

# Sun Fire™ High-End and Midrange Systems UltraSPARC® IV+ 1.8 GHz CPU/Memory Board Upgrade Requirements

For

Sun Fire E25K/E20K Systems

Sun Fire 15K/12K Systems

Sun Fire E6900/E4900 Systems

Sun Fire 6800/4800 Systems



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**Caution** – Failure to follow these procedures will cause your system to be unable to recognize the new CPU/Memory board.

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If a CPU/Memory board is sold as a field-replaceable unit (FRU), it must be used **ONLY** for replacement use. FRUs must not be used to upgrade CPU performance in systems. Such usage can violate United States export regulations.

UltraSPARC® IV+ CPU/Memory boards are not supported in Sun Fire™ 4810/3800 systems.

## Hardware Requirements

- Sun Fire 25K/15K systems require (part number 300-1705) Power Supplies.
- Sun Fire 15K/12K systems require the Carrier Plate Upgrade Kit.
- Sun Fire E6900/E4900 and Sun Fire 6800/4800 systems require these hardware upgrades:
  - Sun Fire E6900 and Sun Fire 6800 systems upgrading from UltraSPARC IV or earlier CPU/Memory boards that wish to support two domains in one partition, must install the Repeater Board upgrade kit.
  - Sun Fire 6800 systems require the Sun Fire 6800 UltraSPARC IV/IV+ Upgrade Kit, which includes the EMI gasket kit to be installed in the card cage and six new power supplies (PS0 through PS5).

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**Note** – Sun Fire E6900 and upgraded Sun Fire 6800 systems upgrading to UltraSPARC IV+ CPU/Memory boards do not require the Sun Fire 6800 UltraSPARC IV/IV+ Upgrade Kit.

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- Sun Fire E4900 and Sun Fire 4800 systems require the Sun Fire E4900/4800 UltraSPARC IV/IV+ Upgrade Kit, which includes the EMI gasket kit to be installed in the card cage, three new power supplies (PS0 through PS2), and three new fan trays: FT0 (bottom left), FT1 (top), and FT2 (bottom right).



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**Caution** – The Sun Fire E4900 and Sun Fire 4800 systems might shut down if you do not install the additional upgrades that are required for the UltraSPARC IV+ CPU/Memory boards.

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## Checking Hardware Upgrades

- ✦ For Sun Fire E4900 and Sun Fire 6800/4800 systems, determine if the hardware upgrades are already installed by using the system controller `showfru` command to see the manufacturing record of the FRU part numbers.

```
schostrname:SC> showfru -r manr
```

This command is available with firmware version 5.18.1 and later. Alternatively, you can find the part numbers on the device label

## Firmware and OS Minimum Requirements

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**Note** – Firmware on all boards and assemblies must be at the same level as the new CPU/Memory board.

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If your system requires a software upgrade and a firmware upgrade, first upgrade the firmware. Install new CPU/Memory boards only after you have upgraded the firmware and software.

- Sun Fire E25K/E20K systems and upgraded Sun Fire 15K/12K systems require these versions:
  - System Management Services (SMS) 1.6 or subsequent compatible versions
  - Solaris 9 9/05, Solaris 10 3/05 HW1 or Solaris 10 1/06 Operating Systems
- Sun Fire E6900/E4900 systems and upgraded Sun Fire 6800/4800 systems require these versions:
  - Firmware level 5.20.1 or subsequent compatible versions
  - Solaris 9 9/05, Solaris 10 3/05 HW1, or Solaris 10 1/06 Operating Systems

For latest patch information go to <http://sunsolve.sun.com>. Installation information and README files are included in the patch download.

## Checking Firmware on Boards and Assemblies in Sun Fire E25K/E20K or Sun Fire 15K/12K Systems

1. Before installing new CPU/Memory boards, use the `flashupdate -d` command to determine if the firmware needs to be updated:

```
mainsc:SC> flashupdate -d <domain name> -f <firmware.path> -n
```

2. Use the following command to determine if the SMS needs to be updated:

```
mainsc:SC> /opt/SUNWSMS/bin/smsversion
```

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## Upgrading Firmware in Sun Fire E25K/E20K or Sun Fire 15K/12K Systems

1. Log in to the main system controller and install the system board firmware upgrade by using the `flashupdate` command for your system:

```
sc0:sms-user:> flashupdate -f /opt/SUNWSMS/hostobj/sgcpcu.flash SB#
```

Replace SB# with the board number of the newly inserted UltraSPARC IV+ CPU/Memory boards. For example, SB3.

For details on using the `flashupdate` command, refer to the system controller manual for your product.

2. Repeat this step for each new CPU/Memory board.

## Checking Firmware on Boards and Assemblies in Sun Fire E6900/E4900 or Sun Fire 6800/4800 Systems

1. Before installing new CPU/Memory boards, use the following command to determine if the firmware needs to be updated:

```
mainsc:SC> showboards -p proms
```

2. Use the following command to determine if the real time operating system (RTOS) needs to be updated:

```
mainsc:SC> showsc -v
```

If updates are required, use the system controller `flashupdate` command as shown in the upgrading firmware section that follows.

## Upgrading Firmware in Sun Fire E6900/E4900 or Sun Fire 6800/4800 Systems

1. Connect to the spare system controller and install the firmware upgrade by using the `flashupdate` command for your system.

```
sparesc:sc> flashupdate -f URL scapp rtos
```

2. Repeat the firmware installation procedure for the main system controller.

```
mainsc:SC> flashupdate -f URL all rtos
```

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