

Sun Ultra[™] 40 M2 Workstation Product Notes

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Sun Ultra 40 M2 Workstation Product Notes

Please note the following issues and considerations for the Sun Ultra $^{\text{TM}}$ 40 M2 Workstation.

- "General Information" on page 2
- "Documentation Issues" on page 4
- "Hardware and BIOS Issues" on page 5
- "Pc-Check Diagnostic Issues" on page 8
- "Solaris OS Issues" on page 10
- "Windows OS Issues" on page 16
- "Linux Issues" on page 18

General Information

Documentation URL

The following is a list of Sun Ultra 40 M2 documentation:

- 819-7565 Sun Ultra 40 M2 Workstation Product Notes
- 820-0121 Sun Ultra 40 M2 Workstation Installation Guide
- 819-7577 Sun Ultra 40 M2 Workstation Operating System Installation Guide
- 820-0123-10 Sun Ultra 40 M2 Workstation Service Manual
- 820-0122 Sun Ultra 40 M2 Workstation Safety and Compliance Guide

These documents are available at the following URL:

http://docs.sun.com/app/docs/coll/ultra40m2#hic

Supported Operating Systems

This section lists the supported operating system versions for the Sun Ultra 40 M2 Workstation.

- SolarisTM 10 6/06 and 11/06
- RHEL 5.0 Client 32-bit/64-bit
- RHEL 4 32-bit/64-bit Update 4
- RHEL 3 32-bit/64-bit Update 8
- SUSE Linux Enterprise (SLED 10) 64-bit
- Windows Server 2003 Enterprise SP2 32-bit/64-bit
- Windows XP 32-bit SP2
- Windows XP 64-bit SP1
- Windows Vista Ultimate 32-bit/64-bit

For the latest information on operating system support, go to the Sun web site at:

http://www.sun.com/desktop/workstation/ultra40/os.jsp

Latest Firmware and System Software Updates

As new features and fixes become available, system software and firmware updates will be released. You can find out more information regarding Sun Ultra 40 M2 updates on the Sun software download site at:

http://www.sun.com/desktop/workstation/ultra40/downloads.jsp

Documentation Issues

The following documentation issues apply to the Sun Ultra 40 M2 Workstation.

■ "Ethernet Cable Not Included with Workstation" on page 4

Ethernet Cable Not Included with Workstation

The *Sun Ultra 40 M2 Workstation Installation Guide* (820-0121-11) shipped with your workstation incorrectly states that an ethernet cable is supplied with the system. There is no ethernet cable supplied with the workstation. Sun recommends that you obtain a Cat 5 RJ-45 ethernet cable for use with the Ultra 40 M2 network interface.

Hardware and BIOS Issues

The following hardware and BIOS issues apply to the Sun Ultra 40 M2 Workstation, regardless of the operating system (OS) installed on the workstation.

- "CMOS Checksum Error When Updating the BIOS" on page 5
- "BIOS Settings Might Change When Updating the BIOS" on page 5
- "Boot Summary Screen Becomes Corrupted" on page 6
- "Memory Guideline for Systems with 1 DIMM" on page 6
- "SATA RAID and Option Card Limitations" on page 6
- "Setting Up the BIOS for the Secondary PCIe Graphics Slot" on page 7

CMOS Checksum Error When Updating the BIOS

After updating to the BIOS on the Sun Ultra 40 M2 Workstation Tools and Drivers CD/DVD, the system might report a CMOS checksum error.

If this happens, do the following:

- 1. Press the F2 key to go into the BIOS Setup Utility.
- 2. Select Load Setup Defaults.
- 3. Press the F10 key to save your settings and exit.

BIOS Settings Might Change When Updating the BIOS

The BIOS settings might reset to the defaults, after updating to the BIOS on the Sun Ultra 40 M2 Workstation Tools and Drivers CD/DVD. If you had changed any BIOS settings before the update (such as enabling RAID), you should enter the BIOS Setup Utility and restore the settings. Perform the following step after updating/flashing the BIOS to enter the Setup Utility:

• Press the F2 key when the system boots to enter the BIOS Setup Utility and restore any individually changed BIOS menu items.

Boot Summary Screen Becomes Corrupted

This issue occurs when the user hits the F12 key for Network Boot during Sun splash screen on a system with the LSI 3081E HBA installed. The user can ignore this as the system will continue to Network Boot.

This issue is fixed with the Tools and Drivers DVD v1.2. For the latest Tools and Drivers image, see the Sun software download site at:

http://www.sun.com/desktop/workstation/ultra40/downloads.jsp

Memory Guideline for Systems with 1 DIMM

When configuring a system with a one DIMM, install the DIMM in CPU0 slot 1 or slot 3. Do not install the DIMM in CPU0 slot 0 or slot 2, because this will cause the system to hang during the POST.

Failure to Power-Up With 8 x 750 Gb Drives

Systems with eight 750 Gb hard drives might fail to power-up. If this happens, perform the following workaround.

Workaround:

- Turn off the system.
- 2. Remove one of the 750 Gb drives.
- 3. Power up the system.

This issue is under investigation.

SATA RAID and Option Card Limitations

You must disable SATA RAID if the option card's expansion ROM is greater than the available shadow memory.

For example, you can only use the Single Ultra-320 (1-Port) SCSI PCI-X card when the onboard SATA RAID is disabled in the BIOS.

Enabling RAID for the onboard SATA drives with a U320 SCSI card installed will result in an expansion ROM not initialized BIOS error message and the U320 SCSI card might not function correctly.

Setting Up the BIOS for the Secondary PCIe Graphics Slot

The primary PCI-Express slot is the PCIe1 Slot. If you would like to use the secondary PCI-Express x16 slot (PCIe3), make the following changes to the BIOS:

- 1. Boot the workstation with the video display connected to the primary graphics card slot.
- 2. When you see the Sun logo screen displayed, press F2 to enter the BIOS Setup Utility.
- 3. Select the Advanced menu.

The entry PCIe X16 VGA CARD SELECT defines which slot is the primary graphics slot. The system will display POST and BOOT information to this card only.

- 4. Select PCI Express Slot 3 to enable the PCIe 3 graphics slot.
- 5. Press the F10 key to save your changes and exit the BIOS.

The next time you reboot the workstation, the secondary graphics card will display output.

Pc-Check Diagnostic Issues

The following issues apply to the Pc-Check v6.05 (available on the Tools and Drivers CD).

- "Incorrect Video Memory Size Detected for NVIDIA FX4600, FX5500, FX5600 Cards" on page 8
- "Pc-Check AC97 Test Error Message" on page 8
- "Graphics Card Test Only Recognizes One Card" on page 8
- "Digital Audio (SPDIF) Diagnostic Test" on page 9
- "TPM Diagnostic Test" on page 9

Incorrect Video Memory Size Detected for NVIDIA FX4600, FX5500, FX5600 Cards

Pc-Check incorrectly detects and reports the video memory for NVIDIA FX4600, FX5500, and FX5600 graphics cards.

This issue is under investigation.

Pc-Check AC97 Test Error Message

The initial release of Pc-Check produces the following error message when running the AC97 audio test:

This system has either no audio capability or the audio is not compatible with PC-Check.

You can safely ignore this message.

Graphics Card Test Only Recognizes One Card

Pc-Check only recognizes the primary graphics card when running the graphics test. To test both cards in a two-card installation, switch the primary graphics card display to the secondary graphics card (see "Setting Up the BIOS for the Secondary PCIe Graphics Slot" on page 7) and run the graphics diagnostic test again.

The functionality to test two cards might be added in a future release of Pc-Check.

Digital Audio (SPDIF) Diagnostic Test

The initial release of Pc-Check does not contain a test for the SPDIF ports.

TPM Diagnostic Test

The initial release of Pc-Check does not contain a TPM test for Infineon.

This issue is fixed with the Tools and Drivers DVD v1.2. For the latest Tools and Drivers image, see the Sun software download site at:

http://www.sun.com/desktop/workstation/ultra40/downloads.jsp

Solaris OS Issues

The following issues apply to Sun Ultra 40 M2 Workstations running the Solaris 10 operating system.

- "Patch Available for Solaris nge Connect Issues" on page 10
- "Solaris 10 Telnet Vulnerability Patch" on page 10
- "Correct nge NIC Placement" on page 11
- "Warning Message When Booting Fail Safe Mode Using Solaris 10 6/06" on page 11
- "Login Failure and Garbled Display When Using Two Graphics Cards with Solaris 10 6/06" on page 12
- "Enabling a Solaris OS Xserver Secondary Display (6357217)" on page 13
- "cdrw Patch for DVD+RW and DVD-RW Media" on page 13
- "Solaris 10 x86 Patch for Daylight Savings Time" on page 13
- "System Hang Using Two Graphics Cards With Solaris 10 6/06" on page 13
- "Solaris 10 Preinstalled Software Image" on page 13
- "Certain 1394 Devices Might Cause a System Panic" on page 14
- "Certain Non-compliant USB Hard Disks Might Cause a System Panic" on page 14
- "Time of Day Clock Error When Running sys-unconfig" on page 14
- "PCI SERR is Logged When Solaris 10 Boots (6603801)" on page 15

Patch Available for Solaris nge Connect Issues

During initialization, Solaris might fail to properly clear the RX_EN register. As a result, TCP/UDP connections via the nge ports will fail. Patch 122530-06, which requires patch 118855-03, will resolve this issue. Reconfigure the system immediately after installing the patches. Both patches are available at http://www.sun.com/sunsolve. Use Patchfinder to locate the patch.

Solaris 10 Telnet Vulnerability Patch

Solaris 10 6/06 and 11/06 security vulnerability in the in.telnetd(1M) daemon might allow unauthorized remote users to gain access to a Solaris Host. For more information, refer to Sun Security Alert 102802.

Patch 120069-02 addresses this issue. The patch is available on the Sun Ultra 40 M2 Tools and Drivers DVD v1.2 image and at:

http://www.sun.com/sunsolve

Apply the patch manually or run the install.sh script on all Solaris 10 6/06 and 11/06 systems.

For the latest Tools and Drivers image, see the Sun software download site at:

http://www.sun.com/desktop/workstation/ultra40/downloads.jsp

Correct nge NIC Placement

This issue only applies to the Solaris 10 Operating System 6/06 version with a nge NIC. The nge NIC does not work in Solaris 10 when placed in the first boot order. When the nge NIC is installed in the first boot order the PXE will attempt to boot. If this should happen, you should place the nge NIC device after the hard disk in the BIOS.

Warning Message When Booting Fail Safe Mode Using Solaris 10 6/06

This issue only applies to the Solaris 10 Operating System 6/06 version. When booting into Fail Safe Mode, the following warning message might display:

TABLE 0-1

WARNING: BIOS microcode patch for AMD Athlon™ 64/Opteron™ processor erratum 131 was not detected; updating your system's BIOS to a version containing this microcode patch is HIGHLY recommended or erroneous system operation may occur."

You can safely ignore this message.

Login Failure and Garbled Display When Using Two Graphics Cards with Solaris 10 6/06

Note – This issue only applies to a clean *reinstall* of Solaris 10 6/06. This issue does *not* apply to the preinstalled image that comes with your Sun Ultra 40 M2 Workstation.

When you log in to a new Solaris 10 6/06 installation, the login attempt will fail and will result in garbled display graphics.

Choose one of the following two workarounds:

- Reset the login screen:
- 1. Reboot the system, but do not log into the system.
- 2. Click the Options button, then select Reset Login Screen.

The screen will reset, and you can then log in as usual.

If your screen displays garbled text, you need to reset the Xserver by pressing Ctrl +ALT + Backspace.

-or-

- Install the unbundled NVIDIA display drivers contained on the Tools and Drivers CD/DVD as follows:
- 1. Use the command prompt to log in as root (superuser).
- 2. Insert the Tools and Drivers CD/DVD into the DVD drive.
- 3. Run install.sh from the /cdrom/cdrom0/drivers/sx86 directory.
- 4. Reboot the workstation.
- 5. Log in to the workstation using the CDE desktop one time before attempting to log in using JDS.

All subsequent JDS logins will work.

Enabling a Solaris OS Xserver Secondary Display (6357217)

The Solaris 10 Xserver default configuration only enables a primary display. To enable a primary and secondary display simultaneously, you need to install the NVIDIA drivers located on the Sun Ultra 40 M2 Workstation Tools and Drivers CD/DVD. Use the install.sh script to add the second display to /etc/X11/xorg.conf.

cdrw Patch for DVD+RW and DVD-RW Media

The cdrw utility that shipped with Solaris 10 6/06 does not fully support writing on DVD+RW and DVD-RW media. The patch number at the time of this writing is 120888-07.

You can access the patch at http://www.sun.com/sunsolve

Solaris 10 x86 Patch for Daylight Savings Time

A Solaris OS patch addresses the change in daylight savings time. The patch number at the time of this writing is 118669-11.

You can access the patch at: http://www.sun.com/sunsolve

System Hang Using Two Graphics Cards With Solaris 10 6/06

This issue only applies to a clean install or reinstall of Solaris 10 Operating System 6/06 version. The system will hang at the NFS message prompt.

If this happens, reboot the workstation.

Solaris 10 Preinstalled Software Image

If you move a card from one PCI-Express slot to another, the OS will remember the instance for the old slot as nvidia0 and will assign the new slot as nvidia1. Use one of the following two workarounds:

■ Change the /dev/nvidia0 link to point to /dev/fbs/nvidia1

-or-

- Update the /etc/path_to_inst file as follows:
- 1. Open the /etc/path_to_inst file in a text editor:

For example:

vi /etc/path_to_inst

- 2. Remove any nvidia entries from the file.
- 3. Save and close the file.
- 4. Perform a configuration reboot by typing b -r at the boot command prompt.This assigns nvidia0 to the new slot.

Certain 1394 Devices Might Cause a System Panic

This is an issue that affects certain 1394 devices. For details, you can search for bug Id# 6260568 or patch Id# 118855-36 at:

http://sunsolve.sun.com

Certain Non-compliant USB Hard Disks Might Cause a System Panic

This is an issue that affects certain USB hard disks. For details, you can search for bug Id# 6346270 or patch Id# 118855-36 at:

http://sunsolve.sun.com

Time of Day Clock Error When Running sys-unconfig

A time of day clock error message might occur after running sys-unconfig and after subsequent date and time configurations.

• Press F2 to continue the Solaris 10 Operating System configuration.

PCI SERR is Logged When Solaris 10 Boots (6603801)

Every time the Solaris 10 operating system boots, a PCI system error signal (SERR) is logged regarding the SAS3081E-S PCI-E-to-SAS adapter. The error messages do not affect operation of the server and can be ignored.

Windows OS Issues

The following issue applies to Sun Ultra 40 M2 Workstations running a supported Windows operating system.

- "System Hangs and Causes Disk Corruption When Running chkdsk c: (XP32)" on page 16
- "RAID Array Size >2 Tb Incorrectly Reported in Disk Management (XP)" on page 16
- "Blank Screen After Booting XP Installation CD/DVD" on page 17
- "HD UAA Audio Bus Drivers XP 64-bit Error" on page 17

System Hangs and Causes Disk Corruption When Running chkdsk c: (XP32)

On XP 32-bit systems with two or more partitions, the system might hang when running the chkdsk command on the C: drive. The system hang occurs during the following screen display:

```
chkdsk is verifying indexes (stage 2 of 3)
```

The system requires a hard reset and might need a reinstall of the OS to repair corrupted files.

This issue is fixed with the Tools and Drivers DVD v1.2. For the latest Tools and Drivers image, see the Sun software download site at:

```
http://www.sun.com/desktop/workstation/ultra40/downloads.jsp
```

RAID Array Size >2 Tb Incorrectly Reported in Disk Management (XP)

Some RAID arrays greater than 2 terabytes (Tb) might show up as 47.49 Gb in Windows Disk Management.

Workaround:

• Create a RAID that is less than 2TB in size.

This issue is under investigation.

Blank Screen After Booting XP Installation CD/DVD

This can happen if there are certain Linux partitions on the hard disk. If a blank screen occurs after booting from the XP installation CD/DVD, remove the Linux partitions on the hard disk.

To remove boot disk partitions, reboot the workstation with the Sun Ultra 40 M2 Workstation Tools and Driver CD/DVD and choose option 3 for the Erase Primary Boot Disk utility to wipe the entire disk clean.

HD UAA Audio Bus Drivers XP 64-bit Error

When using HD UAA Audio Bus XP 64-bit drivers, you might receive a yellow exclamation mark error message. This is an error is related to Windows XP 64-bit drivers. Obtain the updated HD Audio Bus drivers at:

http://support.microsoft.com/?kbid=901105

Linux Issues

The following issues applies to Sun Ultra 40 M2 Workstations running a supported Linux operating system.

- "Xserver Fails to Initialize with NVIDIA FX4600 and FX5600 Graphics Cards" on page 18
- "SLED 10 64-bit GNOME X-Windows Gets Stuck After Loading NVIDIA Display Drivers 9631 (and later)" on page 18
- "RHEL 3 Update 8, 32-bit Keystroke Repeats" on page 19
- "RHEL 3 Update 8, 32-bit Kernel Panic Message" on page 19
- "Graceful Shutdown Not Available on Non-ACPI Supported Linux Operating Systems (6278514)" on page 19

Xserver Fails to Initialize with NVIDIA FX4600 and FX5600 Graphics Cards

The preloaded VESA drivers do not support the FX4600 and FX5600 graphics cards.

Workaround:

- Boot into single-user /fail-safe mode.
- Run the install.sh script for the Tools and Drivers DVD v1.2.
 This will install the updated NVIDIA graphics driver v9755.

SLED 10 64-bit GNOME X-Windows Gets Stuck After Loading NVIDIA Display Drivers 9631 (and later)

SLED 10's GNOME X-windows gets stuck in the upper left corner of the screen after loading NVIDIA display drivers version 9631 (and later).

Solution:

1. Download the update for gnome-session (gnome-session-2.12.0-106.28.x86_64.rpm) at:

http://download.novell.com/Download?buildid=5_mvmMgtk3c~

2. Install the RPM package on a SLED 10 64-bit system, using the following command:

rpm -Fvh gnome-session-2.12.0-106.28.x86_64.rpm

RHEL 3 Update 8, 32-bit Keystroke Repeats

When pressing a key, the keystrokes could auto-repeat. This issue is related to an out-of-sync Time Stamp Counter (TSC). The Linux kernel uses a separate TSC as a timing mechanism for each processor. When the TSCs drift out of sync, you could experience repeating keystrokes.

Solution:

• Install Red Hat kernel version 2.4.21 - 47.0.1 or later.

RHEL 3 Update 8, 32-bit Kernel Panic Message

When installing RHEL 3 Update 8, 32-bit, and the correct BIOS setting are not loaded the system will display the following message:

```
kernel panic: IO-APIC + timer doesn't work!
```

If this happens, perform the following steps:

- 1. Press F2 to enter system BIOS.
- 2. Change the "Advanced/Enable Multimedia Timer" option to No.
- 3. Press F10 to save the changes.
- 4. Exit the system BIOS.
- 5. Reinstall RHEL3 Update 8, 32bit.

Graceful Shutdown Not Available on Non-ACPI Supported Linux Operating Systems (6278514)

Some Linux operating systems, such as RHEL3, do not support the Advanced Configuration and Power Interface (ACPI) which allows a graceful system shutdown. On systems running non-ACPI Linux operating systems, only a forceful shutdown is available.