

Oracle® Dual Port 25 Gb Ethernet Adapter Product Notes

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Les clients Oracle qui ont souscrit un contrat de support ont accès au support électronique via My Oracle Support. Pour plus d'informations, visitez le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> ou le site <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> si vous êtes malentendant.

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Using This Documentation

- **Overview** – Provides late-breaking information about the Oracle Dual Port 25 Gb Ethernet Adapter
- **Audience** – System administrators, network administrators, and service technicians
- **Required knowledge** – Advanced understanding of server systems

Product Documentation Library

Documentation and resources for this product and related products are available at https://docs.oracle.com/cd/E87266_01/index.html.

Feedback

Provide feedback about this documentation at <https://www.oracle.com/goto/docfeedback>.

Oracle Dual Port 25 Gb Ethernet Adapter Product Information

For the most updated information about supported firmware and operating systems, important operating notes, and known issues, refer to the latest Product Notes document, which is available in the Oracle Dual Port 25 Gb Ethernet Adapter Documentation Library at https://docs.oracle.com/cd/E87266_01/index.html.

Servers and Operating Systems Supported

This section lists the servers and operating systems that support the Oracle Dual Port 25 Gb Ethernet Adapter. The maximum number of cards supported in the servers is also listed. For detailed information about using this adapter card with your server, see the Service Manual and Product Notes for your server, available at <https://docs.oracle.com>.

The following servers and operating systems are supported for the Oracle Dual Port 25 Gb Ethernet Adapter.

Supported Servers	Supported Operating Systems	Max Card Quantity Supported Per Server
Oracle X7-2 Oracle X7-2L	<ul style="list-style-type: none">■ Oracle Linux 7.5 with Unbreakable Enterprise Kernel Release 4 Update 4 (UEK R4u4) or the Red Hat Compatible Kernel■ Oracle Linux 7.4 with Unbreakable Enterprise Kernel Release 4 Update 4 (UEK R4u4) or the Red Hat Compatible Kernel■ Oracle Linux 6.9 with Unbreakable Enterprise Kernel Release 4 Update 4 (UEK R4u4) or the Red Hat Compatible Kernel■ Oracle VM 3.4.5■ Oracle VM 3.4.4■ Oracle Solaris 11.3 SRU 23	2

Supported Servers	Supported Operating Systems	Max Card Quantity Supported Per Server
	<ul style="list-style-type: none"> ■ Windows Server 2016 ■ Windows Server 2012 R2 ■ VMware ESXi 6.5 Update 1 	
Oracle Server X7-8	<ul style="list-style-type: none"> ■ Oracle Linux 7.5 with Unbreakable Enterprise Kernel Release 4 Update 4 (UEK R4u4) or the Red Hat Compatible Kernel ■ Oracle Linux 6.9 with Unbreakable Enterprise Kernel Release 4 Update 4 (UEK R4u4) or the Red Hat Compatible Kernel ■ Oracle VM 3.4.4 ■ Oracle Solaris 11.3 SRU 23 ■ Windows Server 2016 ■ Windows Server 2012 R2 ■ VMware ESXi 6.5 Update 1 	4-socket – 2 8-socket – 4
SPARC S7-2	Solaris 11.3 SRU 32	3
SPARC S7-2L		4
SPARC T8-1	Solaris 11.3 SRU 32	4
SPARC T8-2	Solaris 11.3 SRU 32	4
SPARC T8-4	Solaris 11.3 SRU 32	8
SPARC M8-8 (Single and dual domains)	Solaris 11.3 SRU 32	12 (Single PDomain) 8 per PDomain (Dual PDomains)

Other servers and processors might be added to this list in the future, if they qualify. Check your server Product Notes for confirmation that your server has subsequently been qualified for device support.

Note - Refer to your server Product Notes for up-to date information on supported servers, operating systems, and required patchsets.

Minimum Supported Oracle Dual Port 25 Gb Ethernet Adapter Firmware Version

The Oracle Dual Port 25 Gb Ethernet Adapter runs with the following supported firmware for all supported servers. The firmware pack contains the latest software and NIC firmware.

- Broadcom CD version 20.8.1.14
- CFW package version 20.8.172

To obtain the latest firmware pack, use the following:

- Go to the My Oracle Support web site at <https://support.oracle.com>.
- Firmware release download page: <http://www.oracle.com/technetwork/systems/patches/firmware/firmware-140779.html>.
- For information on updating drivers and firmware for the Oracle Dual Port 25 Gb Ethernet Adapter, refer to “[Getting Firmware and Software Updates](#)” on page 17.

Host Firmware Supported

The Oracle Dual Port 25 Gb Ethernet Adapter runs with the minimum required host firmware listed in the following tables.

For the latest software releases, refer to the supported server Product Notes.

x86 Server	Minimum Required Host Firmware Version
Oracle Server X7-2	28309653 Oracle Server X7-2 SW 1.2.1 - FIRMWARE PACK (Patch)
Oracle Server X7-2L	28309671 Oracle Server X7-2L SW 1.2.1 - FIRMWARE PACK (Patch)
Oracle Server X7-8	28306027 Oracle Server X7-8 SW 1.2.0 - FIRMWARE PACK (Patch)

SPARC Server	Minimum Required Host Firmware Version
SPARC S7-2 Server	<ul style="list-style-type: none"> ■ S7-2 Sun System Firmware 9.8.3 ■ Patch number 27043768
SPARC S7-2L Server	<ul style="list-style-type: none"> ■ S7-2 Sun System Firmware 9.8.3 ■ Patch number 27043769
SPARC T8-1 Server	<ul style="list-style-type: none"> ■ T8-1 Sun System Firmware 9.8.1a ■ Patch number 26585181
SPARC T8-2 Server	<ul style="list-style-type: none"> ■ T8-2 Sun System Firmware 9.8.1 ■ Patch number 26585182
SPARC T8-4 Server	<ul style="list-style-type: none"> ■ T8-4 Sun System Firmware 9.8.1 ■ Patch number 26585183
SPARC M8-8 Server with one PDomain	<ul style="list-style-type: none"> ■ SPARC M8-Systems Sun System Firmware 9.8.0d ■ Patch number 27185996
SPARC M8-8 Server with two PDomains	<ul style="list-style-type: none"> ■ SPARC M8-Systems Sun System Firmware 9.8.0d

SPARC Server	Minimum Required Host Firmware Version
	<ul style="list-style-type: none"> ■ Patch number 27185996

Ethernet Transceivers and Cables Supported

The following table contains the Ethernet transceivers and cables supported for the Oracle Dual Port 25 Gb Ethernet Adapter for 10 Gb and 25 Gb switch ports.

Switch Port	Transceiver	Cable Requirement
10 Gb	N/A	<ul style="list-style-type: none"> ■ Twinax passive copper cable: 1 meter ■ Twinax passive copper cable: 2 meters ■ Twinax passive copper cable: 3 meters ■ Twinax passive copper cable: 5 meters
	SFP+ 10GBase-SR	Duplex LC Terminated Multi-mode Fiber OM3 (300 meters maximum)
	SFP+ 10GBase-LR	Duplex LC Terminated Single-mode Fiber OS1 (10 kilometers maximum)
25 Gb	N/A	<ul style="list-style-type: none"> ■ SFP28 Twinax passive copper cable: 1 meter ■ SFP28 Twinax passive copper cable: 2 meters ■ SFP28 Twinax passive copper cable: 3 meters ■ SFP28 Twinax passive copper cable: 5 meters
	SFP+ 25GBase-SR	<ul style="list-style-type: none"> ■ Duplex LC Terminated Multi-mode Fiber OM3 (70 meters maximum) ■ Duplex LC Terminated Multi-mode Fiber OM4 (100 meters maximum)
	SFP+ 25GBase-LR	Duplex LC Terminated Single-mode Fiber OS1 (10 kilometers maximum)

Fixed and Known Issues

This section contains the issues that are fixed and the known issues for the Oracle Dual Port 25 Gb Ethernet Adapter.

Fixed Issues

This section contains the issues that are fixed for SPARC servers in SRU 35 and later for the Oracle Dual Port 25 Gb Ethernet Adapter.

Bug ID	Issue
Bug 27235146	The virtual function VLAN on the guest domain cannot ping the VLAN on the primary domain.
Bug 27816193	The warning message "bnxt_def_cp_task: Unhandled completion type 17" no longer displays.

Known Issues

This section contains the known issues for the Oracle Dual Port 25 Gb Ethernet Adapter.

Solaris Commands Output Two Different Firmware Version Numbers

Bug ID: 28527053

Issue: Solaris commands output two different version numbers for the Oracle Dual Port 25 Gb Ethernet Adapter PCIe device firmware. The firmware versions are identical and only the version numbers are different. For example, `dladm` displays 20.8.172 and `fwupdate` displays 20.08.01.14.

Affected Hardware: SPARC Servers

Workaround: There is no workaround for this issue.

Network Boot Fails with Rx Cmpl Error Message

Bug ID: 28229645

Issue: A network boot might fail with some system configurations and displays the error message, "Rx cmpl errors = ffffffff.".

Affected Hardware: SPARC Servers

Workaround: There is no workaround for this issue. The fix will be included in the next firmware version that you will be able to download from the My Oracle Support web site at <https://support.oracle.com>.

Watch-Net-All Error Message Displays When a Port Link Is Down

Bug ID: 28110830

Issue: If a port link is down, and you run the watch-net-all command at the OpenBoot ok prompt, the following error message might display: "Non zero error code in HWRM response = f03796b8."

Affected Hardware: SPARC Servers

Workaround: Connect a cable to the port to bring the link up. The fix will be included in the next firmware version that you will be able to download from the My Oracle Support web site at <https://support.oracle.com>.

Virtual Function Fails with HWRM Error Messages

Bug ID: 27803946

Issue: When you configure the adapter to share virtual functions among multiple guests, the virtual functions and physical functions might cause FMA faults during a host reboot

operation. The following error messages would display: "Have not got HWRM response yet" and "HWRM failed to respond."

Affected Hardware: SPARC Servers

Workaround: There is no workaround for this issue. The fix will be included in the next firmware version that you will be able to download from the My Oracle Support web site at <https://support.oracle.com>.

Oracle Dual Port 25 Gb Ethernet Adapter Can Experience a Fault During System Reset

Bug ID: 26259122

Issue: The Oracle Dual Port 25 Gb Ethernet Adapter can experience a completion timeout fault during a system warm reset operation on Oracle Server X7-2 and Oracle Server X7-2L. The fault is logged by Oracle ILOM.

Affected Hardware: x86 Servers

Workaround: This issue has no functional impact on normal system behavior and can be ignored.

Getting Firmware and Software Updates

This section explains the options for accessing server firmware and software updates using My Oracle Support.

Customers are required to install the latest available operating system (OS), patches, and firmware versions for optimal system performance, security, and stability.

Firmware and Software Updates

Firmware and software for your server are updated periodically. These updates are made available as software releases. The software releases are a set of downloadable files (patches) that include all available firmware, software, hardware drivers, tools, and utilities for the server. All of these files have been tested together and verified to work with your server.

You must update your server firmware and software as soon as possible after a new software release becomes available. Software releases often include bug fixes, and updating your server ensures that your server has the latest firmware and software. These updates will increase your system performance, security, and stability.

To determine which firmware version is installed on your server, you can use either the Oracle ILOM web interface or the command-line interface (CLI).

- From the web interface, click System Information → Summary, then view the property value for System Firmware Version in the General Information table.
- From the CLI, at the command prompt, type: `show /System/Firmware`

The server Product Notes list the current server software release and firmware version that are available.

Firmware and Software Update Options

Use one of the following options to update your server to the latest firmware and software:

- **My Oracle Support** – All system software releases are available from the My Oracle Support web site at <https://support.oracle.com>.
For information about what is available from the My Oracle Support web site, see “Software Releases” on page 18.
- **Other Methods** – You can use Oracle System Assistant (OSA) or Oracle Hardware Management Pack to update your server software and firmware.
For information, see “Updating Firmware” on page 20.

Software Releases

Software releases on My Oracle Support are grouped by product family (such as Oracle Server), then the product (the specific server), and finally the software release version. A software release contains all the updated software and firmware for your server as a set of downloadable files (patches), including firmware, drivers, tools, or utilities, all tested together to be compatible with your server.

Each patch is within a zip file that contains set of firmware and software subdirectories and files, along with a ReadMe file. The ReadMe file provides information about the patch, such as what has changed since the prior software release and the bugs that have been fixed in the current release.

My Oracle Support provides the set of software releases for your server as described in the following table. You can obtain these software releases by downloading the files from My Oracle Support.

Package Name	Description	When to Download This Package
Firmware Pack	Contains all system firmware, including Oracle ILOM, BIOS, and option card firmware.	You need the latest firmware.
OS Pack	Includes a package of all tools, drivers, and utilities for a specific OS. An OS Pack is available for each supported operating system version. Software includes Oracle Hardware Management Pack, LSI MegaRAID software, and any other optional software that Oracle recommends. For the Windows OS, the OS Pack also includes Intel Network Teaming and Install Pack.	You need to update OS-specific tools, drivers, or utilities.

Package Name	Description	When to Download This Package
All Packs	Includes the Firmware Pack and all OS Packs. This pack does not include the Oracle VTS image.	You need to update a combination of system firmware and OS-specific software.
Diagnostics	Includes Oracle VTS diagnostics image.	You need the Oracle VTS diagnostics image.

Getting Updates From My Oracle Support

You can obtain updated firmware and software from the My Oracle Support web site at <https://support.oracle.com>. For instructions, see “[Download Firmware and Software Updates From My Oracle Support](#)” on page 19.

▼ Download Firmware and Software Updates From My Oracle Support

1. **Go to the My Oracle Support web site:** <https://support.oracle.com>.
2. **Sign in to My Oracle Support.**
3. **At the top of the page, click the Patches & Updates tab.**
The Patch Search pane appears at the right of the screen.
4. **In the Search tab area, click Product or Family (Advanced).**
The Search tab area appears with search fields.
5. **In the Product field, select the product from the drop-down list.**
Alternatively, type a full or partial product name (for example, Oracle Dual Port 25 Gb Ethernet Adapter) until a match appears.
6. **In the Release field, select a software release from the drop-down list.**
Expand the list to see all available software releases.
7. **Click Search.**
The Patch Advanced Search Results screen appears, listing the patches for the software release.

See “[Software Releases](#)” on page 18 for a description of the available software releases.

- 8. To select a patch for a software release, click the patch number next to the software release version.**

You can use the Shift key to select more than one patch.

A pop-up action panel appears. The panel contains several action options, including the ReadMe, Download, and Add to Plan options. For information about the Add to Plan option, click the associated button and select “Why use a plan?”.

- 9. To review the ReadMe file for this patch, click ReadMe.**
- 10. To download the patch for the software release, click Download.**
- 11. In the File Download dialog box, click the patch zip file name.**

The patch for the software release downloads. The download is an archive zip file, which you must extract to find the directory containing the image .pkg file.

Updating Firmware

Use the firmware update tool to update the firmware. You can get the tool in these ways for the Oracle Solaris x86, Linux, and Windows environment:

- **Oracle System Assistant (OSA)** – A built-in tool on x86 servers or a USB thumb drive shipped with the server, which contains the firmware update tool. For firmware update instructions, refer to the text files in OSA.
- **Oracle Hardware Management Pack** – You can use the fwupdate CLI Tool within the Oracle Hardware Management Pack software to update firmware within the system.
For information, refer to the Oracle Hardware Management Pack Documentation Library at:
<https://www.oracle.com/goto/ohmp/docs>

Downloading an OS or Software Applications

You can download an operating system (OS) or software applications for all licensed Oracle products from Oracle Software Delivery Cloud (formerly called Oracle eDelivery). Software is available in zip and ISO formats, which you can unzip or burn to DVDs, respectively. All of the download links on the Oracle Technology Network (OTN) point to the Software Delivery Cloud, making this site the authoritative source for all Oracle OS and application downloads. To access Oracle Software Delivery Cloud, go to <https://edelivery.oracle.com/>.

Oracle Support

If you need help getting firmware or software updates, or downloading a complete software application, you can call Oracle Support. Use the appropriate number from the Oracle Global Customer Support Contacts Directory at:

<https://www.oracle.com/support/contact.html>

Software and Critical Patch Updates

This section includes important operating information and requirements for Oracle Dual Port 25 Gb Ethernet Adapter.

Update Your System to the Latest Software Release

It is highly recommended that you update your system to the latest Software Release before you use the system. Software Releases often include bug fixes, and updating ensures that your server software is compatible with the latest server firmware and other component firmware and software.

You can download the latest Software Release, which includes firmware and software updates, from My Oracle Support at <https://support.oracle.com>. For information about downloading firmware and software from My Oracle Support, see “[Getting Firmware and Software Updates](#)” on page 17.

Server Security, Software Releases, and Critical Patch Updates

To ensure continued security of your system, Oracle strongly recommends that you apply the latest Software Releases. Server Software Releases include Oracle ILOM, BIOS, and other firmware updates, often referred to as “patches.” Oracle publishes these patches regularly on the My Oracle Support site. Applying these patches will help ensure optimal system performance, security, and stability. You can identify the latest Software Release for your system at <http://www.oracle.com/technetwork/systems/patches/firmware/release-history-jsp-138416.html>.

To download a Software Release, go to My Oracle Support at <https://support.oracle.com>.

Oracle notifies customers about security vulnerability fixes for all its products four times a year through the Critical Patch Update (CPU) program. Customers should review the CPU

advisories to ensure that the latest Software Release updates are applied to their Oracle products. Note that updates for Engineered Systems will be specifically published for a specific Engineered Systems product (that is, you need not look at specific updates for individual software components included in your Engineered System). For more information about the Oracle CPU program, go to <http://www.oracle.com/technetwork/topics/security/alerts-086861.html>.

Oracle also recommends that you update to the latest operating system release when it becomes available. Although a minimum operating system release is supported, updating to the latest OS release will ensure that you have the most up-to-date software and security patches. To confirm that you have the latest OS release, refer to the Oracle Hardware Compatibility Lists or third-party operating system certification information. See “[Servers and Operating Systems Supported](#)” on page 9.

For details about how to download the latest system software update, see “[Getting Firmware and Software Updates](#)” on page 17.

▼ Important – Install Latest OS Updates, Patches, and Firmware

A System Software Release is associated with Oracle ILOM firmware version, and with the latest operating system support updates and patches. Newer Oracle ILOM firmware versions have a higher number or a letter added. For example, a current Oracle ILOM firmware version number might be 4.0.2.24, and a future Oracle ILOM firmware version number might be 4.0.2.24a.

Some product features are enabled only when the latest versions of operating system, patches, and firmware are installed. To retain optimal system performance, security, and stability, you must install the latest available operating system, patches, and firmware.

To verify that the server is running the minimum supported Oracle ILOM firmware version or newer. Refer to the server Product Notes for the minimum supported firmware version.

1. **Use Oracle ILOM to verify the system firmware version.**
 - **From the web interface, click System Information → Summary, then view the property information for the System Firmware Version in the General Information table.**
 - **From the command-line interface, at the command prompt (->), type:**
`show /System/Firmware`

For more details, refer to information about viewing system information and inventory in your server Administration Guide, which is available at <https://www.oracle.com/goto/x86admindiag/docs>.

2. **Ensure that the firmware version is at the minimum required version.**
3. **If the required firmware version (or newer) is not installed:**
 - a. **Download the latest Software Release from My Oracle Support at <https://support.oracle.com>.**

For more information, see “Getting Firmware and Software Updates” on page 17.

- b. **Install the downloaded firmware.**

See “Updating Firmware” on page 20.

Refer to the information about performing firmware updates in the *Oracle ILOM Administrators Guide for Configuration and Maintenance Firmware Release 4.0.x*, which is available at <https://www.oracle.com/goto/ilom/docs>. Ensure that you perform the preparatory steps described in that document before updating the firmware.

Note - Occasionally after installing the firmware, the Oracle ILOM web interface cannot display the power state correctly on the power control page. To correct this problem, clear your browser cache before logging in to the Oracle ILOM web interface.

Product Accessibility

Oracle strives to make its products, services, and supporting documentation usable and accessible to the disabled community. To that end, products, services, and documentation include features that make the product accessible to users of assistive technology.

For more information about Oracle's commitment to accessibility, go to <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Documentation Accessibility

Documentation for Oracle hardware is provided in HTML and PDF formats. The HTML documents are accessible using standard operating system controls and assistive technology. PDF documents are also provided, but are not an accessible format. PDF documents are considered support documents because the PDF content is available in accessible HTML format.

Product documentation provides figures, other types of images, and screenshots that do not rely on color for interpretation. Within the figures, callouts indicate the referenced component information. The callouts are mapped within a table to provide text descriptions of the referenced parts of the figures. In addition, alternative text is provided for all tables and images that provides the context of the information and images.

Note that screen readers might not always correctly read the code examples in the documentation. The conventions for writing code require that closing braces should appear on an otherwise empty line. However, some screen readers might not always read a line of text that consists solely of a bracket or brace.

The documentation might contain links to web sites of other companies and organizations that Oracle does not own or control. Oracle neither evaluates nor makes any representations regarding the accessibility of these web sites.

You can access the accessible HTML documentation for Oracle Dual Port 25 Gb Ethernet Adapter products at https://docs.oracle.com/cd/E87266_01/index.html.

