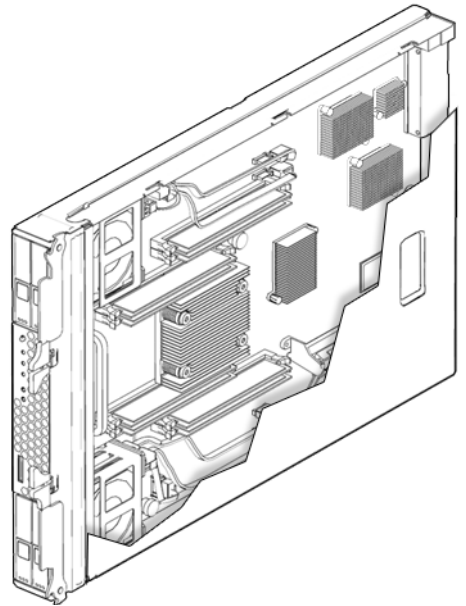


Sun Blade T6300 Server Module

Product Notes



Part No. 820-0278-12
June 2010, Revision A

Copyright © 2008, 2010, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related software documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT RIGHTS. Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications which may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. UNIX is a registered trademark licensed through X/Open Company, Ltd.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Copyright © 2008, 2010, Oracle et/ou ses affiliés. Tous droits réservés.

Ce logiciel et la documentation qui l'accompagne sont protégés par les lois sur la propriété intellectuelle. Ils sont concédés sous licence et soumis à des restrictions d'utilisation et de divulgation. Sauf disposition de votre contrat de licence ou de la loi, vous ne pouvez pas copier, reproduire, traduire, diffuser, modifier, breveter, transmettre, distribuer, exposer, exécuter, publier ou afficher le logiciel, même partiellement, sous quelque forme et par quelque procédé que ce soit. Par ailleurs, il est interdit de procéder à toute ingénierie inverse du logiciel, de le désassembler ou de le décompiler, excepté à des fins d'interopérabilité avec des logiciels tiers ou tel que prescrit par la loi.

Les informations fournies dans ce document sont susceptibles de modification sans préavis. Par ailleurs, Oracle Corporation ne garantit pas qu'elles soient exemptes d'erreurs et vous invite, le cas échéant, à lui en faire part par écrit.

Si ce logiciel, ou la documentation qui l'accompagne, est concédé sous licence au Gouvernement des Etats-Unis, ou à toute entité qui délivre la licence de ce logiciel ou l'utilise pour le compte du Gouvernement des Etats-Unis, la notice suivante s'applique :

U.S. GOVERNMENT RIGHTS. Programs, software, databases, and related documentation and technical data delivered to U.S. Government customers are "commercial computer software" or "commercial technical data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, duplication, disclosure, modification, and adaptation shall be subject to the restrictions and license terms set forth in the applicable Government contract, and, to the extent applicable by the terms of the Government contract, the additional rights set forth in FAR 52.227-19, Commercial Computer Software License (December 2007). Oracle America, Inc., 500 Oracle Parkway, Redwood City, CA 94065.

Ce logiciel ou matériel a été développé pour un usage général dans le cadre d'applications de gestion des informations. Ce logiciel ou matériel n'est pas conçu ni n'est destiné à être utilisé dans des applications à risque, notamment dans des applications pouvant causer des dommages corporels. Si vous utilisez ce logiciel ou matériel dans le cadre d'applications dangereuses, il est de votre responsabilité de prendre toutes les mesures de secours, de sauvegarde, de redondance et autres mesures nécessaires à son utilisation dans des conditions optimales de sécurité. Oracle Corporation et ses affiliés déclinent toute responsabilité quant aux dommages causés par l'utilisation de ce logiciel ou matériel pour ce type d'applications.

Oracle et Java sont des marques déposées d'Oracle Corporation et/ou de ses affiliés. Tout autre nom mentionné peut correspondre à des marques appartenant à d'autres propriétaires qu'Oracle.

AMD, Opteron, le logo AMD et le logo AMD Opteron sont des marques ou des marques déposées d'Advanced Micro Devices. Intel et Intel Xeon sont des marques ou des marques déposées d'Intel Corporation. Toutes les marques SPARC sont utilisées sous licence et sont des marques ou des marques déposées de SPARC International, Inc. UNIX est une marque déposée concédée sous licence par X/Open Company, Ltd.

Ce logiciel ou matériel et la documentation qui l'accompagne peuvent fournir des informations ou des liens donnant accès à des contenus, des produits et des services émanant de tiers. Oracle Corporation et ses affiliés déclinent toute responsabilité ou garantie expresse quant aux contenus, produits ou services émanant de tiers. En aucun cas, Oracle Corporation et ses affiliés ne sauraient être tenus pour responsables des pertes subies, des coûts occasionnés ou des dommages causés par l'accès à des contenus, produits ou services tiers, ou à leur utilisation.



Sun Blade T6300 Server Module Product Notes

These product notes provide late-breaking information about the Sun Blade T6300 Server Module. This document is written for technicians, system administrators, authorized service providers (ASPs), and users who have advanced experience troubleshooting and replacing hardware.

You should always obtain the latest version of these product notes at:

<http://docs.sun.com/app/docs/prod/blade.t6300>

Software Information

Supported Firmware and Software Versions

The following firmware and software versions are supported in this release of the Sun Blade T6300 server module:

- Solaris 10 11/06 Operating System (OS) and mandatory patches
- Service Processor Firmware: system firmware 6.5.4 or greater
- Java Enterprise Systems (Java ES) 2005Q4
- SunVTS 6.3 (patch set 1 recommended)
- CoolTuner 1.0.2
- Sun Studio 11.0.1
- GCC 4.0.3
- SPOT/ATS/BIT 1.0

Note – Before installing any software onto the Sun Blade T6300 server module hard drives, read the documentation for that software.

Required Patches

This section describes the patches available for the Sun Blade T6300 server module. Patches are available from <http://www.sun.com/sunsolve>

Special Instructions for the Solaris 10 Kernel Patches

Follow the special installation instructions in the patch README file before manually installing 118833-36. This patch should not be installed while the system is in multiuser mode.

Note – This patch must be *downloaded* before the other patches. The kernel patch, 118833-36 cannot be *installed* with Sun Update Connection, *even if you select install*.

- 118833-36 or greater kernel update patch

To view the patch README file, perform the following procedures:

1. **Download the patch.**
2. **Change to the `/var/sadm/spool` directory.**
3. **Unzip the file:**

```
# unzip 118833-36
```

4. **Follow the directions in the README file:**

```
# cat 118833-36/README.118833-36
```

5. **Once this patch is installed, restart Sun Update Connection to install the remaining patches.**

Other Required Patches

- 127579-02 or greater — You should install System Firmware Update 6.5.4 before installing a Sun Blade T6300 server module into a Sun Blade 6048 modular system.
- 120824-09 or greater — platform patch for the Sun Fire T1000, and T2000 servers, and the Sun Blade T6300 server module
- 125418-01 or greater — security in.telnetd patch
- 122032-05 or greater — Daylight savings time patch (DST)
- 120011-14 or greater — sun4v platform support for fcode interpreter
- 125100-05 or greater — Sun OS 5.10: Kernel update patch (*You must install kernel update patch 118833 first.*)

Note – Before contacting Sun for support, ensure that the mandatory patches are installed on your server module. In addition to installing these patches, Sun recommends that you check the SunSolve web site on a regular basis for the availability of new patches.

Applying Patches to the Boot Disk

You can go to SunSolve directly or use the Sun Update Connection Manager. Both methods are described in the following section.

Using Sun Update Connection Manager

To use the Sun Update Connection Manager, go to the following URL and follow the instructions in the Get Started section:

<http://www.sun.com/service/sunupdate/gettingstarted.html>

Applying Patches to the Boot Disk Using SunSolve

1. Determine whether the patches have been installed on your system.

For example, using the `showrev` command, type the following:

```
# showrev -p | grep "Patch: 120824"
```

- If you see patch information listed for the queried patch, and the dash extension (the last two digits) matches or exceeds the required version, your system has the proper patches already installed and no further action is required.

For example, if patch 120824-07 or later is installed, your system has the required version of this patch.

- If you do not see patch information listed for the queried patch, or if the dash extension precedes the required version, go to [Step 2](#).

2. Go to <http://www.sun.com/sunsolve> to download the patches.

Using the SunSolve PatchFinder tool, specify the base patch ID number (the first six digits) to access the current release of a patch.

3. Follow the installation instructions provided in a specific patch's README file.

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

Known Software Issues

Chassis Management Module Restrictions

You can view current network settings for the service processor on the Sun Blade T6300 server module using the Sun Blade 6000 chassis management module (CMM). However, you cannot make changes to the service processor network settings using the CMM. To make changes to the service processor network settings, you need to log in to the St. Paul service processor.

The service processor on the Sun Blade T6300 server module can only be reset by logging in to the SP (via ethernet or via RJ-45 serial port) and issuing the `reset_sc` command at the `sc>` prompt.

Hardware Information

This section describes hardware issues with the Sun Blade T6300 server module.

Support for NEMs

The Sun Blade T6300 server module supports SAS1 functionality and is compatible with the following NEMs. You should check the NEM documentation for firmware update information.

Note – There are no 10Gbe fabric expansion modules (FEMs) for the Sun Blade T6300. The Sun Blade T6300 server module only supports 1Gbe on these NEMs

- NEM X4238A Sun Blade 6000 Virtualized Multi-Fabric Network Express Module (10-port 1GbE, 4-port SAS, 2-port 10GbE)
- NEM X4236A - Sun Blade 6000 10GbE Multi Fabric Network Express Module (10x 1GbE pass-through ports, 4 miniSAS x4 ports, 10x 10GbE SFP+ ports)
- NEM X4250A - Sun Blade 6000 Multi-Fabric NEM

Replacing Server Modules or Filler Panels to Prevent Overheating



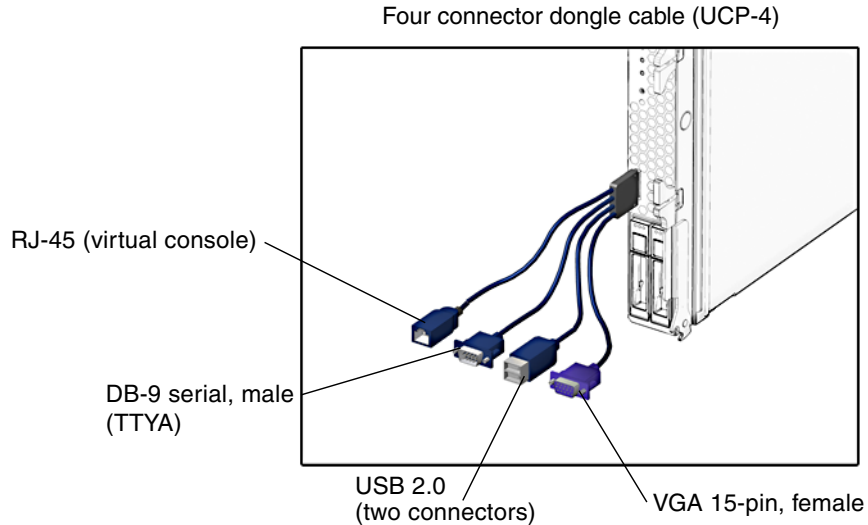
Caution – If you remove a server module from a powered-on Sun Blade 6000 chassis, you must replace the server module or insert a filler panel within one minute to prevent the adjacent server modules from overheating.

Using the Cable Dongle

Note – You should only use the 4-connector cable dongle with the Sun Blade T6300 server module: do not use the 3-connector cable dongle. The RJ45 connectors have different wiring.

The 4-connector cable dongle is intended for initial system setup, configuration, testing, and file transfers. Do not leave the cable dongle attached to the server module.

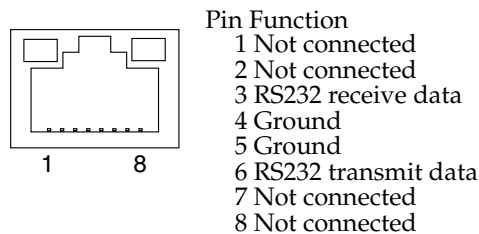
FIGURE 1 Cable Dongle Connectors



RJ-45 Connector on the Cable Dongle

Hardware handshaking signals are not transmitted through the RJ-45 cable dongle connector. Only transmit, receive, and ground signals are transmitted. [FIGURE 2](#) shows the RJ45 connector pinouts.

FIGURE 2 Pinouts for the RJ45 Connector on the Cable Dongle



USB 2.0 Connections to the Cable Dongle

Some third-party USB connectors might have thick molding. If you attempt to connect two USB connectors with thick molding, they could distort the dongle connector and intermittent signals could result. You should connect a USB hub that allows more cables to be connected without deforming the connectors.

Other Known Issues

TABLE 1 lists known issues for which a change request ID (CR ID, formerly known as a bug ID) has been assigned. For more information about these CRs, visit the SunSolve web site.

TABLE 1 Specific Issues and Related CR IDs

| CR ID | Description | Workaround |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6938938 | When the T6300 is inserted into a Sun Blade 6000 Modular System with second generation backplanes, the T6300 logs faults for non-existent fans. For example: MB SYS_FAN at MP/FM7/FOUT has FAILED. MB SYS_FAN at MP/FM6/FIN has FAILED. However, a Sun Blade 6000 chassis only has Fans 0 through 5. | None. You can ignore the messages, however, the size of <code>/var/adm/messages</code> should be managed to prevent false alerts from consuming the file system. See <code>logadm (1M)</code> . |
| 6580747 | T6300 System Firmware 6.3.6: <code>showfru</code> command shows incorrect DIMM vendor | Update the system firmware to 6.4.5 or a subsequent compatible release. |
| 6543485 | ALOM CMT tool might not report the presence, removal, or insertion of a network express module (NEM). | Use the CMM to check for NEM presence. |
| 6551758 | When a Sun Blade T6300 server module is inserted into the chassis, the other server modules might receive incorrect messages that report a new NEM has been installed. When the new server module is powered on, another message might report that the NEMs have been removed. The CMM might also report that two NEMs are present when only one is present. | Ignore these messages. |
| 6525747 | When PCI ExpressModule is hot-plugged and configured, the PICL tree is only partially updated. | Restart <code>picld</code> (<code>svcadm restart picld</code>). |
| 6540600 | St. Paul rejects <code>ssh</code> login under load and <code>ssh</code> login session. | Use Telnet sessions instead of SSH. |
| 6529037 | If you do not have a DHCP server established, you cannot set the Sun Blade T6300 server module service processor from the Sun Blade 6000 chassis management module (CMM). | Use an RJ-45 connector on the cable dongle and use an ALOM command to configure the network. |
| 6438074 | Fan status information not available from the Solaris command <code>prtdiag</code> . | This information is available using the service processor command: <code>showenvironment</code> |

TABLE 1 Specific Issues and Related CR IDs (*Continued*)

| CR ID | Description | Workaround |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 6424701 | Solaris 10 11/06 OS does not support hot-insertion or hot-removal of an InfiniBand ExpressModule card at this time. (See open issues for Supplemental Release 1.2.1 for more information.) | Do not use the Solaris OS when hot-inserting or hot-removing a PCI EM. Shut down the Solaris OS gracefully before removing or inserting the PCI EM. |
| 6466705 | Some Sony USB DVD-RW drives might cause the server module to panic when connected with a USB cable. | Do not connect these Sony USB DVD-RW drives. |
| 6532202 | The I ² C bus might timeout when the number of simultaneous requesters exceeds ten. This timeout might cause missing FRU information for the service processor. | Reboot the service processor. |

Documentation Changes

Cable Dongle Does Not Support Ethernet

In the *Sun Blade T6300 Server Module Installation Guide*, Figure 1-2 describes the dongle cable as an Ethernet cable. This information is not correct. The RJ-45 connector on the cable dongle can only be used to connect to a virtual console. The connector provides a connection to the service processor on the Sun Blade T6300 server module.

`poweron -c` Command

The *Sun Blade T6300 Server Module Installation Guide* incorrectly describes the syntax for the `poweron` command. You must type one of these two commands:

```
sc>poweron -c
```

or

```
sc>poweron
```

```
sc>console
```

Blue LED Information Incorrect in Service Manual

Table 2-3 of the service manual incorrectly describes the Blue OK to Remove LED behaviors. This is the correct information:

| | | | |
|------|-----------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Blue | Off | Steady state | Steady state - If LED is off it is not safe to remove the server module from the chassis. You must use software to take the component offline or shut down the server. |
| | Steady on | Steady state | If the blue LED is on, a service action can be safely performed on the component. |

Documentation, Support, and Training

These web sites provide additional resources:

- Documentation <http://docs.sun.com/>
- Support <http://www.sun.com/support/>
- Training <http://www.sun.com/training/>

Documentation Feedback

Submit comments about this document by clicking the Feedback[+] link at <http://docs.sun.com>. Include the title and part number of your document with your feedback:

Sun Blade T6300 Server Module Product Notes, part number 820-0278-12.

