Upgrade Instructions for 3/180 and 3/200 to 3/400 Workstations

CAUTION Before removing any parts or assembly from a system, make sure to HALT the system properly. Power off the system prior to removing the part or assembly to be reworked.

Installation of the Sun 4.0.3 Operating System will destroy all data on the disk. Be sure you have backed up all data so it can be restored after the operating system is installed.

General Information This document contains the necessary information required to upgrade your Sun-3/180 and Sun-3/200 based products to Sun-3/400 based products.

For additional information regarding Sun Upgrade Installation, please read the *SunUpgrade Program Policy* (P/N 800-2201-XX) included in the kit.

This hardware upgrade requires SunOS 4.0.3 or later revision.

This upgrade kit contains the board configuration, the installation documents, and the necessary hardware and labels to configure the product.

The upgrade kit contains the following:

1. 4/300 CPU (P/N 501-1550-01)
2. 4/300 Memory Board
   8MB (P/N 501-1102-XX)
   16MB (P/N 501-1576-XX)
   32MB (P/N 501-1451-XX)
3. ESD Kit (P/N 560-1302-XX)
4. Single Slot Restrictor (P/N 340-1407-xx)
5. Filler Panels (P/N 540-1443-xx)
6. Cardcage Slot Assignment and Backplane Config Guide (P/N 813-2056-xx)
7. Sun 3400 Board Config. Procedure (P/N 813-2055-xx)
8. Install Notes Sun 3400 Board (P/N 800-2399-xx)
9. Sun Logo: 3/460 – P/N 260-4440-xx –or
            3/480 – P/N 260-3261-xx

The appropriate Country Kit should have been ordered with this Upgrade. This kit will include the Keyboard, Mouse, Power Cord, and Owners manual set.
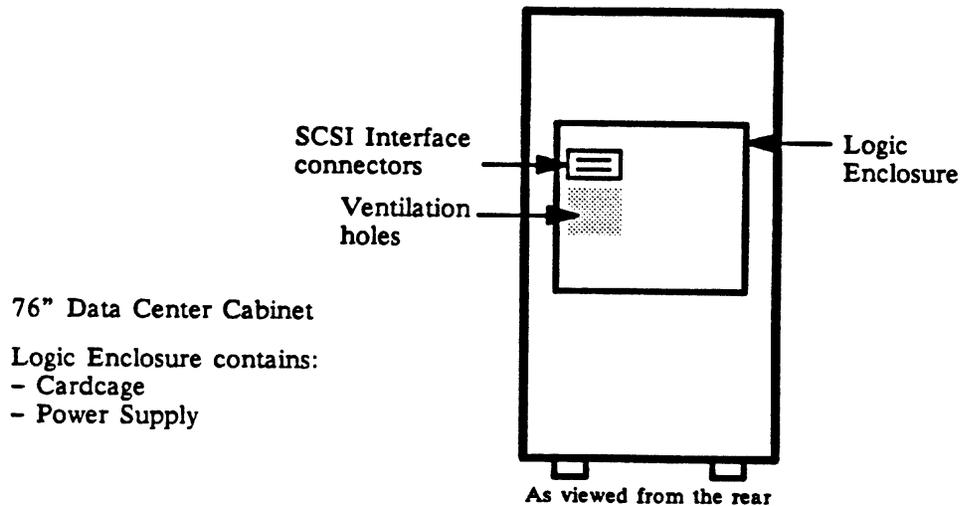
Tools required:

- One small Phillips-head screwdriver
- One two-millimeter, hex-head wrench (provided)
- One small flat-blade screwdriver (provided)
- One Electrostatic Discharge (ESD) antistatic wriststrap and mat (provided)

NOTE   If this upgrade is to be installed in a 3/260 pedestal it must have the six-fan tray installed before the upgrade is performed. Systems with serial numbers lower than 724E2223 will not have a six-fan tray installed. Place a service call with your local Sun Service Office indicating that the work required is for FCO 808-0067.

NOTE   **Do not operate this enclosure with wheels removed. It is vital that the clearance between the unit bottom and the floor be maintained to allow proper air flow for cooling. Your system warranty or contract may be void if these guidelines are not followed.**

NOTE   If this upgrade is to be installed in a 76" data-center cabinet it must have the logic enclosure cooling modification. The only way to determine factory installation of this enhancement is to physically inspect the logic enclosure for ventilation holes located per the following diagram on Figure 1.

SCSI Interface
connectors

Logic
Enclosure

Ventilation
holes

76" Data Center Cabinet

Logic Enclosure contains:
– Cardcage
– Power Supply

As viewed from the rear

Figure 1

If the logic enclosure does not have the indicated ventilation holes, place a service call your local Sun Service office indicating that the work required is for FCO 807-0073.

NOTE   3/200 8MB ECC Memory (Sun Part Number: 501-1102-10 or lower) will function with the 3/400 CPU except when the FPA (Sun Part Number: 501-1105-XX) or FPA+ (Sun Part Number: 501-1446-XX) is installed as part of the configuration. In this case, contact the LOCAL Sun Service Office and request a no charge exchange of the 8MB Memory Board(s) (PN 501-1102-11 or greater).

This upgrade requires the exchange of an original Sun product/component for an enhanced Sun product/component. Do not destroy or discard the upgrade kit packing material. It will be needed to return the old hardware to Sun Microsystems.

sun
microsystems

Sun Customer Service Installation Instructions

If you have a diskful system, make sure that the system is backed up before powering down. If the system is a server, either you, or the systems administrator, should have warned clients or other users that the system is about to be halted or powered down. Now move to the root (super user) level on the system and halt your system by using the following commands:

    #sync
    #sync
    #/etc/halt (or) /etc/shutdown

This procedure ensures that any data in the buffer is written to the disk before the operating system is halted.

Once the system is halted, switch off the system and monitor power .

CAUTION

Use the ESD wriststrap and antistatic mat, as shown in the ESD Kit Instructions, PN 800-2206-XX. This step is essential in preventing ESD damage to the PC assemblies.

To install the Sun-3/400 based product upgrade, use the following procedure:

1. Place the antistatic mat nearby on a flat surface with the shiny side down.

2. Disconnect all cables attached to the CPU board.

3. Unfasten the two hex-head screws located on either side of the CPU board backpanel (Slot 1) and remove them.

4. Push board extraction levers outward to remove PCB from the enclosure.

5. Carefully slide the board out and place the CPU board on the ESD mat.

6. Remove the Sun-3/400 CPU board from its packaging.

7. The Sun-3/400 CPU board requires Slots 1 and 2. Reference the following for the correct slot configurations (make all of the appropriate slot changes at this time):

    Sun 3/460 and 3/480 Cardcage Slot Assignment and
    Backplane Configuration Procedures, PN: 813-2056-XX..

8. If the upgrade is a monochrome system, install the UG–MFB–P (Monochrome Frame Buffer) using:

    Sun P4 Monochrome Frame Buffer Board Installation
    Manual, Sun PN 813-1041-XX

9. Insert 3/400 CPU into slot 1 and 2.

10. Other documents provided in this upgrade are as follows:

    Sun 3400 CPU Board Installation Manual, PN 800-2399-XX

    Sun 3/460 and 3/480 Cardcage Slot Assignment and
    Backplane Configuration Procedures, PN: 813-2056-XX.

11. After the board is firmly seated in the correct slots, replace and tighten the backpanel screws.

12. Reconnect all cables.

13. Power ON the system and monitor. The re-boot process will automatically begin

14. Locate the system serial number label and apply the enclosed "3/460U" label *above* the "Model Number" on a 3/260 product, or "3/480U" label *above* the "Service Code" on a 3/180 and 3/280 product.

15. Remove the old logo and replace with the appropriate logo provided in the upgrade kit.

16. Complete the Upgrade Forms and return them to Sun Microsystsems

17. Package the CPU in the box provided and return to Sun Microsystems using the procedure found in the *SunUpgrades Program Policy* (P/N 800-2001-03 or greater).