

# Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller

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Product Notes  
for the AMC.1-HDD SAS



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# Contents

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## **Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller Product Notes 1**

Additional Copyright Information 1

Related Documentation 2

Operating Systems 2

300GB Capacity Available 2

Upgrading Firmware and Software 3

- ▼ To Upgrade Firmware and Software 3

Upgrading Flash 5

- ▼ To Install the LSI Upgrade Utility 5

- ▼ To Download SAS Firmware Updates 6

- ▼ To Upgrade the Flash 6



# Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller Product Notes

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This document contains important and late-breaking information about Oracle's Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller (AMC.1-HDD SAS). This document includes information about upgrading software and firmware on the AMC.

This document contains the following topics:

- ["Additional Copyright Information" on page 1](#)
- ["Related Documentation" on page 2](#)
- ["Operating Systems" on page 2](#)
- ["Upgrading Firmware and Software" on page 3](#)

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## Related Documentation

The following documents ship with the Sun Netra CP3000 AMC.1-HDD SAS:

- *Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller Getting Started Guide (820-7177)*
- *Important Safety Information for Sun Hardware Systems*

Refer to the *Sun Netra CP3000 Advanced Mezzanine Card PCIe Hard Drive and SAS Controller Getting Started Guide* for information on obtaining the rest of the Sun Netra CP3000 AMC.1-HDD SAS documentation, which is available online at:

<http://docs.sun.com/app/docs/prod/cp3000.pcie#hic>

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## Operating Systems

The following operating systems can be used with the AMC:

- Solaris® 10 8/07
- Solaris x86 10 8/07
- Windows Server 2003
- Red Hat Enterprise Linux (RHEL) 5

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## 300GB Capacity Available

The former 146GB capacity is being phased out in lieu of higher-capacity onboard storage. The documentation was revised to support the new 300GB capacity and permit higher capacities to be added as they are available.

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# Upgrading Firmware and Software

New releases contain the most up-to-date features, enhancements, and bug fixes. Using an earlier release could limit your use of features and enhancements, and could affect your systems with known issues.

Release packages are available from SDLC at:

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

Use the `upgradefw` utility to upgrade your AMC firmware and software.

The AMC.1-HDD SAS 146GB keeps a redundant copy of the firmware in the FLASH. Upgrades are reliable and reversible. A failure in the download (error or interruption) does not disturb the IPMC's ability to continue using the “old” firmware or its ability to restart the download process. The IPMC automatically fails back to the previous firmware if there is a problem when first running new code.

## ▼ To Upgrade Firmware and Software

- 1. Download and upgrade the ATCA blade server firmware and software before upgrading any AMC products installed on blade servers.**

For detailed instructions, refer to the *Product Notes* and to the README files for the blade server in which the AMC is installed.

- 2. Download the AMC upgrades, and place the images on a TFTP server.**

For detailed instructions, refer to the README file for the AMC.

### 3. Install the AMC update using the `upgradefw` tool, as in the following example:

```
$ upgradefw [-s|-n|-m|-r|-R|-q] <firmware_filename>
```

Option	Description
<code>-s &lt;device[:options]&gt;</code>	Upgrade over a serial line (not supported).
<code>-n &lt;hostname[:port],targetaddr&gt;</code>	Where <i>hostname</i> is indicated as the dotted decimal IP address of the remote shelf manager. Where <i>port</i> can be used to override the default port number used by the tool. Where <i>targetaddr</i> is the slot ID of the carrier that holds the AMC
<code>-m &lt;mmc_address&gt;</code>	Where <i>mmc_address</i> is the IPMB-L address of the target MMC
<code>-r</code>	Restore from the backup copy
<code>-R</code>	Get backup version
<code>-q</code>	Use quiet mode

The following example shows the command syntax for performing a firmware upgrade from a desktop PC over LAN/IPMB, using the shelf manager and AMC Carrier IPMC as a LAN-to-IPMB bridge:

```
$ ./upgradefw -n 192.168.1.137,84 -m 7a upgrade.img
```

The `upgradefw` tool lets you manage Intelligent Platform Management Interface (IPMI) functions of either a local or remote system using IPMI V1.5 and IPMI v2.0. Capabilities include printing FRU information, LAN configuration, sensor readings, and remote chassis power control.



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# Upgrading Flash

The AMC is preloaded with firmware that manages the protocols necessary to communicate with SAS and SATA target devices. All firmware is qualified prior to shipping. Periodically, new firmware updates are offered to improve the functionality or performance of these host adapters.

The flash upgrade method varies depending on the operating system. Firmware upgrade tools are provided for Windows, Linux, and Solaris operating systems. Upgrade tools that feature both graphical user interfaces (GUI) and command line interface (CLI) are available.

## ▼ To Install the LSI Upgrade Utility

LSI® Corporation provides a flash command line utility called `lsiutil` to update the firmware of products utilizing its SAS controllers. The software is available for the Solaris, Windows, DOS, and Linux operating systems as well as Extensible Firmware Interface (EFI) pre-boot environments.

The latest LSI drivers and utilities are available at:

<http://www.lsi.com/support/index.html>

- 1. Go to the LSI website and locate the utility download for your OS, or use the following link to download the utility for all supported operating systems:**

[http://www.lsi.com/DistributionSystem/AssetDocument/support/downloads/hbas/fibre\\_channel/hardware\\_drivers/LSIUtil%20Kit\\_1.60.zip#Source/lsiutil.tar.gz:lsiutil.tar:lsiutil/Makefile\\_Windows](http://www.lsi.com/DistributionSystem/AssetDocument/support/downloads/hbas/fibre_channel/hardware_drivers/LSIUtil%20Kit_1.60.zip#Source/lsiutil.tar.gz:lsiutil.tar:lsiutil/Makefile_Windows)

- 2. Based on the OS, perform the following to install `lsiutil`:**

- For Microsoft Windows: copy `lsiutil.exe` to `%windir%\system32`.
- For Linux and Solaris: copy `lsiutil.exe` to `/usr/bin`.
- For DOS: copy `lsiutil.exe` to the desired directory. Install `DOS4GW.exe` in the same directory.
- For EFI: copy `lsiutil.exe` to the desired directory.

3. Go to the LSI website and locate the corresponding driver for your OS.

[http://www.lsi.com/storage\\_home/products\\_home/standard\\_product\\_ics/sas\\_ics/lasisas1064e/index.html](http://www.lsi.com/storage_home/products_home/standard_product_ics/sas_ics/lasisas1064e/index.html)

4. On the LSI web site page, click on the Support and Downloads tab.

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**Note** – The `lsiutil` program will not operate properly unless an LSI OS driver is also installed.

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5. Locate and download the driver corresponding to your OS.
6. Install the driver in the applicable directory for your OS, as described in [Step 2](#).

## ▼ To Download SAS Firmware Updates

- Download updates from the SDLC site:

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

For detailed information about packages and downloading them, refer to the README files for the AMC product.

## ▼ To Upgrade the Flash

1. Ensure that the AMC is properly installed in the carrier board slot.
2. Open a terminal window.
3. Open the directory containing the `lsiutil` program.
4. Execute the `lsiutil` program.  
The program begins, and the Device Selection menu is displayed.  
If you have not installed the program, see [“To Install the LSI Upgrade Utility” on page 5](#).
5. Select a device to update.  
A Download Options menu is displayed.
6. From the Download Options menu, select option menu 2 or 4.  
The File Download screen is displayed.

**7. When prompted, enter the firmware file name.**

**8. Type Yes, when prompted to continue.**

While the image is downloading, a progress message is displayed. When the download is completed, the message "Download succeeded" is displayed.

The update process takes about 20–30 seconds. After the download is completed, the Main menu is displayed.

**9. From the Main menu, select option 99 .**

**10. Enter 0 to quit the program.**

