

Firmware and Boot Code Release Notes for Emulex OCe14000 Series Adapters

Versions: Firmware Version 10.0.803.2202

Date: February 2014

Purpose and Contact Information

This is the initial release of firmware and boot code for the OCe14000 family of products. These release notes describe the current known issues associated with this firmware and boot code release.

For the latest product documentation, go to www.Emulex.com. If you have questions or require additional information, contact an authorized Emulex® technical support representative at tech.support@emulex.com, 800-854-7112 (US/Canada toll free), +1 714-885-3402 (US/International), or +44 1189-772929 (Europe, Middle East, and Africa).

Known Issues

Firmware Known Issues

1. **I/O may fail if the firmware programs both Ethernet flow control and priority flow control.**

Workaround

None.

2. **PHY and MAC loopback diagnostics may fail on Windows 2008 R2 systems.**

Workaround

None.

FCoE UEFI Known Issues

1. **The FCoE ports listed in the 'System Settings > Storage' UEFI menu are ordered backwards.**

The lowest PCI function (the first port) should be the first one on the list.

Workaround

None.

2. **The Configure Boot Devices menu only scans for the next 16 LUNs from the starting LUN, which limits the LUNs displayed.**

Workaround

None.

iSCSI UEFI Known Issues

1. **The machine hangs when you select the “Back to Display Adapters and Reconnect Devices” option in the Emulex utility under the storage option.**

Workaround

Reboot the machine.

2. **The iSCSI vNIC2 configuration with an IBM x880 X6 requires an extraordinary amount of reboots.**

Only one ASIC can be actively configured at a time, and the ASIC configuration settings do not take effect until a reboot occurs. A reboot is required after every setting for each ASIC (2 - 3 reboots per ASIC). If you attempt to change the second ASIC after you configure the first, the first ASIC reverts back to the configuration before the change was made.

Workaround

None.

3. **An iSCSI login does not display an error when providing invalid target information.**

Workaround

None.

PXESelect Known Issues

1. **When changing multichannel modes with PXESelect, an incorrect number of vNIC ports are enabled. Although there should be four vNIC ports per physical port, only one vNIC port is made available per physical port.**

When this issue is encountered, the incorrect number of ports is seen within the UEFI NIC configuration utility and within the OS. This only occurs when changing multichannel modes with PXESelect. This occurs when selecting either IBM Virtual Fabric (vNIC1) or Switch Independent (vNIC2) modes within PXESelect. This issue has been reproduced with any personality (NIC-only, FCoE, or iSCSI).

Workaround

Use the UEFI NIC configuration utility to enable vNIC1 or vNIC2. The correct number of ports are available if you use the UEFI NIC configuration utility.

2. **After a firmware upload, the PXESelect utility may experience a delay of up to three minutes while displaying “Rebooting to Apply PCI Function Mapping Changes”.**

Workaround

None.

3. **The PXESelect banner currently displays iSCSI and FCoE functions as NIC functions.**

Workaround

None.

The PXESelect banner may show only one port. Some Intel servers do not enable a memory-mapped bit for multiple functions. These servers only enable the function for which the PXE BIOS is invoked.

Workaround

None.

PXE BootBIOS Known Issues

1. The PXE BootBIOS screen displays OCe14400-series adapters as “Emulex 10Gb UNDI” during adapter initialization, which is incorrect.

Workaround

None.

2. Enabling UMC when SR-IOV is already enabled does not return a notification message stating that SR-IOV must be disabled.

When UMC is enabled, SR-IOV is automatically disabled without any notification.

Workaround

None.

iSCSISelect Code Known Issues

1. Rebooting the system after changing the iSCSI initiator name may corrupt the iSCSI initiator name causing it to display invalid characters, which may cause the iSCSI login to fail.

Workaround

From the iSCSISelect utility, you must erase the configuration and reboot the system.

2. The iSCSISelect utility does not display the port number for network configuration.

Workaround

None.

3. Incorrect IP address is displayed when target login fails.

Workaround

None.

4. IPv6 formatting does not following RFC standards, which results in invalid IP address error message and a pop-up dialog box requesting that you re-enter the IP address.

Workaround

None.

5. Changing the target’s digest parameters may cause the boot LUN to revert to LUN 0.

Workaround

None. You must re-select the appropriate boot LUN.

6. Logging into multiple targets, including the boot target, from a single port may cause the boot target to get logged out after reboot.

Workaround

None.

7. **Discovery login CHAP authentication must be provided multiple times – once during discovery, once during log in, and when the boot flag is enabled.**

Workaround

None.

8. **iSCSISelect utility may attempt to connect to target even when “connect” option is not selected in iSCSI UEFI utility.**

Workaround

None.

iSCSI BootBIOS Known Issues

1. **When entering the iSCSI BIOS on Windows 2008 x86 SP2 systems, an iSCSI Initiator Name mismatch error message may be displayed.**

The error message states:

“Error: There is an iSCSI Initiator Name mismatch for the OneConnect controllers in this system. Please use the iSCSI Initiator Configuration screen to set a single iSCSI Initiator Name for all controllers in the system.”

Workaround

None.

2. **iSCSI BootBIOS screen displays OCe14400-series adapters as “Emulex 10Gb UNDI” during adapter initialization, which is incorrect.**

Workaround

None.

Technical Tips

1. **Under SLES 11, the bond 5 and 6 modes must be configured properly to work with the firmware.**

When configuring the bond mode, change the default setting to include “updelay=100”. For example, the correct setting for bond 6 is `BONDING_MODULE_OPTS='mode=6 miimon=100 updelay=100'`.

2. **You must ensure that the Staged CEM configuration settings use 100% of the available bandwidth.**

When minimum bandwidth per partition is configured through Staged CEM, the total bandwidth for all active partitions cannot exceed 100%. However, values less than 100% are allowed while reconfiguring the bandwidth settings.

3. **For Cisco switches, the access mode must be set in trunk mode, and native VLAN cannot be FCoE VLAN, that is, the FCoE VLAN must be in the allowed list. For example, if VLAN 2 is the FCoE VLAN and VLAN 1 is the Ethernet VLAN, you would enter the following:**

- `Switchport mode trunk`
- `Switchport trunk native vlan 1`
- `Switchport trunk allowed vlan 1-2`

4. **For Brocade switches, trunk mode must be set in converged mode. For example, if VLAN 2 is the FCoE VLAN, you would enter the following:**
 - Switchport mode converged
 - Switchport converged allowed vlan add 2
5. **For best performance, disable the Spanning Tree Protocol (STP) on all networked switches if you are using the following:**
 - Adapter fault tolerance (AFT)
 - Automatic load balancing (ALB)
 - Static link aggregation teaming

Copyright © 2014 Emulex. All rights reserved worldwide. This document refers to various companies and products by their trade names. In most, if not all cases, their respective companies claim these designations as trademarks or registered trademarks. This information is provided for reference only. Although this information is believed to be accurate and reliable at the time of publication, Emulex assumes no responsibility for errors or omissions. Emulex reserves the right to make changes or corrections without notice. This report is the property of Emulex and may not be duplicated without permission from the Company.