



Installing Sun Fire™ 880 FC-AL Backplane Firmware

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900 U.S.A.
650-960-1300

Part No. 816-2577-10
September 2001, Revision A

Copyright 2001 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, CA 94303-4900 U.S.A. All rights reserved.

This product or document is distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or 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 other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Enterprise, Sun Microsystems, the Sun logo, AnswerBook, AnswerBook2, docs.sun.com, OpenBoot, SunSwift, SunVTS, JumpStart, SunSolve, and Solaris 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 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.

Federal Acquisitions: Commercial Software—Government Users Subject to Standard License Terms and Conditions.

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 2001 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, CA 94303-4900 Etats-Unis. Tous droits réservés.

Ce produit ou document est 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, Sun Microsystems, le logo Sun, AnswerBook, AnswerBook2, docs.sun.com, OpenBoot, SunSwift, SunVTS, JumpStart, SunSolve, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, 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 licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" 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.



Installing Sun Fire 880 FC-AL Backplane Firmware

A backup image of the Sun Fire™ 880 FC-AL backplane firmware is provided on the Computer Systems Supplement CD for your specific Solaris™ release. In the unlikely event that the firmware on a Sun Fire 880 FC-AL backplane becomes corrupted, you can use the backup image to flash update the backplane with its original firmware. The flash update procedure is performed with the Solaris `luxadm` utility and is described below.

Before you can flash update the backplane, the firmware image must be copied from the Supplement CD to the Sun Fire 880 system disk. If you use Solaris Web Start to install the Supplement CD software, the Sun Fire 880 FC-AL Backplane Firmware is not included in the default installation. To install the backup firmware on the system disk, choose the Custom Install option and select the Sun Fire 880 FC-AL Backplane Firmware. For more information, see “Installing Supplement CD Software” in the *Solaris on Sun Hardware Platform Guide*.

Note – The latest version of the backplane firmware is always available on the SunSolve OnlineSM web site at `sunsolve.sun.com`. Whenever possible, you should download and install the firmware from the SunSolve site instead of the Supplement CD. The firmware on the Supplement CD is provided for emergency situations only, when it is not possible to access the SunSolve site. Depending on the specific Solaris release, the Supplement CD firmware may be older than the firmware available from SunSolve. To install the firmware from the SunSolve web site, see the instructions in the README file provided with the firmware image.

Whether installed from the Supplement CD or downloaded from the SunSolve web site, the firmware image is installed in the following default location on the Sun Fire 880 system disk:

```
/usr/platform/SUNW,Sun-Fire-880/lib/images/int_fcbpl_fw
```

Once the image is installed in this location, perform the flash update procedure as follows.

1. As superuser, type the following command to bring the system to single-user mode:

```
# init -s
```

2. Type the following `luxadm` subcommand to begin the flash update process:

```
# luxadm download -f firmware_path enclosure_name
```

Where:

- `firmware_path` is the location of the firmware image on the system disk—in this case, `/usr/platform/SUNW,Sun-Fire-880/lib/images/int_fcbpl_fw`.
- `enclosure_name` is the enclosure name assigned to the Sun Fire 880 internal storage array—by default, `FCloop`. If you need to verify the enclosure name first, use the `luxadm probe` subcommand.

Note – For more information about the `luxadm` utility, see *Platform Notes: Using luxadm Software*, part of the Solaris on Sun Hardware AnswerBook2 set on the Supplement CD.

3. When the superuser prompt reappears, wait at least 15 more minutes before continuing with this procedure.

This minimum wait time is required for the flash update process to propagate the firmware code to all SSC100 processors in the system. Do not attempt any other operations during this time.

4. After the required waiting period, reboot the system to single-user mode. Type the following:

```
# reboot -- -s
```

5. To verify that the flash update process has successfully completed, type the following `luxadm` subcommand:

```
# luxadm display enclosure_name
```

Where *enclosure_name* is the enclosure name assigned to the Sun Fire 880 internal storage array.

The command output shows the status of each SSC100 in the system. The following is an excerpt of sample output for a dual-backplane system.

```
SSC100's - 0=Base Bkpln, 1=Base LoopB, 2=Exp Bkpln, 3=Exp LoopB
SSC100 #0:   O.K.(9222/ 120A)
SSC100 #1:   O.K.(9222/ 120A)
SSC100 #2:   O.K.(9222/ 120A)
SSC100 #3:   O.K.(9222/ 120A)
```

Verify that each SSC100 displays an "O.K." status and that each displays the same firmware version in parentheses. If so, the flash update process has successfully completed. Otherwise, wait another two minutes or so and repeat this step.

6. Once the flash update process is complete, restore the system to multiuser mode using the `init` command.

For example, type:

```
# init 2
```

The system can now resume normal operation.

