

Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF

Product Notes



Part No.: E25529-04
June 2012

Copyright © 2012, 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 END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

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 that 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.

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. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

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 © 2012, 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 END USERS. Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

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.

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. AMD, Opteron, le logo AMD et le logo AMD Opteron sont des marques ou des marques déposées d'Advanced Micro Devices. UNIX est une marque déposée d'The Open Group.

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.



Adobe PostScript

Contents

Important Information About the Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF	1
Intel GbE Driver Support for Linux and Windows	1
Hardware and OS Software Support	2
Known Issues	2
Links Do Not Work Correctly After Running Oracle VTS and Internal Loopback Test Fails (CR 7147018 and CR 7008767)	2
Network Latency Under Oracle OpenSolaris Is Three Times Slower Than Solaris 10 5/09 (CR 6933376)	3
Related Documentation	3
Feedback	4
Support and Accessibility	4

Important Information About the Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF

These product notes contain information about new features, known limitations, and documentation updates for the Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF, from Oracle.

New issues are added to the product notes as needed. Be sure to read the most recent version of the product notes that is available on the web. For the most recent version of the product notes, go to the Oracle documentation portal at the following site:

<http://www.oracle.com/technetwork/documentation/oracle-net-sec-hw-190016.html>

Intel GbE Driver Support for Linux and Windows

Information on the Intel GbE drivers for Linux and Windows, including tools and documentation, is at the following web site:

http://www.intel.com/p/en_US/support/highlights/network/esa-i350-f4

Hardware and OS Software Support

The Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF, is supported on various hardware platforms running either the Oracle Solaris (SPARC or x86), Linux, or Windows operating environment.

To obtain a list of the currently supported hardware and operating environment versions, go to the product web page at:

<http://www.oracle.com/us/products/servers-storage/networking/ethernet/index.html>

Known Issues

Each known change request (CR) is listed by its synopsis and its CR number. Each entry describes the issue and provides a workaround, if one is available. Check the latest status of CRs at:

<http://support.oracle.com>

Links Do Not Work Correctly After Running Oracle VTS and Internal Loopback Test Fails (CR 7147018 and CR 7008767)

Performing an internal network loopback test with Oracle SunVTS on Sun Quad Port PCIe 2.0 Gigabit Ethernet Networking Cards might result in a test failure and improperly working links.

Workaround: Avoid using Oracle SunVTS network loopback test. If you ran the test and the links are not working properly, try the following solutions, depending on the operating system.

For the Oracle Solaris 10 OS, perform these steps:

1. Reboot the system.
2. Power cycle the system.
3. Download, and apply the latest patches.

If downloading the latest patch does not solve the issue, contact your Oracle service provider.

For the Oracle Solaris 11 OS, update the system with the latest service patches.

Network Latency Under Oracle OpenSolaris Is Three Times Slower Than Solaris 10 5/09 (CR 6933376)

Starting with Solaris 10 10/09, you could see network latency spikes. This issue is related to the Intel power management feature and deep C-state. When a CPU is idle, it can either halt until it is woken up, or the CPU can spin. `MWAIT` and `HLT` can halt a CPU, but they have different wakeup mechanisms. Deeper C-states are greater power-saving halt states, but they can also cause longer wake-up times.

Workaround: Add these entries in the `/etc/system` file then reboot both systems.

```
...
set idle_cpu_prefer_mwait=0
set idle_cpu_no_deep_c=1
...
```

When only `idle_cpu_no_deep_c=1` is set, the system only uses the C1 halt state. Thus, you must set both states. This works with either `HLT` or `MWAIT`.

Related Documentation

Documentation	Links
All Oracle products	http://www.oracle.com/documentation
Sun Dual Port GbE PCIe 2.0 Low Profile Adapter, MMF	http://www.oracle.com/pls/topic/lookup?ctx=SDP_GbE-PCIe2.0-LP_MMF

Documentation	Links
Oracle Solaris 10 Operating System	http://docs.oracle.com/cd/E23823_01/index.html
Oracle Solaris 11 Operating System	http://docs.oracle.com/cd/E23824_01/index.html
Oracle Solaris OS and systems software library	http://www.oracle.com/technetwork/indexes/documentation/index.html#sys_sw

Feedback

Provide feedback on this documentation at:

<http://www.oracle.com/goto/docfeedback>

Support and Accessibility

Description	Links
Access electronic support through My Oracle Support	http://support.oracle.com
	For hearing impaired: http://www.oracle.com/accessibility/support.html
Learn about Oracle's commitment to accessibility	http://www.oracle.com/us/corporate/accessibility/index.html
