

Overview and Frequently Asked Questions

Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards

May 17, 2012

Overview

Oracle's Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards, incorporating the Intel X540 Controller, are backward compatible with legacy 1GbE Base-T- infrastructure offering a smooth transition and easy migration to 10 GbE. These cards, designed for Oracle's portfolio of SPARC and x86 servers, deliver cost effective converged networking for bandwidth intensive applications and virtualized environments.

Data Center Virtualization with Uncompromised Performance

Optimized for virtualization performance, the Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking cards support advanced networking and virtualization capabilities incorporated in Oracle Solaris and Oracle VM for optimizing database and application performance. Servers deployed with SR-IOV provide direct access to networking hardware for up to 128 virtual machines per networking card. Direct access to hardware from virtual machine environments increases performance and reduces the number of required adapters, cables, and switch ports.

Implementation of Data-Center Bridging (DCB) standards for lossless Ethernet and innovations in Oracle Solaris networking enable fabric convergence to Ethernet.

Customer Benefits

With its robust feature set, the Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards allows customers to simplify their network while reducing costs:

- Higher application performance and lower CPU utilization
- Improved virtualization performance and elimination of I/O bottlenecks between virtual machines
- Industry standard connectivity to both LANs and iSCSI SANs

- Backward compatibility enables seamless upgrade to 10 GbE over existing copper cabling in the datacenter

Frequently Asked Questions

What are Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards?

- They are 10 GbE server adapters that use the 10GBase-T standard interface with support for auto-negotiation of 10 Gbps, 1 Gbps and 100 Mbps speeds available in both Low Profile card and ExpressModule form factors for Oracle's Sun blade and rackmount servers

What are the major features?

The Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards have four main features:

- Industry standard PCIe 2.0 doubles the bus speed to 5 Gbps
- Optimized application performance with advanced features that offload network processing from software to hardware
- Advanced virtualization performance: Support of SR-IOV and built-in zero overhead virtualization in Oracle Solaris
- Converged networking: Support of DCB for LAN and iSCSI traffic for scalable performance of storage connectivity

What are the operating systems that have been certified to run on these networking cards?

The Sun Quad Port PCIe 2.0 Gigabit Ethernet Networking Cards are certified to run Oracle Solaris, Oracle Enterprise Linux, Red Hat Enterprise Linux, SuSE Linux Enterprise Server, VMware and Windows. The current list of the supported Operating Systems are based on the host servers that support these networking cards and can be found at:

Overview and Frequently Asked Questions

Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards

May 17, 2012

<https://wikis.oracle.com/display/SystemsComm/Home#tab:SPARC-Platform-I-O-Support>

Which Sun Servers are supported to work with these cards?

Current and future Sun servers are targeted for support with these cards. Refer to the I/O document of the specific server for updated information.

Sun Dual Port 10 GbE PCIe 2.0 Low Profile Adapter, Base-T

- SPARC T4-1 Server
- SPARC T4-2 Server

Sun Dual Port 10 GbE PCIe 2.0 ExpressModule, Base-T

Netra T4-1B Server

- SPARC T4-4 Server
- SPARC T4-1B Server Module

What are the key technologies involved?

These cards use Intel X540 Controller and support the advanced networking and virtualization capabilities incorporated in the Oracle Solaris and Oracle VM Server for SPARC and x86.

Where can I find more information about the Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards?

You can contact your Oracle sales representative directly or call 1-800-Oracle1.

In addition, more information about the Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards

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

Can I order the Sun Dual Port PCIe 2.0 10 Gigabit Ethernet Networking Cards today?

Yes, we are now taking orders for this product.



Oracle Corporation

Worldwide Headquarters

500 Oracle Parkway
Redwood Shores, CA
94065
U.S.A.

Worldwide Inquiries

Phone
+1.650.506.7000
+1.800.ORACLE1

Fax
+1.650.506.7200

oracle.com



Oracle is committed to developing practices and products that help protect the environment

Copyright © 2010, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

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