A", in Figure 1-5). Using the same orientation, reinstall the fan back inside the bottom front fan housing assembly.
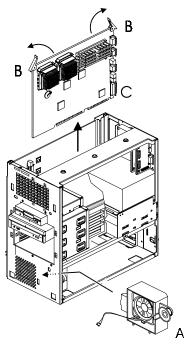

REINSTAL FAN IN SPEAKER/FAN ASSEMBLY BOX

C

Blows Air through the Chassis

REMOVE FAN

A

B

B

DEC01017-5

Figure 1-5. Transferring the Rear Fan.

10. Reinstall the lower front fan assembly (labeled "A" in Figure 1-6).

Instructions - Removing the Pentium Pro Main Logic Board

1. Unlock the Main Logic Board (labeled "C" in Figure 1-6) by rotating the "board pulling tabs" (labeled "B" in Figure 1-6), upward and outward, and the lift the Main Logic Board, removing it from the chassis.

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**Figure 1-6. Removal of the Main Logic Board and
Lower Fan Assembly Reinstallation.**

Instructions - Installing the Pentium™ II Main Logic Board

1. Facing the left side of the chassis, note that once you have removed the outer skin, there are a series of mounting holes in the chassis frame. Align the Main Logic Board Support Mounting Bracket as shown in the diagram below.

2. Peal off all of the protective strips on the adhesive tape. Mounting the support bracket to the inside of the chassis, position the mounting bracket to the inside outer wall of the system. Make sure that the alignment pegs are in place before you adhere the adhesive tape.
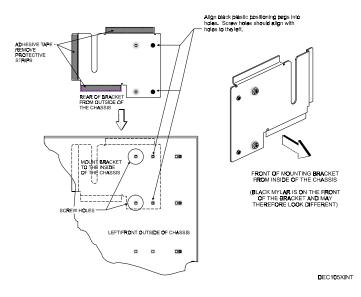

Figure 1-7. Main Logic Board Support Bracket

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3. Use a screw and a nylon washer for each mounting screw hole. Refer to Figure 1-7, for the screw hole locations. Using a Phillips head screwdriver, secure the screw and washer into each of the tapped holes in the back of the new Main Logic Board Mounting Support Bracket.

4. Remove the SIMMs from the old Main Logic Board, and then populate the new main logic board with the same memory. Refer to your System Reference Manual for help on removing the SIMMs and how to reinstall them.

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 a SIMM:

Touch the metal frame of your workstation to discharge any static electricity.
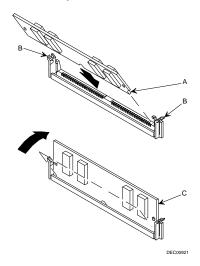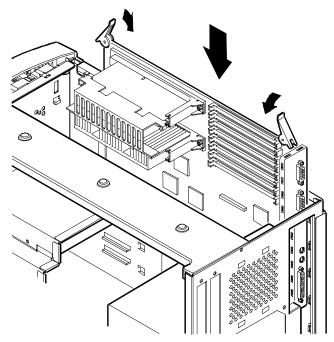
Keep all SIMMs away from non-conductors.

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Figure 1-8. Installing a SIMM

5. Slide in the new Pentium ® II Processor based Main Logic Board. Once the main logic board is seated, use the "Board Pulling Tabs" to lock the board into place.
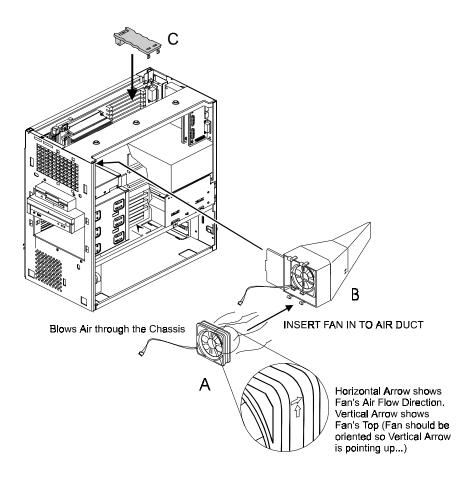
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Figure 1-9. Reinstalling the new Main Logic Board

Instructions - System Restoration

1. Insert the new fan (labeled "A", in Figure 1-10) into the fan pipe box (labeled "B", in Figure 1-10). Check to ensure that the fans orientation is correct. Arrows on the fan's frame indicate the top and air flow direction of the fan. This air duct is longer than the previous fan pipe to get the amount of air that is needed to cool the larger processors. Reinstall the main logic board support brace (labeled "C", in Figure 1-10).
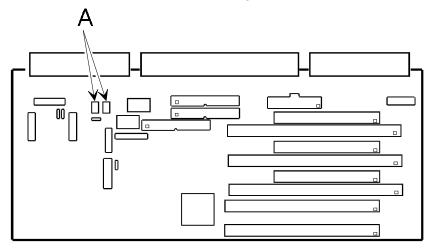
C

Blows Air through the Chassis

B

INSERT FAN IN TO AIR DUCT

A

Horizontal Arrow shows
Fan's Air Flow Direction.
Vertical Arrow shows
Fan's Top (Fan should be
oriented so Vertical Arrow
is pointing up...)

DEC01017-9INT

Figure 1-10. Install Top Front Fan Pipe Assembly

2. Ensure that the power to both fan assemblies are plugged in to the riser card. The top fan is typically plugged into the fan power connector (J22) on the backplane. The bottom fan is typically plugged into the fan power connector (J23) on the backplane. The approximate location of these power connectors are identified as "A" in Figure 1-11.

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Figure 1-11. Fan Power Connector Locations on the Backplane

3. Replace system covers and front bezel.

4. Reconnect all of your peripherals, including your mouse, keyboard, printer cables, and any networking cables.

5. You may now power up your system. This completes the system upgrade.