Sun Fire™ V490 Server Product Notes

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Sun Fire V490 Server Product Notes

These Product Notes provide late-breaking information related to the Sun Fire™ V490 server.

Related Documentation

A complete set of online documentation supporting the Sun Fire V490 server is available at:

`http://www.sun.com/products-n-solutions/hardware/docs/Servers`

Check these sites periodically for the latest revisions of Sun Fire V490 product documentation, including the latest version of these Product Notes.

Preinstalled Software

Your Sun Fire V490 server comes preinstalled with the Solaris™ Operating System (Solaris OS) and Java™ Enterprise System software. For important information about how to get started with the preinstalled software, go to:

`http://www.sun.com/software/preinstall`

2100 MHz System Requirements

Sun Fire V490 systems shipped with 2100 MHz CPU/Memory modules are factory upgraded to support the additional power of the 2100 MHz UltraSPARC™ IV+ processors. For more information on the software requirements and hardware upgrades for 2100 MHz systems, see the *Sun Fire V490/V890 Systems with UltraSPARC IV+ 2100 MHz CPU/Memory Modules Supplement*, located online at:

`http://www.sun.com/products-n-solutions/hardware/docs/Servers`

Software and OpenBoot Firmware Requirements

TABLE 1 lists the minimum versions of the OS and OpenBoot™ PROM (OBP) firmware required by the 1050 MHz and 1350 MHz UltraSPARC IV CPU/Memory modules, and the 1500 MHz, 1800 MHz and 2100 MHz UltraSPARC IV+ CPU/Memory module.

TABLE 1 Minimum Operating System and Firmware Versions

CPU/Memory Module	Operating System	Firmware Version
1050 MHz	Solaris 8 2/04	OBP 4.15.1
	Solaris 9 4/04	OBP 4.15.1
	Solaris 10 3/05	OBP 4.15.1
1350 MHz	Solaris 8 2/04	OBP 4.15.6
	Solaris 9 4/04	OBP 4.15.6
	Solaris 10 3/05	OBP 4.15.6
1500 MHz	Solaris 9 9/05	OBP 4.18.1
	Solaris 10 3/05 HW1	OBP 4.18.1
1800 MHz	Solaris 9 9/05	OBP 4.18.8
	Solaris 10 3/05 HW1	OBP 4.18.8
2100 MHz	Solaris 9 9/05	OBP 4.22.24
	Solaris 10 3/05 HW1	OBP 4.22.24

Caution – Use OBP version 4.22.24 or greater on systems equipped with 2100 MHz CPU/Memory modules. Loading an earlier version of OBP on these systems makes them unbootable.

To verify that the proper version of the operating system is installed your server, examine the `/etc/release` file. It should contain the text `Solaris X X/XX` or identify a Solaris release that is compatible with the Sun Fire V490 system.

To determine the current OpenBoot firmware version on a server, use one of the following methods:

- **While the Solaris Operating System is running, type:**

```
# /usr/sbin/prtconf -V
```

- **Or, from the `ok` prompt, type:**

```
ok .version
```

OpenBoot PROM Enhancements for Diagnostic Operation

Starting with version 4.15, OBP provides enhanced diagnostics that are enabled by default at power-on. These diagnostics can increase the amount of time it takes a Sun Fire V490 server to boot. They also change the behavior of some applications that detect and report information about the server.

For instance, when the OBP diagnostics are enabled, the output from the `rsc-console` connection is sent to the server console without a warning message. When this occurs, the RSC console may appear to not respond to RSC commands. This behavior can also occur when you are viewing `rsc-console` output while the front panel keyswitch of the Sun Fire V490 server is set to the Diagnostics position.

In addition, the diagnostics change the behavior of the server LEDs during startup. While power-on self-test (POST) is executing, the Power and System Fault LEDs blink simultaneously. After POST has completed and OBP diagnostics run, the LEDs return to normal function.

For more information about these enhancements, the new and redefined configuration variables, and the new standard (default) configuration, refer to *OpenBoot PROM Enhancements for Diagnostic Operation*, which is available on the Sun Fire V490 Documentation CD included with the Sun Fire V490 server.

Software Patches

This section lists the software patches that may be required for your Sun Fire V490 server. You can obtain these patches from your authorized Sun service provider or by downloading them from the SunSolve Online[SM] web site at:

```
http://sunsolve.sun.com
```

For patch installation instructions, see the README file that accompanies each patch. Patches for the following versions of the Solaris OS are listed below:

- Software Patches for Solaris 10
- Software Patches for Solaris 9
- Software Patches for Solaris 8

Note – If you are using the version of Solaris 10 OS that comes preinstalled on your server, refer to the preinstalled software Web site at:

```
http://www.sun.com/software/preinstall
```

The patch information in this section applies if you have manually installed a different version of the Solaris 10 OS, or if you have installed Solaris 9.

Software Patches for Solaris 10 OS

To see a list of required software patches for Solaris 10, see the *Solaris 10 Sun Hardware Platform Guide*.

Software Patches for Solaris 9 OS

TABLE 2 lists the required and recommended patches for the Solaris 9 4/04 OS installed on a Sun Fire V490 server.

TABLE 2 Sun Fire V490 Required Patches for Solaris 9 OS

Patch ID	Description
Required Patches:	
112233-12 or later	SunOS 5.9: kernel patch
112817-17 or later	SunOS 5.9: SunGigaSwift Ethernet 1.0 driver patch
111847-08 or later	SAN Foundation Kit patch (MPxIO/leadville)*
113039-04 or later	SunOS 5.9: Sun StorEdge Traffic Manager patch*
113040-06 or later	SunOS 5.9: fctl/fp/fcp/usoc driver patch*
113041-04 or later	SunOS 5.9: fcip driver patch*
113042-04 or later	SunOS 5.9: qlc driver patch*
113043-05 or later	SunOS 5.9: luxadm, liba5k and libg_fc patch*
113044-04 or later	cfgadm patch*
113447-13 or later	SunOS 5.9: libprtdiag_psr patch
117171-05 or later	SunOS 5.9: kernel patch
115553-10 or later	SunOS 5.9: USB Drivers and Framework patch
Recommended Patches:	
116363-07 or later	RSC 2.2.2 patch

* Patches 111847, 113039, 113040, 113041, 113042, 113043 and 113044 require the package SUNWsan (SAN Foundation Kit). The SUNWsan package is available via the Sun Download Center at:

`http://www.sun.com/storage/san/`

From that site, download the latest SAN release software/firmware upgrade.

Software Patches for Solaris 8

TABLE 3 lists the required patches that are specific to the Sun Fire V490 server with the Solaris 8 02/04 OS installed. These patches are available as of the publication date of these Product Notes.

TABLE 3 **Sun Fire V490 Server Required Patches for Solaris 8 OS**

Patch ID	Description
Required Patches:	
109873-25 or later	SunOS 5.8: prtdiag and platform libprtdiag_psr.so.1 patch
109896-25 or later	USB drivers patch
110460-32 or later	SunOS 5.8: fruid / PICL plug-ins patch
110614-02 or later	SunOS 2.8: ses driver patch
111095-15 or later	SunOS 2.8: fctl / fp / fcp / usoc driver patch*
111096-08 or later	SunOS 2.8: fcip driver patch*
111097-14 or later	SunOS 2.8: qlc driver patch*
111412-13 or later	SunOS 2.8: Sun StorEdge Traffic Manager patch*
111413-12 or later	SunOS 2.8: luxadm, liba5k, and libg_fc patch*
111792-09 or later	picl plugins patch
111846-08 or later	SunOS 2.8: cfgadm patch*
111847-08 or later	SAN Foundation Kit patch*
111883-24 or later	SunOS 5.8: GigaSwiftEthernet driver patch
116962-01 or later	pcisch driver patch
Recommended Patches:	
117255-01 or later	RSC 2.2.2 patch

* Patches 111095, 111096, 111097, 111412, 111413, and 111846 require the package SUNWsan (SAN Foundation Kit). The SUNWsan package is available from the Sun Download Center at:

`http://www.sun.com/storage/san/`

From that site, download the latest SAN release software / firmware upgrade.

Hardware Issues

The following sections describe various hardware issues associated with the Sun Fire V490 server.

Fan Trays Are Not Hot-Pluggable: Do Not Attempt to Remove When System Is Running

The CPU Fan Tray (FT 0) and the PCI Fan Tray (FT 1) are not components that you can “hot-plug”; that is, do not remove either fan tray while the system is running. You could also damage the system hardware by “hot-plugging” a fan tray. Serious injury can result if you attempt to remove a fan while the system is turned on.

Instructions for Installing a Server Into a Cabinet Requiring M6 Screws

To install a server into a cabinet requiring M6 screws, follow the instructions in the *Sun Fire V490 Server Server Setup and Rackmounting Guide*. Where the instructions specify 10-32 screws, use the M6 screws included in the rackmounting kit box. Use a Phillips No. 2 screwdriver with the M6 screws. Replace the 10-32 captive screws (if present) on the front trim panel with M6 screws before you install the server into the cabinet.

Use Shielded RJ-45 Cables for Server and SC Card Serial Connections

The Sun Fire V490 Server ship kit includes two special shielded RJ-45 cables. Use these cables when you set up serial connections from the server and from the SC card.

Software Issues

The following sections describe various software issues associated with the Sun Fire V490 server.

Sun Management Center Software Support

Sun Management Center support for the Sun Fire V490 systems requires as a minimum Version 3.5 Update 1. If you are running the Solaris 10 OS, you must install Version 3.5 Update 1b, as well as Sun Management Center patch 118389-07.

With any version of the Solaris OS, you must install all relevant Sun Management Center patches, especially if your system is equipped with a new CPU/Memory module.

Sun StorEdge Traffic Manager Software

Sun StorEdge™ Traffic Manager software automates multipath I/O failover, fail-back, and SAN-wide load balancing on multiple platforms. It also allows you to perform dynamic database configuration. This software can help provide improved I/O performance, increased availability, and time-saving manageability on your mission-critical SAN.

To learn more about Sun StorEdge Traffic Manager software, to take an interactive tour of its features, and to price and purchase the product for your installation, go to:

```
http://www.sun.com/storagetek/management_software/resource_manag
ement/traffic_manager/
```

Open Issues

This section describes bugs and anomalies associated with the Sun Fire V490 server. In many cases, software patches that provide fixes for these bugs are available. Visit the SunSolve Online web site, or contact your Sun authorized service provider for information about patch availability. For more information, see "Software Patches" on page 4.

Also check the Platform Guide for your release of the Solaris OS. It contains information about OS-related bugs that may affect Sun Fire V490 servers.

OpenBoot Firmware Documentation

Instructions for using the firmware are provided in the *OpenBoot 4.x Command Reference Manual*, which is available at the following web site under Solaris on Sun Hardware:

```
http://docs.sun.com
```

Sun GigaSwift Ethernet Adapter Documentation

The *Sun GigaSwift Ethernet Adapter Installation and User's Guide*, Sun Part No. 816-1702-11 provides information about installing and using the Sun GigaSwift Ethernet UTP adapter and the Sun GigaSwift Ethernet MMF adapter. This guide also provides a reference on how to configure the system's Ethernet device driver software.

This document includes information on how to create a `ce.conf` file in the `/platform/sun4u/kernel/drv` directory, which is the recommended way to configure the onboard network interfaces for the Sun Fire V490 server.

Note – Setting the Sun GigaSwift Ethernet adapter driver parameters using the `/etc/system` file is not supported.

This guide is available online at the following Web site:

`http://www.sun.com/products-n-solutions/hardware/docs/Network_Connectivity/index.html`