# BROADCOM®

# Emulex® LPe15000-Series and LPe16000-Series HBA Firmware and Boot Code

## Release 12.2.299.33, 12.2.299.27, and 12.2.299.23

## Purpose and Contact Information

These release notes describe the new features, resolved issues, known issues, technical tips, and license notices associated with this firmware release for Emulex® LPe15004, LPe16000, LPe16000B, LPe16002, LPe16002B, and LPe16004 HBAs.

For the latest product documentation, go to www.broadcom.com. If you have questions or require additional information, contact an authorized Broadcom® Technical Support representative at ecd-tech.support@broadcom.com.

## New Features

There are no new features in this release.

## Resolved Issues for Release 12.2.299.33

### Firmware

A process login (PRLI) failure no longer occurs when resetting a target port in a direct-connect configuration.

## Resolved Issues for Release 12.2.299.27

### Firmware

1. Fixed an intermittent issue where Dynamic D_Port External Loopback and Optical Loopback tests succeed but the Link Traffic test fails on a functional 16 Gb/s HBA port.

2. Fixed an intermittent issue where all Dynamic D_Port tests on a port display `passed` but the `PortDPortTest` summary output for the port shows a `failed` result.

3. Fixed an intermittent issue where OnDemand D_port tests run from the HBA to the switch failed with a `No FC cable connected` message.

4. If a D_Port test is interrupted for any reason, both ports must be reset before starting a new D_Port test.

# Resolved Issues for Release 12.2.299.23

## Firmware

An issue that might cause a firmware update failure has been resolved.

## UEFIBoot

1. Uncommitted changes that are made to the HBA configuration are no longer mistakenly saved.

2. If six or more ports are attached to a switch, all ports will now be seen.

# Known Issues

## General

1. Beginning with software release 11.2, FC HBAs and OneConnect® converged network adapters (CNAs) have independent software kits. Before updating earlier drivers and applications to the software in release 12.0.3, refer to the *Emulex Software Kit Migration User Guide* for special instructions and considerations for using the 11.2 and later software kits for FC HBAs and OneConnect CNAs.

2. Boot from SAN is not supported if FC-SP-2 authentication (DHCHAP) is enabled.

## Boot UEFI

The BIOS utility does not display the new values after setting HBA to its default values.

**Workaround**

Reboot the server to view the new settings.

## x86 BootBIOS

1. In the x86 BootBIOS utility, switch ports connected to the adapter will appear as G-ports until the port logs into the fabric using the scan targets or the configure boot targets menu.
   **Workaround**
   None.

2. The x86 BootBIOS utility displays a maximum of 16 LUNs starting from the **Starting Input LUN**; the remaining LUNs are not displayed.
   **Workaround**
   None.

3. If two LUNs are configured, only one might be displayed in the system BIOS boot list.
   **Workaround**
   None.

## Firmware

1. If a firmware update requires a system reboot, you cannot perform a firmware dump until the reboot has occurred.

   **Workaround**

   None.

2. A port state might change to `link down` after enabling the `enable-mds-diags` configuration parameter and performing an internal loopback test.

   **Workaround**

   None.

3. Booting from SAN in loop-mode while connected to a Brocade 300 switch running FOS version 7.4.1 causes a Windows operating system problem.

   **Workaround**

   Use the OneCommand Manager application to configure the ports to run at a fixed speed of 8Gb/s.

4. When running D_Port tests from the switch, the switch port can get stuck in D_Port mode.

   **Workaround**

   Do not stop D_Port tests while they are running. Use the `Portdporttest --exit` command to clear the configuration if the switch port is stuck in D_Port mode.

# Technical Tips

The displayed FC topology value might differ between the UEFI boot and the operating system driver. Boot component and operating system driver topology details are maintained separately. This situation can lead to differences in the displayed current topology value and the link status.

**Workaround**

To display consistent values, manually configure topology separately for boot and operating system driver components.

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