

# Sun Fire™ High-end and Midrange Systems UltraSPARC® IV+ 1.95 GHz CPU/Memory Board Upgrade Requirements

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** – Your system will not recognize the new CPU/Memory board unless you follow these procedures.

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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.

## Sun Fire E25K/E20 and Sun Fire 15K/12K Systems Hardware Requirements

Sun Fire E25K/E20K and Sun Fire 15K/12K systems require the following upgrades:

- Sun Fire E25K/E20K and Sun Fire 15K/12K systems require power shelf (part number 371-0919).
- Sun Fire E25K/E20K and Sun Fire 15K/12K systems require power supply (part number 300-1813).
- Sun Fire 15K/12K systems require the carrier plate upgrade kit.

## Sun Fire E6900 and Sun Fire 6800 Systems Hardware Requirements

Sun Fire E6900 and Sun Fire 6800 systems require the Sun Fire E6900/6800 UltraSPARC IV+ Upgrade Kit.

- E6900 upgrade kit: 594-3419 (This kit includes the 300-1836 power supply. It is used for both the 1.8 GHz and 1.95 GHz CPU upgrades.)
- If the system needs to support two domains on one partition, you must install the repeater board upgrade kit, part number 594-3776.

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# Sun Fire E4900 and Sun Fire 4800 Systems Hardware Requirements

Sun Fire E4900 and Sun Fire 4800 systems require the Sun Fire E4900/4800 UltraSPARC IV/IV+ Upgrade Kit, PN 594-3418. The kit includes:

- EMI gasket kit (to be installed in the card cage)
- Three new power supplies (PS0 through PS2)
- 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 these upgrades for the UltraSPARC IV+ CPU/Memory boards.

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## Verifying the Hardware Upgrades

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

```
schostname: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, Patches, 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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Install new CPU/Memory boards only after you have upgraded the firmware and software.

- Sun Fire E25K/E20K and Sun Fire 15K/12K systems require SMS 1.6 patches as well as 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 and Sun Fire 6800/4800 systems require these versions:
  - Firmware level 5.20.4 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 and 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
```

## Upgrading Firmware in Sun Fire E25K/E20K and 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/hostobjs/sgcpu.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 and 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 and 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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