



# Sun™ 10-Gigabit Ethernet PCI-X Adapter Release Notes

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# Sun 10-Gigabit Ethernet PCI-X Adapter Release Notes

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This document contains late-breaking information for the *Sun 10-Gigabit Ethernet PCI-X Adapter*. Read this carefully before installing and configuring your Sun 10-Gigabit Ethernet PCI-X adapter.

Find the latest updates for the Sun 10-Gigabit Ethernet PCI-X driver software at this web site: <http://www.sun.com/download>  
Select Networking.

Find the latest Sun 10-Gigabit Ethernet PCI-X adapter documentation at this web site: <http://docs.sun.com/app/docs/coll/10-gbe-pcix>

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## New ixgb (x86/x64 Only) Driver Bundled With Solaris 10 and Later

With the introduction of Solaris 10, ixgb is the bundled driver for the adapter. ixgb supports x86/x64 platforms only.



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**Caution** – The ixge driver is required for SPARC platforms. The ixge driver is not bundled with the Solaris OS. You must download and install the ixge driver for SPARC platforms if you upgrade to Solaris 10 or later.

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Go to the following URL to download and install the ixge driver for SPARC platforms:

<http://www.sun.com/products/networking/ethernet/10gigabitethernet/support.xml>

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**Note** – The ixge driver package contains Solaris 10 and Solaris 9 OS ixge drivers. The bundled install script installs the correct driver based on the OS.

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Refer to the *Sun 10-Gigabit Ethernet PCI-X Installation and User's Guide* for driver installation details.

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# Hardware and Software Requirements

The following table lists the hardware and software requirements. Also refer to: <http://wikis.sun.com/display/PlatformIoSupport/KirkwoodSingle10GbE>

Requirements	Description
Hardware	<i>SPARC Servers:</i>
	• Sun Fire V215 – Not Supported
	• Sun Fire V240 – Not Supported
	• Sun Fire V245 – Not Supported
	• Sun Fire V250 – Not Supported
	• Sun Fire V440 – 1 card
	• Sun Fire V445 – 1 card
	• Sun Fire V480 – 1 card
	• Sun Fire V490 – 1 card
	• Sun Fire V880 – 2 cards
	• Sun Fire V880z – 2 cards
	• Sun Fire V890 – 2 cards
	• Sun Fire T2000 – 1 card
	• Sun Fire T1000 – Not Supported
	• Sun Fire V1280 – 2 cards
	• Sun Fire E2900 – 2 per domain
	• Sun Fire 4800 – 2 per domain
	• Sun Fire E4900 – 2 per domain
	• Sun Fire 6800 – 2 per domain
	• Sun Fire E6900 – 2 per domain

Requirements	Description
	<ul style="list-style-type: none"> <li>• SPARC Enterprise M4000 – Not Supported</li> </ul>
	<ul style="list-style-type: none"> <li>• SPARC Enterprise M5000 – Not Supported</li> </ul>
	<ul style="list-style-type: none"> <li>• SPARC Enterprise M8000 – Not Supported</li> </ul>
	<ul style="list-style-type: none"> <li>• SPARC Enterprise M9000 – Not Supported</li> </ul>
	<ul style="list-style-type: none"> <li>• Sun Fire E20K – 2 per domain</li> </ul>
	<ul style="list-style-type: none"> <li>• Sun Fire E25K – 2 per domain</li> </ul>
Hardware (continued)	<p><b>x64 Servers</b></p> <ul style="list-style-type: none"> <li>• Sun Fire V20z – Not Supported</li> <li>• Sun Fire V40Z – 2 cards</li> <li>• Sun Fire X2100 – Not Supported</li> <li>• Sun Fire X2100 – M2 1 card</li> <li>• Sun Fire X2200 – M2 Not Supported</li> <li>• Sun Fire X4100 – 1 card</li> <li>• Sun Fire X4200 – 1 card</li> <li>• Sun Fire X4100 M2 – 1 card</li> <li>• Sun Fire X4200 M2 – 1 card</li> <li>• Sun Fire X4600 M2 – 2 cards</li> </ul>
Hardware (continued)	<p><b>NEBS Servers</b></p> <ul style="list-style-type: none"> <li>• Netra T2000 – Not Supported</li> <li>• Netra 4200 M2 – Not Supported</li> <li>• Netra 240 – Not Supported</li> <li>• Netra 440 – 1 card</li> <li>• Netra 1280 – 1 card</li> </ul>
Operating Systems	<p>SPARC platforms: Solaris 9 Update 4 OS and later  x86/x64 platforms: Solaris 10 Update 3 OS and later  Red Hat Enterprise Linux 3.0</p>
Drivers	<p><b>SPARC Platforms</b></p> <ul style="list-style-type: none"> <li>• The unbundled <b>ixge</b> driver is required for all SPARC platforms. See <a href="#">“New ixgb (x86/x64 Only) Driver Bundled With Solaris 10 and Later” on page 1.</a></li> </ul> <p><b>x86 or x64 Platforms</b></p> <ul style="list-style-type: none"> <li>• As of Solaris 10, the bundled <b>ixgb</b> driver is required for all x86 or x64 platforms.</li> </ul>

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## Known Issues

The following are known issues at the time of this release:

- Jumbo frames support is to 8K only
- NDD autonegotiation is set to off and cannot be changed
- Sun Trunking is not currently supported.
- Sun Fire™ X4100 platform is not currently supported.

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## Linux Issues

If your system is running Linux 2.6 kernel such as SuSE 9.0 or RedHat 4.0 operating system, you must remove the Intel 10-Gigabit Ethernet driver bundled with that system.

```
# rmmod ixgb
```

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**Note** – Linux driver version 1.0.100.3-2 or higher is required to support Linux 2.6 kernel.

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See Appendix D in the *Sun 10-Gigabit Ethernet PCI-X Adapter Installation and User's Guide* (819-0938) for instructions on how to install the Sun 10-Gigabit Ethernet PCI-X adapter in Linux operating systems.

if your system is running SuSE 9.0 operating system, you may see the following warning when installing the rpm package. However, this is unrelated to the Sun 10-Gigabit Ethernet driver and is harmless to it.

```
# rpm -ivh sun-10-gigabit-kernel-2.6.5-7.139-smp-1.0.100.3-2.x86_64.rpm
Preparing...
#####
[100%]
1:sun-10-gigabit-kernel-
2#####
[100%]
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdb_getarea_size
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdb_printf
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdb_unregister
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdbgetularg
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdbgetaddrarg
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdb_register
WARNING: /lib/modules/2.6.5-7.139-smp/kernel/fs/xfs/xfsidbg.ko
needs
unknown symbol kdbnearsym
```

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## Patch Requirements

The software driver requires the following patches:

- Solaris 9 SPARC Operating System PatchID Number 119609-01
- Solaris 10 SPARC Operating System PatchID Number 119610-01

The Sun Fire T2000 platform requires the following patch:

- PatchID Number 119610-02

Install the *latest* version of the patchID number. For example, the patchID number for the Solaris 9 OS is 119609-01. The dash number -01 becomes higher with each new version of the patch.

Patches are available at the following web site:

<http://sunsolve.sun.com>

If the patch is not available on SunSolve, contact your local sales or service representative.

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## Patches and Updates

Check the Sun Update Connection to ensure that you have the latest recommended Patch Clusters and Security Patches. You can download the latest recommended Patch Clusters and Security Patches from the following web site:

<http://sunsolve.sun.com/pub-cgi/show.pl?target=patchpage>

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## SunVTS

The following SunVTS Diagnostic Software provides built-in support for the Sun 10-Gigabit Ethernet adapter:

- Solaris 9 Operating System: SunVTS 5.1ps10
- Solaris 10 Operating System: SunVTS 6.0ps2

You can find SunVTS documentation at the following web site:

[http://www.sun.com/products-n-solutions/hardware/docs/Software/system\\_administration/tools/testing\\_valid/sunvts/index.html](http://www.sun.com/products-n-solutions/hardware/docs/Software/system_administration/tools/testing_valid/sunvts/index.html)

Refer to the *Sun 10-Gigabit Ethernet PCI-X Adapter Installation and User's Guide* if you have an earlier version of the Solaris Operating System.



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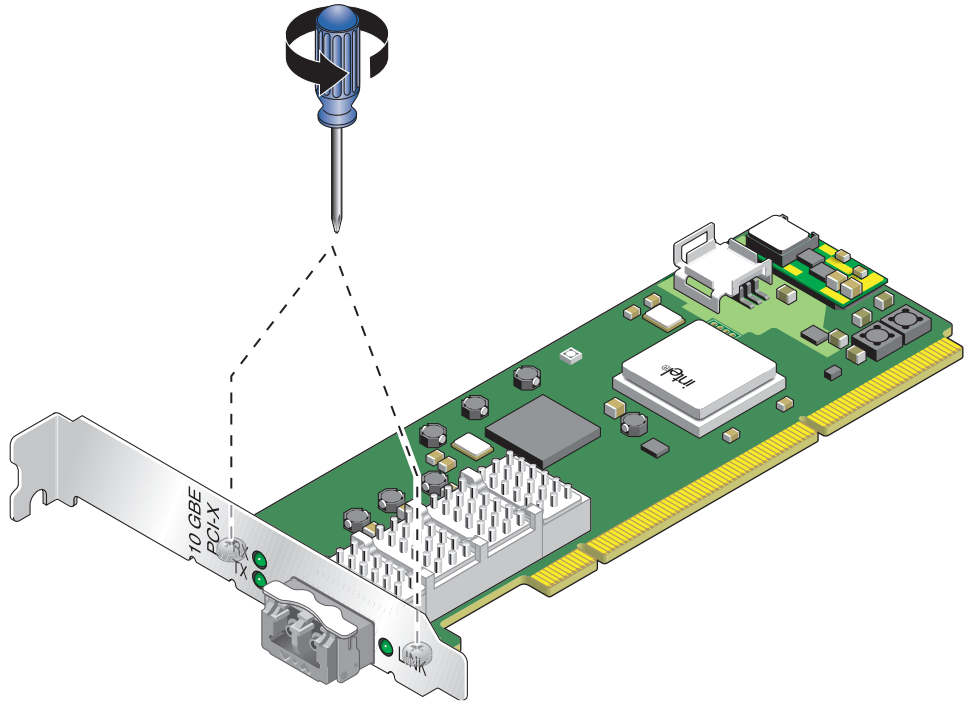
# ESD-EMI Gasket Installation

Now shipping with the adapter is a small, rectangular ESD-EMI gasket. This gasket improves ESD-EMI characteristics. You must install this gasket before installing the adapter into a system. Use the following procedure to install the gasket.

1. Using a No. 2 Philips screwdriver, remove the two screws that secure the bracket to the adapter card.

See [FIGURE 1](#).

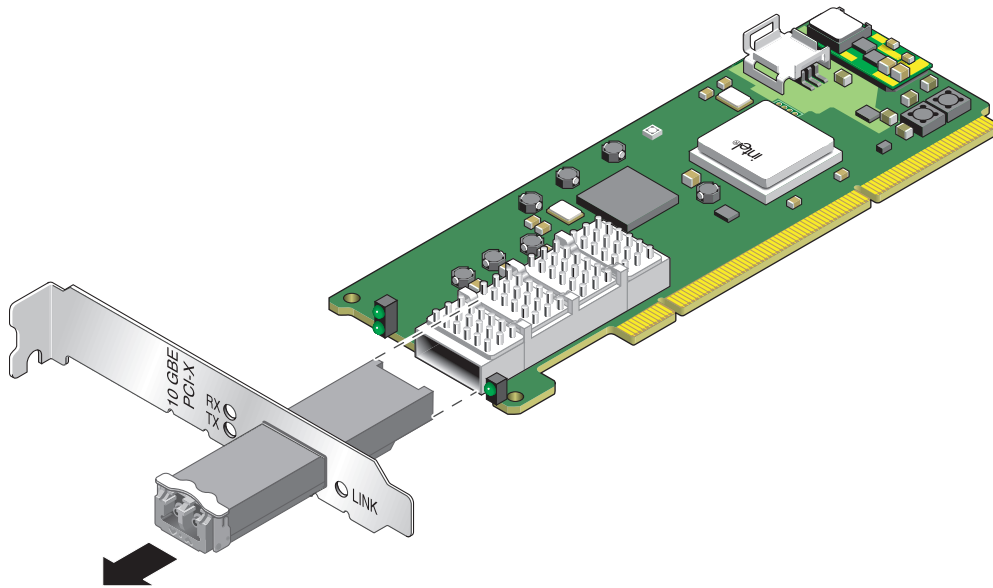
**FIGURE 1** Removing the Bracket Screws



2. Release the lever on the optical transceiver.
3. Disassemble the optical transceiver and bracket from the adapter card as one unit.

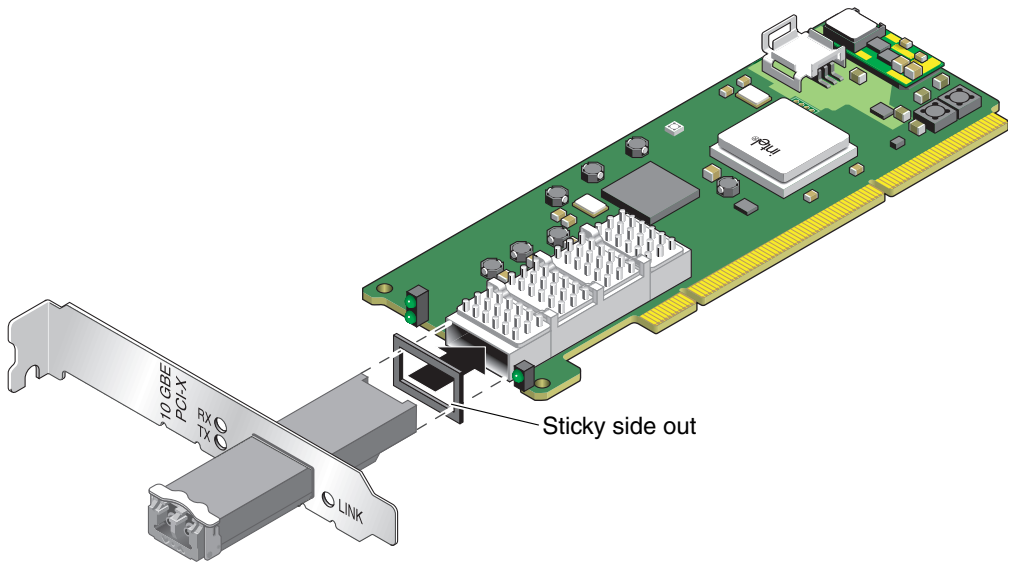
See [FIGURE 2](#).

**FIGURE 2** Disassembling the Sun 10-Gigabit Ethernet PCI-X Adapter



4. **Determine which bracket you are going to use.**  
If that bracket is different than the one with the optical transceiver, swap the brackets.
5. **Ensure that the bracket has the correct orientation.**  
See [FIGURE 2](#).
6. **Peel the backing off of the EMI-ESD gasket and slide it over the optical transceiver, with the sticky side toward the bracket.**
7. **Reassemble the optical transceiver, bracket, and gasket to the adapter card.**  
See [FIGURE 3](#).

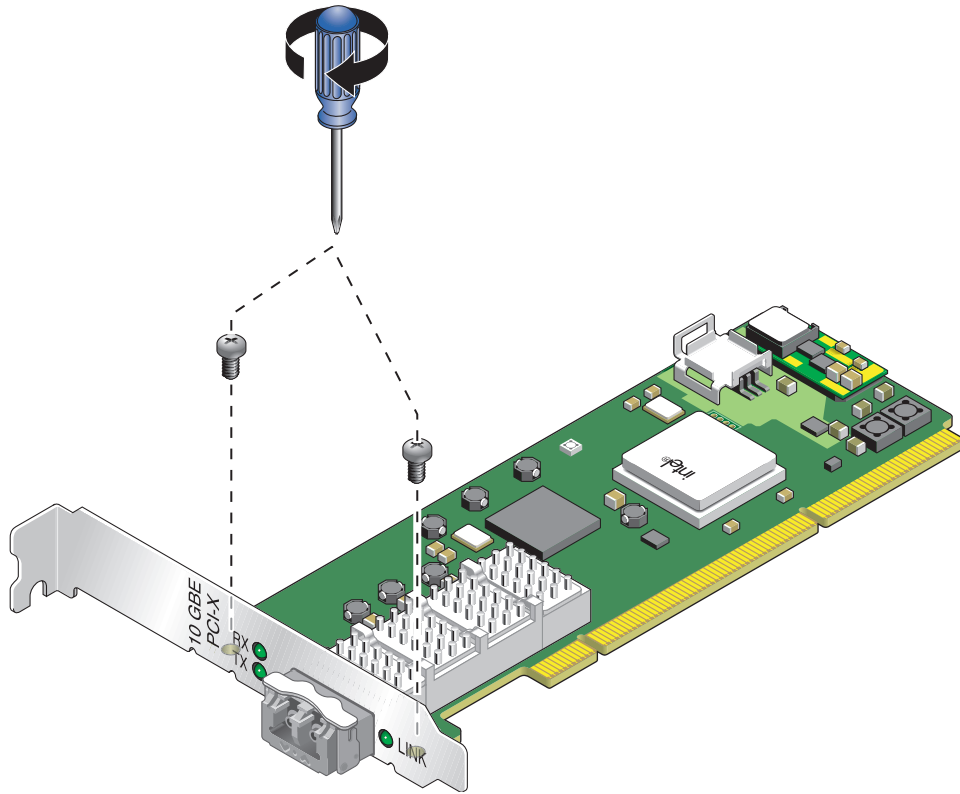
**FIGURE 3** Assembling the Sun 10-Gigabit Ethernet PCI-X Adapter



8. Using the No. 2 Philips screwdriver, tighten the two screws securing the bracket to the adapter card.

See [FIGURE 4](#).

**FIGURE 4** Securing the Bracket Screws



9. Close the lever on the optical transceiver.
10. Install the Sun 10-Gigabit Ethernet PCI-X adapter into the system.  
See the *Sun 10-Gigabit Ethernet PCI-X Adapter Installation and User's Guide* and your system's service or installation manual for instructions.