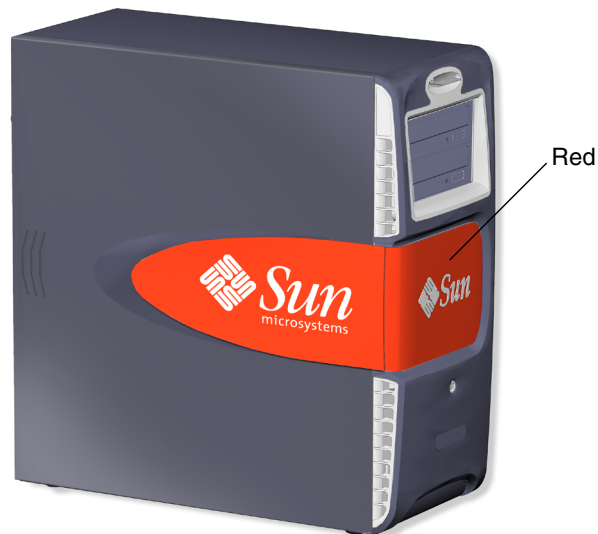


Sun Blade™ 2500 Product Notes

(Red)



Sun Microsystems, Inc.
www.sun.com

Part No. 816-1001-15
December 2004, Revision A

Submit comments about this document at: <http://www.sun.com/hwdocs/feedback>

Copyright 2004 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at <http://www.sun.com/patents> and one or more additional patents or pending patent applications in the U.S. and in other countries.

This document and the product to which it pertains are distributed under licenses restricting their use, copying, distribution, and decompilation. No part of the product or of this document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.

Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd. The Energy Star logo is a registered trademark of EPA.

Sun, SunSolve, Sun Microsystems, the Sun logo, AnswerBook2, `docs.sun.com`, Solaris, OpenBoot, SunOS, SunVTS, and Sun Blade are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and in other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and in other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.



As an Energy Star® partner, Sun Microsystems, Inc. has determined that configurations of this product that bear the Energy Star Logo meet the Energy Star guidelines for energy efficiency.

U.S. Government Rights—Commercial use. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

OpenGL is a registered trademark of Silicon Graphics, Inc.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2004 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, Californie 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuelle relatants à la technologie qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuelle peuvent inclure un ou plus des brevets américains énumérés à <http://www.sun.com/patents> et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les autres pays.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, SunSolve, Sun Microsystems, le logo Sun, AnswerBook2, `docs.sun.com`, OpenBoot, SunOS, SunVTS, Sun Blade, et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciées de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

OpenGL est une marque déposée de Silicon Graphics, Inc.

LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.



Please
Recycle



Adobe PostScript

Sun Blade 2500 Product Notes

The *Sun Blade 2500 Product Notes (Red)*, 816-1001, contain late-breaking information about changes to hardware, software, and documentation that became known after the documentation set was published.

Note – This publication describes the changes made to hardware, software, and documentation for Sun Blade™ 2500 workstations with red bezels. If you have a Sun Blade 2500 workstation with a silver bezel, refer to *Sun Blade 2500 Product Notes (Silver)*, 817-5121.

Note – Both red- and silver-bezeled versions of the Sun Blade 2500 documentation are available at:

<http://www.sun.com/products-n-solutions/hardware/docs/>

These product notes include:

- “Hardware Information” on page 2
- “Software and Firmware Information” on page 4
- “Documentation Information” on page 11

Hardware Information

Note – Before removing or installing any hardware, software, or firmware components read all of the *Sun Blade 2500 Product Notes*, and the documentation for that component.

Note – Before removing or installing any hardware components, read all of the contents of the *Sun Blade 2500 Workstation Safety and Compliance Guide*, 816-2061.

CD-RW and DVD-ROM Optical Drives

Refer to Chapter 12.2.3, “Installing the DVD-ROM Drive” in the *Sun Blade Service, Diagnostics, and Troubleshooting Manual*, 816-0996. All Sun Blade 2500 workstation optical drives must have their jumpers configured for MA (MASTER) mode operation. If necessary, configure the drive by placing the jumper in the MA (MASTER) position.

Memory Upgrade and Firmware Compatibility

Note – If a memory upgrade is not compatible with the system OpenBoot™ PROM, the workstation will beep three times and power off.

Checking Firmware Version

When your workstation boots, OpenBoot PROM checks for system compatible DIMM pairs. Before upgrading memory, verify the version of OpenBoot PROM installed on your system by typing the following command from a terminal window:

```
% prtconf -v
```

For example:

```
% prtconf -v
OBP 4.9.4 2003/05/14 19:12
```

In this example, OpenBoot PROM version 4.9.4 is installed.

Determining Proper DIMM Pair Part Numbers

Use [TABLE 1](#) to determine which DIMM pair memory upgrades to order for your system.

TABLE 1 DIMM Pair Memory Upgrades

OpenBoot PROM Version	DIMM Pairs	Sun Part Number
4.9.4	2 x 512 MB DIMMs	595-6874-01 (x-option)
	2 x 1 GB DIMMs	595-6875-01 (x-option)
4.9.5	2 x 512 MB DIMMs	595-7498-01 (x-option)
	2 x 1 GB DIMMs	595-7499-01 (x-option)
4.9.7	2 x 512 MB DIMMs	595-7498-01 (x-option)
	2 x 1 GB DIMMs	595-7499-01 (x-option)

SCSI Host Adapter Cable

An UltraSCSI host adapter cable is now available from Sun. This cable supports the 72 GB DAT tape drive and the single channel, single ended UltraSCSI PCI host adapter card. [TABLE 2](#) describes the part numbers for the UltraSCSI host adapter cable, 72 GB tape drive assembly, and UltraSCSI PCI host adapter card.

TABLE 2 SCSI Host Adapter Cable, 72 GB DAT Tape Drive and UltraSCSI PCI Host Adapter Card Part Numbers

Part Name	Part Number
SCSI Host Adapter Cable	370-7629-01
72 GB DAT Tape Drive	595-7384-01 (x-option)
UltraSCSI PCI Host Adapter Card	595-5377-01 (x-option)

Sun XVR-600 Graphics Accelerator Monitor Cable

The monitor cable included with the Sun XVR-600 graphics accelerator installation kit has been changed from a DVI-I to 13W3 monitor cable to a DVI-I to VGA monitor cable.

For additional information about the Sun XVR-600 graphics accelerator go to:
<http://www.sun.com/desktop/products/graphics/xvr600/>

Software and Firmware Information

Note – Before installing any software onto the Sun Blade 2500 hard drive(s), read the documentation for that software.

Verifying Workstation Configuration With the Sun Install Check Tool

Note – Install Check is an optional tool for verifying workstation configuration. Sun Microsystems encourages its use for customer satisfaction.

The Install Check tool verifies and provides information about your Sun Blade 2500 workstation's configuration. To run Install Check, you need to download it from the web.

Downloading Install Check

1. **As superuser of the Sun Blade 2500 system, open a web browser and go to the Install Check URL:**

<http://www.sun.com/software/installcheck/index.html>

Note – Documentation on the use of Install Check is available at this URL.

2. **Click Get the Software.**
3. **Click Download Sun Install Check Tool.**

4. Log in with your My Sun, Sun Store, or SunSolveSM username and password.

Note – If you are not a registered user, click Register Now and register.

5. Read and agree to the licensing terms.
6. Click the Sun Install Check Application, English link and save the `sunic.zip` file to a download directory.
7. Go to the download directory and unzip the `sunic.zip` file.

```
# unzip sunic.zip
```

A `sunic` subdirectory is created, containing a `README` file.

Read the `README` file for further instructions to install and run the Sun Install Check tool.

Software Optimization

Software for the Sun Blade 2500 workstation is continuously improved throughout the life cycle of the product. [TABLE 3](#) lists the latest patches as of December 2004.

TABLE 3 Latest Patches as of December 2004

Solaris Operating Environment	Patch	Synopsis
Solaris TM 8 2/04	108528-29 (or later)	Kernel update patch
	108576-48 (or later)	SunOS TM 5.8: Sun XVR-500 graphics accelerator patch
	108974-41 (or later)	DADA, UATA, DAD, SD, SCSI patch
	108975-08 (or later)	<code>rmformat</code> and <code>format</code> patch
	108977-04 (or later)	<code>libsmmedia</code> patch
	109793-25 (or later)	<code>su</code> patch

TABLE 3 Latest Patches as of December 2004 (*Continued*)

Solaris Operating Environment	Patch	Synopsis
	109873-26 (or later)	prtdiag and platform libprtdiag_psr.so.1 patch
	109883-02 (or later)	/usr/include/sys/ecppsys.h patch
	109887-18 (or later)	Smart card and usr/sbin/ocfserv patch
	109889-07 (or later)	usr platform links and libc_psr patch
	109892-04 (or later)	/kernel/drv/sparcv9/ecpp patch
	109896-28 (or later)	SunOS 5.8: USB and audio framework patch
	109920-09 (or later)	pcic and busra driver patch
	110320-03 (or later)	/kernel/misc/sparcv9/s1394 patch
	110609-04 (or later)	USB header patch
	110835-07 (or later)	/platform/sun4u/kernel/misc/sparcv9/gptwo_cpudriver patch
	111325-02 (or later)	/usr/lib/saf/ttymon patch
	111804-03 (or later)	update_drv, rem_drv patch
	111808-02 (or later)	/usr/lib/adb/devinfo patch
	113680-04	BGE driver patch
	113681-03	mc-us3i patch
	113886-26 (or later)	OpenGL® 1.3: OpenGL patch for Solaris (32-bit)
	113887-26 (or later)	OpenGL 1.3: OpenGL patch for Solaris (64-bit)
	114537-26 (or later)	SunOS 5.8: Sun XVR-100 graphics accelerator patch

TABLE 3 Latest Patches as of December 2004 (*Continued*)

Solaris Operating Environment	Patch	Synopsis
	114554-17 (or later)	SunOS 5.8: Sun XVR-1200 graphics accelerator patch
	114152-01 (or later)	SunOS 5.8: Japanese SunOS 4.x Binary Compatibility (BCP) patch (Only for Japanese locale)
	114583-01 (or later)	I ² C driver patch
	116042-12 (or later)	SunVTS 5.1: Patch Set 5
	117000-05 (or later)	Kernel update patch
	117005-01 (or later)	PICL-D patch
	117350-13 (or later)	Kernel update patch
	117365-01 (or later)	OpenBoot PROM 4.9.5: Firmware upgrade
Solaris 9 4/04		
	112233-12 (or later)	Kernal update patch
	112540-22 (or later)	SunOS 5.9: Sun XVR-500 graphics accelerator patch
	112926-05 (or later)	Smart card patch
	112954-09 (or later)	uata driver patch
	113077-14 (or later)	su patch
	113277-26 (or later)	sd and ssd patch
	113447-23 (or later)	libprtdiag_psr patch
	113490-04 (or later)	Audio device driver patch

TABLE 3 Latest Patches as of December 2004 (*Continued*)

Solaris Operating Environment	Patch	Synopsis
	113886-20 (or later)	OpenGL 1.3: OpenGL Patch for Solaris (32-bit)
	113887-20 (or later)	OpenGL 1.3: OpenGL Patch for Solaris (64-bit)
	114128-02 (or later)	sd_lun patch
	114538-26 (or later)	SunOS 5.9: Sun XVR-100 graphics accelerator patch
	114555-17 (or later)	SunOS 5.9: Sun XVR-1200 graphics accelerator patch
	114153-01 (or later)	SunOS 5.9: Japanese SunOS 4.x Binary Compatibility (BCP) patch (Only for Japanese locale)
	114584-01 (or later)	I ² C driver patch
	115553-13 (or later)	USB and audio framework patch
	116042-12 (or later)	SunVTS TM 5.1: Patch Set 5
	116472-01 (or later)	reformat patch
	116474-02 (or later)	libsmmedia patch
	116476-01 (or later)	pcic driver patch
	116478-01 (or later)	usr platform links patch
	116480-01 (or later)	IEEE 1394 patch
	116482-01 (or later)	modload utils patch
	116665-01 (or later)	BGE driver patch
	117171-12 (or later)	Kernel update

TABLE 3 Latest Patches as of December 2004 (*Continued*)

Solaris Operating Environment	Patch	Synopsis
	117365-01 (or later)	OpenBoot PROM 4.9.5: Firmware upgrade

Note – Additional information about the latest patches may be found at:
<http://sunsolve.sun.com>

Note – Patch 117365 can be installed to upgrade the OpenBoot PROM firmware to a version later than 4.9.4.

Updating the OpenBoot PROM Firmware

1. As superuser of the system that requires the firmware update, go to the SunSolve web site:

<http://www.sunsolve.sun.com>

2. Click the Patchfinder link.

The SunSolve Patch Access page appears.

3. Type 117365 into the Patch ID field and click Find Patch.

The patch README file is displayed.

4. Read the README file for instructions on downloading and installing the firmware.

Checking Your Installed Patches

- Type this command to see which patches are installed on your system:

```
% patchadd -p
```

The installed patches are listed in ascending order.

Installing the Patches Using the patchadd Command

1. Go to the Sun Solve web site:
<http://sunsolve.sun.com>
2. Click the Patchfinder link.
3. Enter a patch ID from TABLE 3, "Latest Patches as of December 2004" on page 5 into the field and click Find Patch.
4. Download the patch to a temporary location.
5. Repeat Step 3 and Step 4 for each patch required.
6. Become superuser of the system to receive the patch.
7. Transfer and unzip each patch.

For example:

```
# unzip xxxxxx-x
```

Note – Where xxxxxx-x represents a patch ID number.

8. Install each patch.
For example:
9. Repeat Step 7 and Step 8 for each patch required.
10. If requested by a patch, reboot the system after installing all of the patches.

For example:

```
# patchadd xxxxxx-x
```

```
# reboot -- -r
```

11. Verify the system configuration by running the Sun Install Check tool.

See "Verifying Workstation Configuration With the Sun Install Check Tool" on page 4.

Documentation Information

This section describes changes to the Sun Blade 2500 documentation.

Getting Started With Additional Preinstalled Software

Note the following correction to the *Sun Blade 2500 Getting Started Guide*, 816-1005-11.

Power Management Features

The Sun Microsystems web site does not list the workstation configurations that are Energy Star compliant. From the following Energy Star web site you can download a PDF file of the configurations that are Energy Star compliant.

http://www.energystar.gov/index.cfm?computers.pr_computers

From the Energy Star web site select the following links to download the PDF file:
Products>Office Equipment>Computers>For Consumers: Product List

Service, Diagnostics, and Troubleshooting Manual

Note the following corrections to the *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual*, 816-0996-11.

Service, Diagnostics, and Troubleshooting Manual Revision

The *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual* has been revised to include all of the information contained within the original service manual and the following *Sun Blade 2500 Product Notes*:

- 816-0996-10
- 816-0996-11
- 816-0996-12
- 816-0996-13

Refer to the *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual*, 816-0996-11, and this product note for the latest service information.

ShowMe How Multimedia Movie Links Might Not Work

The *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual* on the Sun Blade 2500 Hardware Documentation CD, part number 704-7736, contains links to multimedia service procedures. Sometimes, if you read the manual with an Adobe® Acrobat Reader that has been launched from a web browser, the links may not work correctly, while the rest of the manual content displays properly. If this happens, perform one of the following steps to see the movies:

- Open Adobe Acrobat Reader, and then open the *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual* directly from Acrobat Reader to access the multimedia links within the manual.

The *Sun Blade 2500 Service, Diagnostics, and Troubleshooting Manual* PDF files are located on the hardware documentation CD at:

`/cdrom/cdrom0/Docs/ServiceManual/` (for Solaris users)

or

`/sblade2500doc/Docs/ServiceManual/` (for users on other platforms)

- Click the ShowMe™ How tab on the hardware documentation CD site pages, and select a link to view a movie.