Sun FDDI™ SBus Adapter 4.0 Product Notes

Sun

The Network Is the Computer™

Your SBus board is marked to indicate its FCC, DOC, and VCCI class. Please read the appropriate section which corresponds to the marking on your SBus board before attempting to install it into your system.

FCC Class A Notice — United States

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note – This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Shielded Cables

Connections between the workstation and peripherals must be made using shielded cables in order to maintain compliance with FCC radio frequency emission limits.

Modifications

Modifications to this device, not approved by Sun Microsystems, Inc., may void the authority granted to the user by the FCC to operate this equipment.

FCC Class B Notice — United States

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note – This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Shielded Cables

Connections between the workstation and peripherals must be made using shielded cables in order to maintain compliance with FCC radio frequency emission limits.

Modifications

Modifications to this device, not approved by Sun Microsystems, Inc., may void the authority granted to the user by the FCC to operate this equipment.

DOC Class A Notice — Canada

This digital apparatus does not exceed the Class A limits for radio noise emission for a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Avis Concernant les Systèmes Appartenant à la Classe A du DOC — Canada

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

DOC Class B Notice — Canada

This digital apparatus does not exceed the Class B limits for radio noise emission for a digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Avis Concernant les Systèmes Appartenant à la Classe B du DOC — Canada

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe B prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

　第二種ＶＣＣＩの商標　⟦ⅤℂⅠ⟧　のない製品には、下記に示す第一種ＶＣＣＩ基準に関するお知らせが該当します。第二種ＶＣＣＩの商標　⟦ⅤℂⅠ⟧　がついた製品には、下記に示す第二種ＶＣＣＩ基準に関するお知らせが該当します。

第一種ＶＣＣＩ基準に関するお知らせ

　この装置は、第一種情報装置（商工業地域において使用されるべき情報装置）で商工業地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）基準に適合しております。

　この装置は、第一種または第二種ワークステーションのオプションです。本装置を使用する場合、システムとしての適合レベルは下記の通りです。
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　第二種ワークステーション：第一種情報装置

　本装置を使用する第二種ワークステーションは、第一種情報装置（商工業地域において使用されるべき情報装置）となります。
　従って、住宅地域またはその隣接した地域で使用すると、ラジオ、テレビジョン受信機等に受信障害を与えることがあります。
　取扱説明書に従って正しい取り扱いをして下さい。

第二種ＶＣＣＩ基準に関するお知らせ

　この装置は、第二種情報装置（住宅地域またはその隣接した地域において使用されるべき情報装置）で住宅地域での電波障害防止を目的とした情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）基準に適合しております。

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　本装置を使用する第二種ワークステーションは、第二種情報装置（住宅地域またはその隣接地域において使用されるべき情報装置）となります。従って、本装置をラジオ、テレビジョン受信機に近接してご使用になると、受信障害の原因となることがあります。
　取扱説明書に従って正しい取り扱いをして下さい。

SunFDDI SBus Adapter 4.0
Product Notes

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These product notes are part of the SunFDDI/S 4.0 document set and contain important information concerning the product. Read this document before attempting to install SunFDDI on your machine.

Inventory

You should have the following items in your SunFDDI shipment:

- A compact disc (CD-ROM), part number 704-5241-10, containing the SunFDDI software

- A SunFDDI SBus card, part number 370-2238-01 (SAS fiber),
  or 370-2239-01 (DAS fiber)

- *SunFDDI SBus Adapter 4.0 User's Guide*, part number 802-5144-10

Compatibility and Requirements

Hardware and Software Platforms
SunFDDI 4.0 was designed to run on SPARCstations™ and SPARCservers™ (32 Mbytes RAM minimum) running either a Solaris™ 1.1.1 environment or later, or a Solaris 2.3 environment or later.

Disk Space
You require 1600 KBytes of disk space to install SunFDDI in a Solaris 2.x environment and 3600 KBytes of disk space to install SunFDDI in a Solaris 1.x environment.

Hostnames and IP Addresses
You need to assign a unique hostname and IP address to each SunFDDI device installed in your machine. If you have more than one IP interface (for example, FDDI and Ethernet) in a single machine, each interface must be on a different IP subnetwork.

Differences from Previous Release

- The beaconing on resetting problem that existed in FDDI 3.0 does not exist in SunFDDI 4.0.

- SunFDDI 4.0 supports the full range of possible multicast addresses without the restrictions imposed on SunFDDI 3.0.

- A nibbling feature has been added to SunFDDI 4.0 that prevents packet fragmentation.

Diagnostics

- If you are running Solaris 2.5, run SunVTS in the normal way using the `netstat` command to verify that SunFDDI is functional.

- If you are running earlier versions of Solaris or SunOS, do the following:

1. **Change to the** `/opt/SUNWdiag/bin` **directory.**

```
% cd /opt/SUNWdiag/bin
```

2. **Using a text editor, create a file named** `.usertest`, **and add the following:**

```
fddi,nettest,v IF=nf0
```

3. **Run Sundiag.**

Related Patches

The patches needed for SunFDDI 4.0 depend on the operating system installed on your machine.

Solaris 2.3, 2.4, 2.5 Environment

- `103011-01`

Install the latest version of Patch-ID# `103011-01` to fix BugID 1228732: SunFDDI makes the Mbone tunnel router hang under heavy multicast routing loads.

Install this Patch-ID# `103011-01` only if you any of the following patches:
- `101318-71`
- `101734-03`
- `101945-27`
- `102038-02`

▼ To Install a Patch Using Installpatch

1. Become superuser.

2. Apply the patch by typing:

```
# <dir>installpatch <patch-dir>
```

where *<dir>* is the directory containing `installpatch`, and
<patch-dir> is the directory containing the patch itself.

Example:

```
# cd /tmp/123456-01
# ./installpatch .
```

3. See "Patch Installation Errors" if any errors are reported.

4. Reboot your system after the patch is successfully installed.

Note – On client server machines the patch package is NOT applied to existing clients or to the client root template space. Therefore, when appropriate, ALL CLIENT MACHINES WILL NEED THE PATCH APPLIED DIRECTLY USING THIS SAME INSTALLPATCH METHOD ON THE CLIENT.

▼ To Install the Patch on a Dataless Client

1. Execute the following command on the server:

```
# share -F nfs -o ro,anon=0 /export/exec/<os_version>/usr
```

This gives the client read-only, root access to the exported /usr file system so that the client can execute the pkgadd command.

2. Login to the client system and become super-user.

3. Continue with Step 2 in "To Install a Patch Using Installpatch" on page 3.

▼ To Install a Patch on a Diskless Client

1. Find the complete path for the root directory of the diskless client.

2. Install the patch normally, but add the command option -R *<path>* **to the command line.** *<path>* **should be the completely specified.**
Example:

```
# cd /tmp/123456-01
# ./installpatch -R /export/root/client1 .
```

▼ To Identify Patches Installed on a System

♦ Use the -p **option to identify installed patches.**

```
# ./installpatch -p
```

Or

```
# showrev -p
```

♦ **On a diskless client, use both the** `-R <dir>` **option and the** `-p` **option, where** *\<dir>* **is the fully specified path to the client's root directory.**

```
# cd /tmp/123456-01
# ./installpatch -R /export/root/client1 -p
```

▼ To Back Out of a Patch Using Backoutpatch

1. Become super-user.

2. Change directory to `/var/sadm/patch`**:**

3. Back out of the patch by typing:

```
<patch-id>/backoutpatch <patch-id>
```

where *\<patch-id>* is the patch number.

Example:

```
# cd /var/sadm/patch
# 123456-01/backoutpatch 123456-01
```

▼ To Back Out of a Patch on a Dataless Client

1. Give the client root access to `/usr` **as specified in "To Install the Patch on a Dataless Client."**

2. Logon to the client and follow backoutpatch instructions as specified in "To Back Out of a Patch Using Backoutpatch."

▼ To Back Out of a Patch on a Diskless Client

To back out of a patch on a diskless client, either follow the instructions for backing out on a dataless client (that is, logon to the client and back out the patch), or use the following instructions to back out of the patch while on the server.

1. **Find the complete path for the root directory of the diskless client.**

2. **Back out the patch normally, but add the command option** `-R` *<path>* **to the command line.** *<path>* **means the complete path name.**
   Example:

```
# cd /export/root/client1/var/sadm/patch
# ./123456-01/backoutpatch -R /export/root/client1 123456-01
```

Solaris 1.x Environment

- `103012-01`

Install Patch-ID# `103012-01` to fix BugID 1224893: fddi broken with Ross HyperSparc 150 MHz under SunOS 4.1.4/Solaris1.1.2.

1. **Become superuser.**

2. **In the** `patches/103012-01` **directory on the CD, type**

```
# ./patch_install
```

The patch will be properly installed in /usr/sunlink/nf.

3. **Change directories.**

```
# cd /usr/sunlink/nf/install
```

4. **Complete the patch installation, by typing**

```
# ./install_nf
```

This final step rebuilds the driver with the patch.

Known Problems and Limitations

As of the date of this publication, we are aware of the following problems and limitations with SunFDDI 4.0:

- The SunFDDI 4.0 driver for SunOS 4.x will not load on any system that is running SunOS 4.1.3 or 4.1.3C. You must install kernel jumbo Patch-ID# 100726-18 before installing the driver.

  Contact Sun Service at 1-800-872-4SUN to obtain kernel jumbo Patch-ID# 100726-18.

- SunFDDI 4.0 does not support booting an Ultra Sparc machine across a network.

Known Problem With the Documentation

The *SunFDDI Adapter 4.0 User's Guide* contains an FCC disclaimer for Class B. This is erroneous. The correct FCC disclaimer appears in the front matter of this document.