

## Sun Fire™ V20z Server Release Notes

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## Sun Fire V20z Server Release Notes

These are the advisories known to be outstanding for the Sun Fire<sup>TM</sup> V20z server.

## **Installation Information**

An operating system can be installed on the server without configuring the service processor or the network share volume (NSV) software. However, if you choose to skip configuration of the service processor and the NSV software, you will not be able to use the remote management capabilities of the system or the diagnostics.

- The Network Share Volume files are on the included CD, "Sun Fire V20z Server Network Share Volume CD" (705-0970).
- Operating system drivers and other support files are on the included CD, "Sun Fire V20z Server Documentation and Support Files CD" (705-0971). This CD also includes the following documents in PDF format:
  - Sun Fire V20z Server Installation Guide (817-5246)
  - Sun Fire V20z Server Operating System Installation Guide (817-5250)
  - Sun Fire V20z Server User Guide (817-5248)
  - Sun Fire V20z Server, Server Management Guide (817-5249)
  - Sun Fire V20z Server Release Notes (817-5252)

The product website always has the most up-to-date information and downloads at:

http://www.sun.com/servers/entry/v20z/

The product documentation website has the latest versions of user and service documentation:

http://www.sun.com/products-n-solutions/hardware/docs/Servers/Workgroup\_Servers/Sun\_Fire\_V20z/

## Important Notes and Considerations

This section lists known issues and considerations for the Sun Fire V20z server at this time.

## **Service Processor Configuration**

The service processor (SP) must be secured with a username and password when the server is first deployed. Failure to secure the SP will expose the server to a potential denial-of-service attack through the SP network interface. Refer to the *Sun Fire V20z Server Installation Guide* for detailed instructions on configuring the SP and setting up an initial manager account.

## **Ethernet Port Labeling**

It is important to note the labeling of the Ethernet ports on the server back panel. As shown on the far right side of the server illustrated in FIGURE 1, interfaces eth1 and eth0 are labeled as "1" on the upper port and "0" on the bottom port, respectively.

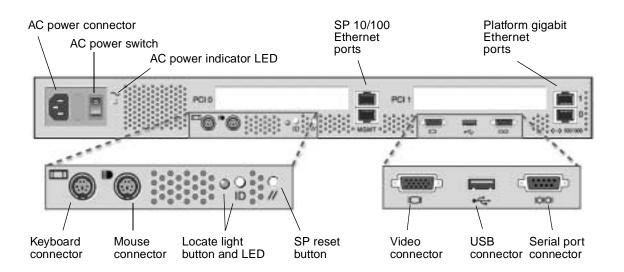


FIGURE 1 Sun Fire V20z Server Back Panel

## PCI Card Addition Causes POST Error Message

If you add a PCI card to system, you might encounter an error message such as the following example during power-on self test (POST):

```
Error Message: Expansion ROM not initialized. PCI Mass Storage Controller in Slot 01 Bus: 02, Device: 05, Function:00
```

If you press the F1 key at this point, the OS loads up normally.

#### Disabling Option ROM Scan to Avoid the Error Message

To avoid this message in the future, perform the following steps when the error message is displayed during POST.

**Note** – You will not be able to boot from this add-in card after you perform this procedure. If you want to disable the error message and boot from the add-in card (applicable for SCSI-controlled cards only), use the alternate procedure, "Disabling Option ROM Scan in a Bootable SCSI-Controlled Card" on page 3.

- 1. Press the F2 key to enter the BIOS Setup Utility.
- 2. In the Advanced menu, select the PCI Configuration submenu.
- 3. Select PCI Device Slot 1 or 2 (select the slot in which you installed the new device).
- 4. Change the Option ROM Scan value to Disabled.
- 5. Press the F10 key to save your changes.

Subsequent POST runs will not produce the error message.

#### Disabling Option ROM Scan in a Bootable SCSI-Controlled Card

- 1. Press the F2 key to enter the BIOS Setup Utility.
- 2. In the Advanced menu, select the PCI Configuration submenu.
- 3. Select Embedded Broadcom Gbit 0 or Embedded Broadcom Gbit 1 (select the port that does *not* connect to your networked PXE server).
- 4. Change the Option ROM Scan value to Disabled.
- 5. Press the F10 key to save your changes.

Subsequent POST runs will not produce the error message, and you will still be able to boot from the SCSI-controlled card.

#### Serial Concentrator Failures At Speeds Faster Than 9600-Baud

Some serial concentrators fail to work with the Sun Fire V20z server when it is set to a baud rate greater than 9600 because of framing errors. The problem occurs because the server has very fast processors and UARTS with 16-byte FIFOs, causing the transmit bandwidth to become completely saturated. There is no empty space left between one asynchronous byte and the next—one byte's stop bit is followed immediately by the next byte's start bit.

The consequence of this is that the terminal (or other device) on the receiving end of this treatment must be fast enough to keep up, without missing a single byte. When a serial concentrator clears its receiver overflow and begins to receive once again, it can no longer detect where the start and stop bits are. The result is an endless stream of framing errors, both detected and undetected.

To correct this problem, use the following procedure:

- 1. Perform these steps on the Sun Fire V20z server:
  - a. Press the F2 key to enter the BIOS Setup Utility.
  - b. In the Advanced menu, select the Console Redirection submenu and press Enter.
  - c. In the Console Redirection menu, select the Baud Rate option and choose your desired baud rate (the default is 9600).
  - d. Select the Flow Control option and choose CTS/RTS.
  - e. Select the Console Type option and choose your desired terminal type.
  - f. Press the F10 key to save your changes
- 2. Perform these steps on the serial concentrator console:
  - a. Choose the desired port number.
  - b. Choose the baud rate that matches the baud rate you selected for the server.
  - c. For the Flow Control option, select Hardware.
  - d. For the DCD Sensitive option, select Yes or No, depending on your preference.
  - e. Make sure you have the correct RJ-45 female to DB-9 female adapter (refer to your serial concentrator user documentation.)
- If you still encounter a few framing errors, check your cabling between the server and the serial concentrator.

## Server Top Cover Installation

When replacing the top cover back onto the server after component installation, use caution to avoid damaging the cover or server components.

Remove all peripheral cables from PCI cards before installing the cover. If you install the system cover with PCI card cables installed, a lip on the edge of the system cover and the EMC foam gasket inside that lip may catch parts of the PCI card connectors, and in some cases, may deform the system cover seal or damage the connector latches.

Ensure that the power supply cable is properly installed. The system cover may not close properly or may be difficult to close, and system performance may be affected if the power supply cable is not properly installed.

The power supply cables must be routed and pressed down such that they do not interfere with the cover installation. The power supply cable must be tucked into a position such that the cable and its associated tie-wraps are not below the top surface of the power supply. Rotate the tie-wraps downward so that they do not protrude above the cable itself.

# Solaris Operating System Considerations

Issues and considerations in regard to Sun Fire V20z servers that use the Solaris<sup>™</sup> 9 4/04 operating system are listed in this section. For all items, check the product website for future enhancements:

http://www.sun.com/servers/entry/v20z/

The first compatible version of Solaris for the Sun Fire v20z server will be Solaris 9 4/04. However, certain functionality will be phased in after the initial product release of the Sun Fire V20z server:

- RAID functionality is not supported in the initial release.
- The ECC-check driver and IPMI support that can be found on the "Sun Fire V20z Documentations and Support Files" CD are not supported in the initial release.
- The VESA driver should be used for Solaris installations requiring graphics. When installing Solaris 9 4/04 with a monitor, please select "VESA Generic Driver for VESA Compatible Video Cards" with kdmconfig.
- You might see problems when connecting a USB mouse to the server. The kdmconfig utility might fail to detect the USB mouse and the video might fail. To avoid this problem, manually select USB mouse in the Pointing Device Selection screen with kdmconfig.
- The Solaris boot disk is limited to SCSI target 0. The SCSI target 0 disk slot on the Sun Fire v20z server is the slot farthest from the front-panel LCD display.
- Some distributions of operating systems might be on DVD media, rather than CD. It is recommended that you obtain the optional Sun Fire V20z server DVD-ROM/diskette drive (X9260A) to install software from DVD media.
- The Sun Fire V20z server does not have UHCI hardware on-board. Devices that are operated by USB drivers written to run on prior Solaris X86 environments (using the original USBA framework) require either:
  - 1) a 3rd-party UHCI-based USB PCI card (to use their existing driver) or,
  - 2) a USBA 1.0 driver to work with on-board OHCI hardware.

## **Linux Operating System Considerations**

Issues and considerations in regard to Sun Fire V20z servers that use supported Linux operating systems are listed in this section. For all items, check the product website for future enhancements:

http://www.sun.com/servers/entry/v20z/

■ It has been noted that the Trident server video driver, which is shipped with Red Hat Enterprise Linux 3, can cause a system lockup under certain conditions. These conditions are described on-line within Red Hat's Bugzilla database: https://bugzilla.redhat.com/bugzilla/show\_bug.cgi?id=113533

To avoid this lockup situation, it is recommended that you instead use the VESA X server video driver that is bundled with RHEL 3.

To select the VESA driver at installation time, proceed normally until the Graphical Interface (X) Configuration screen appears. Then expand the Other drivers menu and select "VESA driver (generic)."

To select the VESA driver after installation, switch from using a Trident driver to a VESA driver. For detailed steps, refer to your Red Hat Enterprise Linux documentation.

- The 32-bit version of Red Hat Enterprise Linux 3 does not see more than 4 GB of physical memory, even when more than 4 GB are installed. This is a limitation of the default kernel, rather than the hardware.
  - Some other 32-bit versions of Linux have also demonstrated issues with recognizing greater than 4GB of memory because of limitations of their default kernels. If your OS is failing to see more than 4 GB of memory, contact your OS vendor for instructions on getting correct support of your memory configuration.
- For Linux server management, a customized OpenIPMI Linux kernel driver must be installed. Refer to the *Sun Fire V20z Server Management Guide* for detailed instructions on how to install this customized OpenIPMI driver.
- Some distributions of operating systems might be on DVD media, rather than CD. It is recommended that you obtain the optional Sun Fire V20z server DVD-ROM/diskette drive (X9260A) to install software from DVD media.