

# Sun Ultra™ 2 Series System Product Notes

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# Sun Ultra 2 Series System Product Notes

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**Note** – Unless otherwise stated, Sun Ultra™ 2 Series manuals describing "Sun Ultra 2 Series systems" refers to both Ultra 2 Series systems and Sun Enterprise™ 2 systems.

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The Sun Ultra 2 Series systems can now support a 400-MHz CPU if the motherboard is part number 501-3132-13 or higher.

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# Minimum Solaris Operating Environment

**TABLE 1** Minimum Solaris Operating Environment

CPU Frequency	Solaris Release
167 MHz	2.5.1
200 MHz	2.5.1 Hardware: 4/97
250 MHz	2.5.1 Hardware: 8/97
300 MHz	2.5.1 Hardware: 11/97, 2.6 Hardware: 3/98
400 MHz	2.5.1 Hardware 11/97, 2.6 Hardware 5/98, 7 Hardware 5/99

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## OpenBoot PROM

The Sun Ultra 2 Series system requires OpenBoot PROM version 3.19.0 (or later).

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## Installing an UltraSPARC-II Module

Before installing an UltraSPARC-II module, refer to the Sun UltraSPARC-II Module Upgrade document, part number 805-0936.

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## Service Warning



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**Caution** – The AC power cord must be disconnected while you replace the power supply. Do not reconnect the power cord while the power supply is outside of the chassis.

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## Updated Information

Updated information related to the Sun Ultra 2 Series system is also available on the World Wide Web under <http://www.sun.com>.

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## Solaris 2.X Software Requirements

Sun Ultra 2 Series systems are supported by Solaris™ 2.5.1 or later.

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## Using PrestoServe SBus Card with Sun Ultra 2 Series System

The PrestoServe™ 2.4.2 release is incompatible with the Solaris 2.5.1 software environment when running on a Sun Ultra 2 Series system.

For information about working around that problem, refer to the document *SMCC Open Issues Supplement Solaris 2.5.1*, part number 802-5340-xx.

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## Using Narrow SCSI on Sun Ultra 2 Series System

Contact your Sun representative to order a 50-to-68-pin SCSI cable:

For 1.2 meter external SCSI cable, order X903A.

For 2.0 meter external SCSI cable, order X904A.

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## Using AUI Devices on Sun Ultra 2 Series System

Contact your Sun representative to order an MII to AUI Converter.  
Order X467A.

The MII to AUI converter connects the MII (Media Independent Interface) connector on the backpanel of the Sun Ultra 2 Series system or the SunFastEthernet™ Adapter to AUI 10BASE-5 DB-15 Ethernet connectors.

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## Framebuffers Not Supported in Sun Ultra 2 Series System

- GS SBus Graphics Accelerator (370-1329-xx, 370-1370-xx, 370-1407-xx, 370-1551-xx)
- GT Graphics subsystem (501-1624-x, 501-1692-xx, 501-1694-xxx, 501-1726-xx)
- GT2 Graphics subsystem SBus adapter card (501-1693-xx)
- GX (501-1481-xx, 501-1645-xx)
- GX+ (501-1717-xx, 501-2018-xx, 501-2039-xx)
- ZX2 (501-1694-xx)

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## EnergyStar

If you experience RED State Exception failures when exercising EnergyStar suspend/resume functions on Solaris 2.5.1 releases prior to Solaris 2.5.1 HW 4/97, install patch 104729-01.

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# UPA Graphics Card

To remove and replace a UPA graphics card, proceed as follows.

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**Note** – Illustrations supporting the UPA graphics card removal and replacement are not representative of a system unit.

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## Removing a UPA Graphics Card

To remove a UPA graphics card:

1. **Power-off the system.**
2. **Disconnect the video cable from the graphics card 13W3 video connector.**
3. **Remove the unit cover.**



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**Caution** – Use proper ESD grounding techniques when handling components. Wear an antistatic wrist strap and use an ESD-protected mat. Store ESD-sensitive components in antistatic bags before placing it on any surface.

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4. **Attach the wrist strap.**
5. **Unlock the card retainers (FIGURE 1).**
6. **Holding the UPA graphics card at each corner, gently pull the card up to disconnect it from the UPA socket (FIGURE 2).**

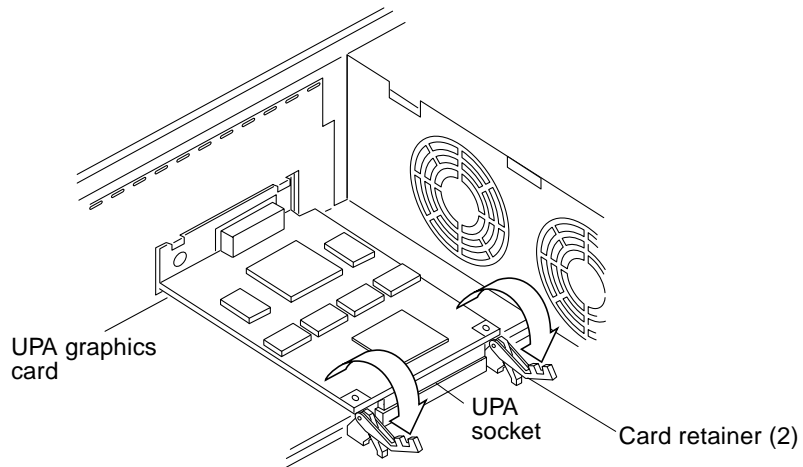


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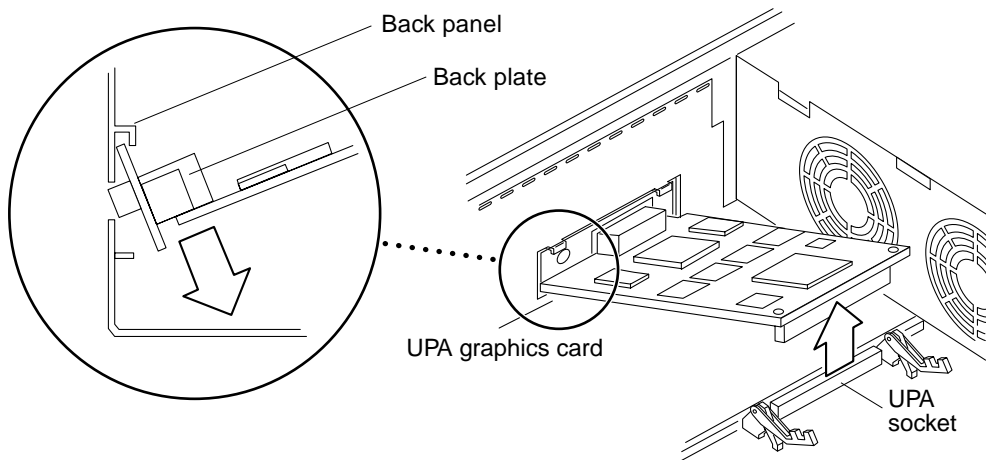
**Caution** – Avoid applying unequal force to one end or one side of the UPA graphics card or connector pin damage may occur.

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7. **Slowly lift the graphics card at an upward angle.**
8. **Lower the UPA graphics card backplate.**
9. **Disengage the UPA graphics card backplate from the back panel.**
10. **Place the UPA graphics card on antistatic surface.**



**FIGURE 1** Preparing to Remove a UPA Graphics Card



**FIGURE 2** Removing the UPA Graphics Card



# Replacing a UPA Graphics Card

To replace a UPA graphics card:



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**Caution** – Use proper ESD grounding techniques when handling components. Wear an antistatic wrist strap and use an ESD-protected mat. Store ESD-sensitive components in antistatic bags before placing it on any surface.

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1. Verify that both card retainers are pushed back (FIGURE 3).
2. Remove the replacement UPA graphics card from its container.
3. At an angle, lower the UPA graphics card into the chassis over the UPA socket.
4. Hook the UPA graphics card backplate under the chassis back panel tabs.

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**Note** – Ensure that the backplate is visible through the slot on the back panel.

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5. Carefully press both corners of the UPA graphics card evenly to seat the graphics card connector into the UPA socket (FIGURE 4).

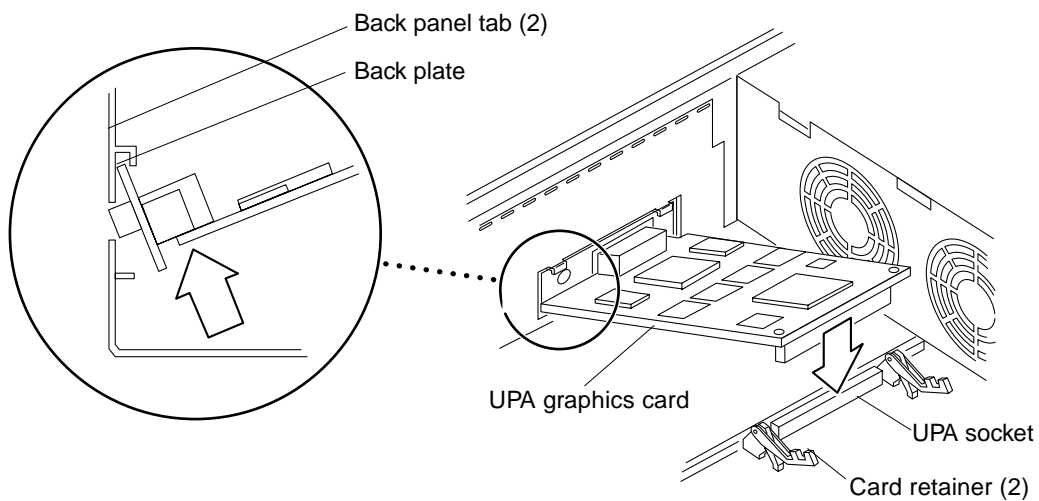


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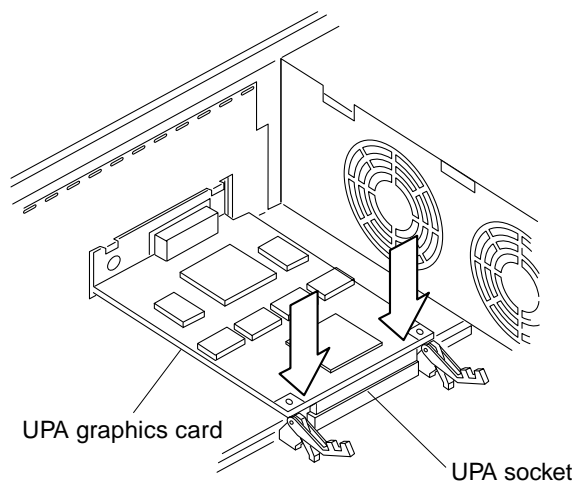
**Caution** – Avoid applying unequal force to one end or one side of the UPA graphics card or connector pin damage may occur.

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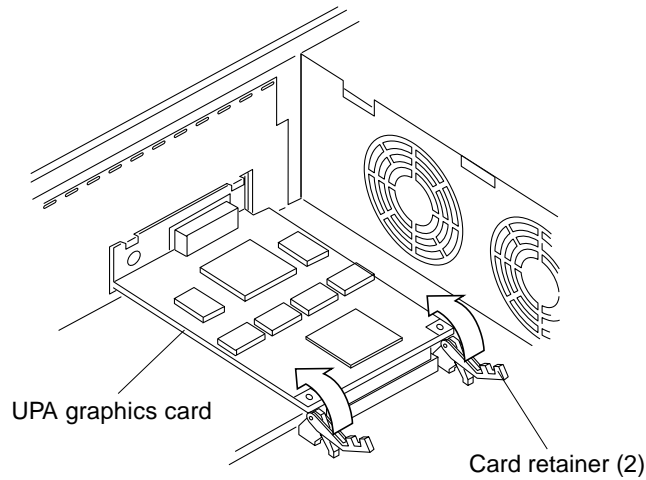
6. Push the card retainer onto the UPA graphics card (FIGURE 5).
7. Replace two screws and washers securing the UPA graphics card to the back panel.
8. Detach the wrist strap.
9. Replace the unit cover.
10. Connect the video cable to the graphics card 13W3 video connector.
11. Power-on the system.



**FIGURE 3** Replacing the UPA Graphics Card



**FIGURE 4** Seating the UPA Graphics Card into the Socket



**FIGURE 5**    Securing the UPA Graphics Card into the Chassis

## Creator/Creator3D UPA Graphics Card Patch Information

If you are installing or using the Solaris 2.6 5/98 operating environment, and your system is running in multi-processor mode and you are also installing a Creator or a Creator3D UPA graphics card, you must install patch 105360-21 (or a more current version). This patch is available through the SunSolve Online website at <http://sunsolve.sun.com>.

