

## VMware Deliverable Release Notes

This document does not apply to HPE Superdome servers. For information on HPE Superdome, see the following links:

[HPE Integrity Superdome X](#)  
[HPE Superdome Flex](#)

Information on HPE Synergy supported VMware ESXi OS releases, HPE ESXi Custom Images and HPE Synergy Custom SPPs is available at:

[OS Support Tool for HPE Synergy](#)

Information on HPE Synergy Software Releases is available at:

[HPE Synergy Software Releases - Overview](#)

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## Gen11 SPP 2025.03.00.00 Release Notes for VMware ESXi 8.0

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### BIOS - System ROM

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ROM Flash Firmware Package - HPE ProLiant DL110 Gen11 (U62) Servers  
Version: 2.48\_03-11-2025 (**Recommended**)  
Filename: U62\_2.48\_03\_11\_2025.fwpkg

#### **Important Note!**

##### **Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

##### **Deliverable Name:**

HPE ProLiant DL110 Gen11 System ROM - U62

##### **Release Version:**

2.48\_03-11-2025

##### **Last Recommended or Critical Revision:**

2.48\_03-11-2025

##### **Previous Revision:**

2.46\_02-21-2025

##### **Firmware Dependencies:**

None

##### **Enhancements/New Features:**

None

##### **Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

##### **Known Issues:**

None

#### **Fixes**

##### **Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE](#)

[Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Firmware Package - HPE ProLiant DL320/ML110 Gen11 (U63) Servers

Version: 2.48\_03-11-2025 (**Recommended**)

Filename: U63\_2.48\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE ProLiant DL320 Gen11/ML110 Gen11 Servers System ROM - U63

**Release Version:**

2.48\_03-11-2025

**Last Recommended or Critical Revision:**

2.48\_03-11-2025

**Previous Revision:**

2.46\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Firmware Package - HPE Alletra 4110/Alletra 4120/ProLiant DL380a Gen11 (U58) Servers  
Version: 2.48\_03-11-2025 (**Recommended**)  
Filename: U58\_2.48\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE Alletra 4110/Alletra 4120/ProLiant DL380a Gen11 System ROM - U58

**Release Version:**

2.48\_03-11-2025

**Last Recommended or Critical Revision:**

2.48\_03-11-2025

**Previous Revision:**

2.46\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Firmware Package - HPE ProLiant DL20 Gen11/ML30 Gen11/MicroServer Gen11 (U65) Servers  
Version: 2.14\_03-11-2025 (**Recommended**)  
Filename: U65\_2.14\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.03.04.048.0 (2.10\_12\_03\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE DL20 Gen11/ML30 Gen11/MicroServer Gen11 System ROM - U65

**Release Version:**

2.14\_03-11-2025

**Last Recommended or Critical Revision:**

2.14\_03-11-2025

**Previous Revision:**

2.12\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.03.04.048.0 (2.10\_12\_03\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Firmware Package - HPE ProLiant DL560 Gen11 (U59) Servers

Version: 2.48\_03-11-2025 **(Recommended)**

Filename: U59\_2.48\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE ProLiant DL560 Gen11 System ROM - U59

**Release Version:**

2.48\_03-11-2025

**Last Recommended or Critical Revision:**

2.48\_03-11-2025

**Previous Revision:**

2.46\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Firmware Package - HPE ProLiant ML350/DL360/DL380 Gen11 (U54) Servers

Version: 2.48\_03-11-2025 (**Recommended**)

Filename: U54\_2.48\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE DL380 Gen11/ML350 Gen11/DL360 Gen11 System ROM - U54

**Release Version:**

2.48\_03-11-2025

**Last Recommended or Critical Revision:**

2.48\_03-11-2025

**Previous Revision:**

2.46\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.075.0 (2.40\_10\_23\_2024).

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Universal Firmware Package - HPE ProLiant DL145 Gen11 (A58) Servers

Version: 1.52\_03-11-2025 **(Recommended)**

Filename: A58\_1.52\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE DL145 Gen11 System ROM - A58

**Release Version:**

1.52\_03-11-2025

**Last Recommended or Critical Revision:**

1.52\_03-11-2025

**Previous Revision:**

1.50\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

## **Fixes**

### **Important Notes:**

This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

### **Firmware Dependencies:**

None

### **Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

### **Known Issues:**

None

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ROM Flash Universal Firmware Package - HPE ProLiant DL325/DL345 Gen11 (A56) Servers  
Version: 2.34\_03-11-2025 (**Recommended**)  
Filename: A56\_2.34\_03\_11\_2025.fwpkg

## **Important Note!**

### **Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.3 for AMD 5th Generation EPYC processors. This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

### **Deliverable Name:**

HPE ProLiant DL325 Gen11/DL345 Gen11 System ROM - A56

### **Release Version:**

2.34\_03-11-2025

### **Last Recommended or Critical Revision:**

2.34\_03-11-2025

### **Previous Revision:**

2.32\_02-21-2025

### **Firmware Dependencies:**

None

### **Enhancements/New Features:**

None

### **Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

### **Known Issues:**

None

## **Fixes**

### **Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.3 for AMD 5th Generation EPYC processors. This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

### **Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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ROM Flash Universal Firmware Package - HPE ProLiant DL365/DL385 Gen11 (A55) Servers

Version: 2.34\_03-11-2025 (**Recommended**)

Filename: A55\_2.34\_03\_11\_2025.fwpkg

**Important Note!**

**Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.3 for AMD 5th Generation EPYC processors. This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Deliverable Name:**

HPE DL385 Gen11/DL365 Gen11 System ROM - A55

**Release Version:**

2.34\_03-11-2025

**Last Recommended or Critical Revision:**

2.34\_03-11-2025

**Previous Revision:**

2.32\_02-21-2025

**Firmware Dependencies:**

None

**Enhancements/New Features:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

**Fixes**

**Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.3 for AMD 5th Generation EPYC processors. This revision of the System ROM includes AMD reference code GenoaPI 1.0.0.E for AMD 4th Generation EPYC processors.

Details about reported security vulnerabilities and their mitigation can be found at the following link [Security Bulletin Library | HPE Support](#).

**Firmware Dependencies:**

None

**Problems Fixed:**

Addressed an issue where the system might RSOD when performing firmware update via Firmware Management Protocol.

**Known Issues:**

None

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## Driver - Lights-Out Management

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HPE iLO Native Driver for ESXi 8.0 and ESXi 9.0

Version: 10.9.0 **(Recommended)**

Filename: ilo-driver\_800.10.9.0.17-10EM.800.1.0.20613240\_24608328.zip

### Fixes

The product addressed a probabilistic PSOD when repeatedly doing the OS reboot.

### Enhancements

- Add support for the new ESXi 9.0
- Remove support for the ESXi 7.0.

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## Driver - Network

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HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0

Version: 2025.03.00 **(Recommended)**

Filename: cp063725.compsig; cp063725.zip

### Important Note!

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the *HPE Broadcom NetXtreme-E Firmware Version, 232.1.132008* or later, for use with this driver.

### Enhancements

- This product enhances to add support for Tunnel based TPA (TCP Packet Aggregation).
- This product enhances the coredump feature for generating the summary of a coredump file.

### Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 535FLR-T Adapter
- HPE Ethernet 10Gb 2-port 535T Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter
- HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- HPE Ethernet 10Gb 2-port SFP+ BCM57412 OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 OCP3 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 OCP3 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter
- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE
- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE
- Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 Adapter for HPE
- Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 OCP3 Adapter for HPE

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HPE Intel igbn Driver for VMware vSphere 8.0

Version: 2024.09.00 **(Recommended)**

Filename: cp062161.compsig; cp062161.zip

### Important Note!

This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.24.0 or later, for use with this driver.

### Enhancements

This product added support to new Gen11 servers.

## **Supported Devices and Features**

These drivers support the following network adapters:

- HPE Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 1Gb 2-port 361i Adapter
- HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 4-port 366T Adapter
- HPE Ethernet 1Gb 4-port 366i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE
- Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE
- Intel(R) I350 Gigabit Network Connection

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Intel icen Driver for VMware vSphere 8.0

Version: 2025.03.00 (**Recommended**)

Filename: cp065675.compsig; cp065675.zip

### **Important Note!**

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the firmware provided in *Intel Firmware Package For E810 Ethernet Adapter*, version 4.60 or later, for use with these drivers.

### **Enhancements**

This product is now supported on a new platform.

## **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE
- Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE
- Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE
- Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE
- Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE
- Intel E810-2CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE
- Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE

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## **Driver - Storage Controller**

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HPE MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen10P and Gen11 controller (64-bit) Driver for vSphere 8.0

Version: 2025.01.01 (B) (**Recommended**)

Filename: cp065469.compsig; cp065469.zip

### **Important Note!**

- Actual Version is 7.730.1.0.

### **Enhancements**

- Support new Gen12 servers.

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HPE ProLiant Gen10 Smart Array and Gen10 Plus and Gen11 Smart RAID Controller Driver for VMware vSphere 8.0 (Driver Component).

Version: 2025.02.01 (**Recommended**)

Filename: cp062918.compsig; cp062918.zip

### **Important Note!**

- This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com, plus an HPE specific CPXXXX.xml file.
- Actual ESXi8.0 driver version is 80.4704.0.108

### **Enhancements**

- Improve the tolerance of error handling.

- Enhancement of DMA engine attributes to prevent PSOD.

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## **Firmware - Network**

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Broadcom Firmware Package for BCM5741x adapters

Version: 232.1.132.8 **(Recommended)**

Filename: bcm232.1.132.8.pup.fwpkg; bcm232.1.132.8.pup.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 232.0.155.7 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-232.0.155.5 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.03.00 or later

### **Fixes**

- This product fixes the issue where the OCP module experiences link width degradation in the system.
- This product fixes the issue where RDMA connections are not getting connected.
- This product fixes the issue where RoCE and TX/RX path core dump decoding failed.
- This product fixes the issue where Port 1 was not receiving broadcast packets with ESXi.
- This product fixes the issue where the OCP module experiences link width degradation in the system.
- This product fixes the issue where PXE boot does not work with VLAN configurations.

### **Enhancements**

- This product removes the Ethernet/LLDPTransmit/ManagementVlanId property to streamline configuration.
- This product enhances the coredump feature in the BNXT driver for improved diagnostics.
- This product enhances to update the driver to suppress the HII MBA menu for a cleaner interface.

### **Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter
- HPE Ethernet 10Gb 2-port SFP+ BCM57412 OCP3 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 OCP3 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 OCP3 Adapter

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Broadcom Firmware Package for BCM5750x adapters

Version: 232.1.132.8 **(Recommended)**

Filename: bcm232.1.132.8\_Thor.pup.fwpkg; bcm232.1.132.8\_Thor.pup.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 232.0.155.7 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-232.0.155.5 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.03.00 or later

### **Fixes**

- This product fixes the issue where the firmware fails to send a reset notification to the driver during error recovery.
- This product fixes the issue where the RDE bejString special character escape sequences were incorrectly encoded.
- This product fixes the issue where the PLDM port link speed sensor reading and event values were reported as negative.
- This product fixes the issue where the XDP/LPBK L2 context entry caused resource leaks.
- This product fixes the issue where XDP flows were not properly freed by ensuring they are released only when the MAC address is non-zero.

### **Enhancements**

- This product removes the Ethernet/LLDPTransmit/ManagementVlanId property to simplify network configuration.
- This product enhances system stability by adjusting MSI-X vector counts to prevent resource exhaustion.
- This product enhances SPDM functionality by setting the MsgTag in the MCTP transport header.

- This product enhances the coredump feature in the BNXT driver for better diagnostic capabilities.
- This product enhances network performance by adding the RX rate profile and improving DPDK functionality.

### **Supported Devices and Features**

This product supports the following network adapters:

- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE
- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE

Broadcom Firmware Package for BCM57608 100GbE 2p Adapter

Version: 232.1.132.8 (B) **(Recommended)**

Filename: BCM232.1.132.8\_BCM957608-P2100HQF00.fwpkg; BCM232.1.132.8\_BCM957608-P2100HQF00.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 232.0.155.7 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-232.0.155.5 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.03.00 or later

### **Enhancements**

Add new support platform.

### **Supported Devices and Features**

This product supports the following network adapters:

- Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 Adapter for HPE

Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter

Version: 232.1.132.8 (B) **(Recommended)**

Filename: BCM232.1.132.8\_BCM957608-N2100HQI00.fwpkg; BCM232.1.132.8\_BCM957608-N2100HQI00.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 232.0.155.7 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-232.0.155.5 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.03.00 or later

### **Enhancements**

Add new support platform.

### **Supported Devices and Features**

This product supports the following network adapters:

- Broadcom BCM57608 Ethernet 100Gb 2-port QSFP112 OCP3 Adapter for HPE

Broadcom NX1 Online Firmware Upgrade Utility for VMware

Version: 1.41.0 **(Recommended)**

Filename: CP064518.compsig; CP064518.zip

### **Important Note!**

This software package contains combo image v20.32.41 with the following firmware versions:

<b>NIC</b>	<b>Boot Code Version</b>	<b>PXE Version</b>	<b>NCSI Version</b>	<b>UEFI Version</b>
BCM 5719 1GbE 4p BASE-T Adptr	1.60	21.6.4	1.60	21.6.85
BCM 5719 1GbE 4p BASE-T OCP3 Adptr	1.60	21.6.4	1.60	21.6.85

BCM 5719 1GbE 4p BASE-T LOM Adptr	1.60	21.6.4	1.60	21.6.85
BCM 5720 1GbE 2p BASE-T LOM Adptr	1.43	21.6.4	N/A	21.6.85

### **Prerequisites**

This product requires the appropriate driver for your device and operating system to be installed before the firmware is updated.

### **Fixes**

This product fixes where MBA configuration reset to defaults after updating firmware.

### **Enhancements**

This product enhances libfwupg to improve NVRAM configuration updates.

### **Supported Devices and Features**

This product supports the following network adapters:

- Broadcom BCM5720 Ethernet 1Gb 2-port BASE-T LOM Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T LOM Adapter for HPE

---

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware  
Version: 226.1.107.0 (B) **(Recommended)**  
Filename: CP065663.compsig; CP065663.zip

### **Important Note!**

HPE recommends *HPE Broadcom NetXtreme-E Drivers for VMware*, versions 2023.09.00 or later, for use with this firmware.

This software package contains NVM Image version 226.1.107000 with the following firmware versions:

NIC	Bootcode Version	NCSI Version	MBA Version	UEFI Version	RoCE Version
HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 OCP3 Adapter	226.0.145.0	226.0.145.0	226.0.135.0	226.0.135.0	226.0.145.0
HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter					
HPE Ethernet 10Gb 2-port BaseT BCM57416 OCP3 Adapter					
HPE Ethernet 10Gb 2-port BaseT BCM57416 Adapter					
HPE Ethernet 10Gb 2-port SFP+ BCM57412 OCP3 Adapter					
HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter					
HPE Ethernet 10/25Gb 4-port SFP28 BCM57504 Adapter					
HPE Ethernet 10/25Gb 4-port SFP28 BCM57504 OCP3 Adapter					

### **Prerequisites**

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

### **Fixes**

- This product addressed device lost symptom after continuously ungraceful restart on BCM57414 OCP3 adapter.
- This product addressed some RDE pattern format for some LLDP properties.
- This product addressed the NC-SI passthrough with BMC when device is under idle mode.

- This product addressed new mechanism for loading factory default.

### **Enhancements**

- This product enhanced the device self-diagnostic matrix and MAC verification.
- This product enhanced the link-speed calculation for internal variable.

### **Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 OCP3 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 Adapter
- HPE Ethernet 10Gb 2-port BaseT BCM57416 OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter
- HPE Ethernet 10Gb 2-port SFP+ BCM57412 OCP3 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter
- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE
- Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE

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Intel Firmware Package For E810-2CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_2CQDA2\_O\_SEC\_4p60\_PLDMoMCTP\_8001E8B6.fwpkg;

HPE\_E810\_2CQDA2\_O\_SEC\_4p60\_PLDMoMCTP\_8001E8B6.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

### **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-2CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE

---

Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_CQDA2\_4p60\_PLDMoMCTP\_8001E8B1.fwpkg; HPE\_E810\_CQDA2\_4p60\_PLDMoMCTP\_8001E8B1.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

## **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE

---

Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_CQDA2\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8B5.fwpkg;

HPE\_E810\_CQDA2\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8B5.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel ica Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

## **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE

---

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_XXVDA2\_SD\_4p60\_PLDMoMCTP\_8001E8B3.fwpkg; HPE\_E810\_XXVDA2\_SD\_4p60\_PLDMoMCTP\_8001E8B3.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel ica Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

## **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE

---

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_XXVDA2\_SD\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8B0.fwpkg;

HPE\_E810\_XXVDA2\_SD\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8B0.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

### **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE

---

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_XXVDA4\_FH\_4p60\_PLDMoMCTP\_8001E8B2.fwpkg; HPE\_E810\_XXVDA4\_FH\_4p60\_PLDMoMCTP\_8001E8B2.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

### **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE

---

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter

Version: 4.60 (B) **(Recommended)**

Filename: HPE\_E810\_XXV4\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8AF.fwpkg;

HPE\_E810\_XXV4\_OCP\_4p60\_NCSIwPLDMoMCTP\_8001E8AF.json

### **Important Note!**

For Firmware installation, there is no OS and drivers dependency.

For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2024.11.00 or later

This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Enhancements**

Add new support platform.

## **Supported Devices and Features**

This product supports the following network adapters:

- Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE

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Intel Online Firmware Upgrade Utility for VMware  
Version: 3.25.0 (B) (**Recommended**)  
Filename: CP065653.compsig; CP065653.zip

### **Important Note!**

This software package contains the following firmware versions for the below listed supported network adapters:

<b>NIC</b>	<b>EEPROM/NVM Version</b>	<b>OROM Version</b>	<b>NVM Version</b>
HPE Ethernet 10Gb 2-port SFP+ OCP3 X710-DA2 Adapter	8000F6CA	1.3682.0	9.52
HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter	8000F6C9	1.3682.0	9.52
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter	8000123F	1.3682.0	N/A
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter	80001234	1.3682.0	N/A
Intel(R) I350 Gigabit Network Connection (2-port)	8000119C	1.3682.0	N/A
Intel(R) I350 Gigabit Network Connection (4-port)	8000119D	1.3682.0	N/A

The combo image v1.3682.0 includes: Boot Agent: 1GbE - v1.5.90, 10GbE - v2.4.54, 40GbE - v1.1.45 & UEFI Drivers: 1GbE - v9.8.62, 10GbE - v8.2.47, 40GbE - v5.0.12

Single NVM Version is new firmware format which represent an unified version in place of the previously used EEPROM/NVM Version or OROM version.

### **Prerequisites**

This product requires the appropriate driver for your device and operating system be installed before firmware is updated.

### **Enhancements**

This product now supports VMware 9.0

## **Supported Devices and Features**

This package supports the following network adapters:

- Intel(R) I350 Gigabit Network Connection (2-port)
- Intel(R) I350 Gigabit Network Connection (4-port)
- HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ X710-DA2 OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter

---

Mellanox Firmware Package (FWPKG) - Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE  
Version: 26.43.1014 (**Recommended**)  
Filename: 26\_43\_1014-MCX631102AS-ADA\_Ax.pldm.fwpkg; 26\_43\_1014-MCX631102AS-ADA\_Ax.pldm.json

### **Important Note!**

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software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution.

A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26431014/known+issues>

### **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

### **Fixes**

#### **The following issues have been fixed in version 26.43.1014:**

- Setup crash would occur when create\_sq used invalid mbox. Now the invalid mbox is replaced with a valid DB.
- Fixed the query for FACTORY default NV configuration values. The firmware always returned the "next" value to be applied.

### **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

#### **New features and changes included in version 26.43.1014:**

- Added a recovery step in case of CQ doorbell getting lost during VF migration.
- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.). The feature is configured using a new general object: RDMA-Telemetry object, and depends on the following new caps:

HCA\_CAP.rdma\_telemetry\_notification\_types and HCA\_CAP.rdma\_telemetry.

- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func
- Added 'table\_type\_valid' and 'table\_type' fields to the steering action (STC) "Jump To Flow" table parameters to enable the user to jump from NIC\_TX to FDB\_TX and bypass the ACL table.
- Enabled hop reduction by bypassing NIC domain in various use cases. Such action reduces the number of hops (improves PPS) to deal with mass number of flows and devices. To enable this new capability, a new STC action type "JUMP\_TO\_FDB\_RX" was added to allow jumping into the RX side of a table.

### **Supported Devices and Features**

<b>HPE Part Number</b>	<b>Mellanox Ethernet Only Adapters</b>	<b>PSID</b>
P42044-B21	Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	MT_0000000575

Mellanox Firmware Package (FWPKG) - Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE

Version: 26.43.1014 **(Recommended)**

Filename: 26\_43\_1014-MCX631432AS-ADA\_Ax.pldm.fwpkg; 26\_43\_1014-MCX631432AS-ADA\_Ax.pldm.json

### **Important Note!**

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26431014/known+issues>

### **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

### **Fixes**

#### **The following issues have been fixed in version 26.43.1014:**

- Setup crash would occur when create\_sq used invalid mbox. Now the invalid mbox is replaced with a valid DB.
- Fixed the query for FACTORY default NV configuration values. The firmware always returned the "next" value to be applied.

### **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

#### **New features and changes included in version 26.43.1014:**

- Added a recovery step in case of CQ doorbell getting lost during VF migration.
- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.). The feature is configured using a new general object: RDMA-Telemetry object, and depends on the following new caps:

HCA\_CAP.rdma\_telemetry\_notification\_types and HCA\_CAP.rdma\_telemetry.

- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func
- Added 'table\_type\_valid' and 'table\_type' fields to the steering action (STC) "Jump To Flow" table parameters to enable the user to jump from NIC\_TX to FDB\_TX and bypass the ACL table.
- Enabled hop reduction by bypassing NIC domain in various use cases. Such action reduces the number of hops (improves PPS) to deal with mass number of flows and devices. To enable this new capability, a new STC action type "JUMP\_TO\_FDB\_RX" was added to allow jumping into the RX side of a table.

### **Supported Devices and Features**

<b>HPE Part Number</b>	<b>Mellanox Ethernet Only Adapters</b>	<b>PSID</b>
P42041-B21	Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	MT_0000000551

Mellanox Firmware Package (FWPKG) for HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter : HPE part numbers P31246-B21 and P31246-H21

Version: 16.35.4030 (**Recommended**)

Filename: 16\_35\_4030-MCX515A-CCA\_HPE\_Ax.pldm.fwpkg

## **Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**Disclaimer:** Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution.

A list of known issues with this release is available

at: <https://docs.nvidia.com/networking/display/connectx5firmwarev16354030ts/known+issues>

## **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 16.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

## **Fixes**

**The following issues have been fixed in version 16.35.4030:**

- VF FLR would get stuck when its PF triggered the FLR as well.
- Unexpected source UDP port appeared in RoCE packets when the firmware ignored a non-PF driver configuration for RoCE source UDP port control (as set in SET\_HCA\_CAP.sw\_r\_roce\_src\_udp\_port).

## **Enhancements**

Important : Security Hardening Enhancements - This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device firmware to this version to improve the firmware security and reliability of your device.

**New features and changes included in version 16.35.4030:**

- Added support for postponing QP timeout "retry exceeded" errors for traffic directed at specific destinations. This new capability prevents broken connections for destinations in downtime because of live migration.

## **Supported Devices and Features**

This software package contains the following firmware versions:

<b>Mellanox Ethernet Only Adapters</b>	<b>Firmware Version</b>	<b>PSID</b>
HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter(P31246-B21 and P31246-H21)	16.35.4030	MT_0000000591

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter : HPE part numbers P23664-B21 and P23664-H21

Version: 20.43.1014 **(Recommended)**

Filename: 20\_43\_1014-MCX653105A-HDA\_HPE\_Ax.pldm.fwpkg

## **Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**Disclaimer:** Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution.

A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

## Prerequisites

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

## Fixes

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.
- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

## Enhancements

**Security Hardening Enhancements:** This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

**New features and changes included in version 20.43.1014:**

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func

## Supported Devices and Features

This software package contains the following firmware versions:

Mellanox InfiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter (P23664-B21 and P23664-H21)	20.43.1014	MT_0000000451

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter : HPE part numbers P31323-B21 and P31323-H21  
Version: 20.43.1014 **(Recommended)**  
Filename: 20\_43\_1014-MCX653435A-HDA\_HPE\_Ax.pldm.fwpkg

## **Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

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A list of known issues with this release is available

at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

## **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

## **Fixes**

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.
- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

## **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

**New features and changes included in version 20.43.1014:**

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func

## **Supported Devices and Features**

This software package contains the following firmware versions:

<b>Mellanox InfiniBand Adapter</b>	<b>Firmware Version</b>	<b>PSID</b>
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter (P31323-B21 and P31323-H21)	20.43.1014	MT_0000000592

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter : HPE part numbers P31324-B21 and P31324-H21  
 Version: 20.43.1014 (**Recommended**)  
 Filename: 20\_43\_1014-MCX653106A-HDA\_HPE\_Ax.pldm.fwpkg

**Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**ConnectX-6 VPI supports having one port as InfiniBand and the other port as Ethernet according to the following matrix of combinations.**

Port #2 - InfiniBand				
Port #1 - Ethernet	HDR/HDR100	EDR	FDR	QDR
200GbE/50GbE	supported	not supported	not supported	supported
100GbE/25GbE	supported	not supported	not supported	supported
40GbE/10GbE	supported	not supported	not supported	supported
1GbE	supported	not supported	not supported	supported

Port #2 - Ethernet				
Port #1 - InfiniBand	200GbE/50GbE	100GbE/25GbE	40GbE/10GbE	1GbE
HDR / HDR100	supported	supported	not supported	supported
EDR	supported	supported	not supported	supported
FDR	not supported	not supported	not supported	not supported
QDR/SDR	supported	supported	not supported	supported

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

**Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

**Fixes**

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.

- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

## Enhancements

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

### New features and changes included in version 20.43.1014:

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func

## Supported Devices and Features

This software package contains the following firmware versions:

Mellanox InfiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter(P31324-B21 and P31324-H21)	20.43.1014	MT_000000594

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter : HPE part numbers P31348-B21 and P31348-H21

Version: 20.43.1014 (**Recommended**)

Filename: 20\_43\_1014-MCX653436A-HDA\_HPE\_Ax.pldm.fwpkg

### Important Note!

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**ConnectX-6 VPI supports having one port as InfiniBand and the other port as Ethernet according to the following matrix of combinations.**

Port #2 - InfiniBand				
Port #1 - Ethernet	HDR/HDR100	EDR	FDR	QDR
200GbE/50GbE	supported	not supported	not supported	supported
100GbE/25GbE	supported	not supported	not supported	supported
40GbE/10GbE	supported	not supported	not supported	supported
1GbE	supported	not supported	not supported	supported

Port #2 - Ethernet				
Port #1 - InfiniBand	200GbE/50GbE	100GbE/25GbE	40GbE/10GbE	1GbE
HDR / HDR100	supported	supported	not supported	supported
EDR	supported	supported	not supported	supported
FDR	not supported	not supported	not supported	not supported
QDR/SDR	supported	supported	not supported	supported

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

### **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

### **Fixes**

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.
- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

### **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

**New features and changes included in version 20.43.1014:**

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESORCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func

## Supported Devices and Features

This software package contains the following firmware versions:

Mellanox InfiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter (P31348-B21 and P31348-H21)	20.43.1014	MT_0000000593

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter : HPE part numbers P23665-B21 and P23665-H21

Version: 20.43.1014 (**Recommended**)

Filename: 20\_43\_1014-MCX653105A-ECA\_HPE\_Ax.pldm.fwpgk

### Important Note!

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

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A list of known issues with this release is available

at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

### Prerequisites

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

### Fixes

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.
- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

### Enhancements

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

**New features and changes included in version 20.43.1014:**

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- o tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- o tool\_partial\_cap.set\_hca\_cap\_other\_func
- o tool\_partial\_cap.query\_roce\_addr\_other\_vport
- o tool\_partial\_cap.query\_vuid\_direct\_data
- o tool\_partial\_cap.query\_hca\_cap\_other\_func

## Supported Devices and Features

This software package contains the following firmware versions:

Mellanox InfiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter (P23665-B21 and P23665-H21)	20.43.1014	MT_0000000452

Mellanox Firmware Package (FWPKG) for HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter : HPE part numbers P23666-B21 and P23666-H21

Version: 20.43.1014 (**Recommended**)

Filename: 20\_43\_1014-MCX653106A-ECA\_HPE\_Ax.pldm.fwpgk

## Important Note!

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**ConnectX-6 VPI supports having one port as InfiniBand and the other port as Ethernet according to the following matrix of combinations.**

Port #2 - InfiniBand				
Port #1 - Ethernet	HDR/HDR100	EDR	FDR	QDR
50GbE	supported	not supported	not supported	supported
100GbE/25GbE	supported	not supported	not supported	supported
40GbE/10GbE	supported	not supported	not supported	supported
1GbE	supported	not supported	not supported	supported

Port #2 - Ethernet				
Port #1 - InfiniBand	50GbE	100GbE/25GbE	40GbE/10GbE	1GbE
HDR / HDR100	supported	supported	not supported	supported
EDR	supported	supported	not supported	supported
FDR	not supported	not supported	not supported	not supported
QDR/SDR	supported	supported	not supported	supported

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6firmwarev20431014/known+issues>

### **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 20.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

### **Fixes**

**The following issues have been fixed in version 20.43.1014:**

- Setup crash when "create\_sq" used invalid mbox.
- The firmware always returned the "next" value to be applied when querying FACTORY default NV configuration values.

### **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

**New features and changes included in version 20.43.1014:**

- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.).
- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESORCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func

### **Supported Devices and Features**

This software package contains the following firmware versions:

<b>Mellanox InfiniBand Adapter</b>	<b>Firmware Version</b>	<b>PSID</b>
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter (P23666-B21 and P23666-H21)	20.43.1014	MT_0000000453

Mellanox Firmware Package (FWPKG) for Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE  
Version: 22.43.1014 (**Recommended**)  
Filename: 22\_43\_1014-MCX623105AS-VDA\_Ax.pldm.fwpkg

### **Important Note!**

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6dxfirmwarev22431014/known+issues>

## Prerequisites

FWPKG will work only if the firmware version flashed on the adapter is 22.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

## Fixes

### The following issues have been fixed in version 22.43.1014:

- Setup crash would occur when create\_sq used invalid mbox. Now the invalid mbox is replaced with a valid DB.
- An upgrade issue that required firmware v22.36.1010 as an intermediate version when upgrading the firmware from v22.33.0428 or below to versions above 22.36.1010.
- Fixed the query for FACTORY default NV configuration values. The firmware always returned the "next" value to be applied.

## Enhancements

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

### New features and changes included in version 22.43.1014:

- Added a recovery step in case of CQ doorbell getting lost during VF migration.
- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.). The feature is configured using a new general object: RDMA-Telemetry object, and depends on the following new caps:

HCA\_CAP.rdma\_telemetry\_notification\_types and HCA\_CAP.rdma\_telemetry .

- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

The 5 sub-operations are:

- QUERY\_HCA\_CAP with other function
- QUERY\_VUID with direct data
- QUERY\_ROCE\_ADDRESS with other vport
- SET\_HCA\_CAP with other function
- POSTPONE\_CONNECTED\_QP\_TIMEOUT with other vport

The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func
- Added 'table\_type\_valid' and 'table\_type' fields to the steering action (STC) "Jump To Flow" table parameters to enable the user to jump from NIC\_TX to FDB\_TX and bypass the ACL table.
- Enabled hop reduction by bypassing NIC domain in various use cases. Such action reduces the number of hops (improves PPS) to deal with mass number of flows and devices. To enable this new capability, a new STC action type "JUMP\_TO\_FDB\_RX" was added to allow jumping into the RX side of a table.
- Added support for QoS scheduling across multiple E-Switches grouped in a LAG. VPort members of a Physical Function can be added to a rate group from another Physical Function and rate limits of the group will apply to those VPort members as well.
- Increased the maximum number of supported "ARC-IN" from 1 to 8 and "ARCOUT" from 3 to 8 for the dynamic flex parser.

## Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P10180-B21	Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE	MT_0000000435

## **Important Note!**

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## **Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 22.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

## **Fixes**

### **The following issues have been fixed in version 22.43.1014:**

- Setup crash would occur when create\_sq used invalid mbox. Now the invalid mbox is replaced with a valid DB.
- An upgrade issue that required firmware v22.36.1010 as an intermediate version when upgrading the firmware from v22.33.0428 or below to versions above 22.36.1010.
- Fixed the query for FACTORY default NV configuration values. The firmware always returned the "next" value to be applied.

## **Enhancements**

Security Hardening Enhancements: This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your device's firmware to this release to improve the firmware security and reliability of your device.

### **New features and changes included in version 22.43.1014:**

- Added a recovery step in case of CQ doorbell getting lost during VF migration.
- Added the option to indicate an error CQE event on every selected function per eSwitch manager. This indication is defined as a new WQE including the relevant information about the error (such as: syndrome, function\_id, timestamp, QPs num etc.). The feature is configured using a new general object: RDMA-Telemetry object, and depends on the following new caps:

HCA\_CAP.rdma\_telemetry\_notification\_types and HCA\_CAP.rdma\_telemetry .

- Extended kernel lockdown permission set. The following sub-operations can now be called by tools (permission TOOLS\_RESOURCES) using new HCA capability bitmask field: tool\_partial\_cap.

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The new added caps are:

- tool\_partial\_cap.postpone\_conn\_qp\_timeout\_other\_vport,
- tool\_partial\_cap.set\_hca\_cap\_other\_func
- tool\_partial\_cap.query\_roce\_addr\_other\_vport
- tool\_partial\_cap.query\_vuid\_direct\_data
- tool\_partial\_cap.query\_hca\_cap\_other\_func
- Added 'table\_type\_valid' and 'table\_type' fields to the steering action (STC) "Jump To Flow" table parameters to enable the user to jump from NIC\_TX to FDB\_TX and bypass the ACL table.
- Enabled hop reduction by bypassing NIC domain in various use cases. Such action reduces the number of hops (improves PPS) to deal with mass number of flows and devices. To enable this new capability, a new STC action type "JUMP\_TO\_FDB\_RX" was added to allow jumping into the RX side of a table.
- Added support for QoS scheduling across multiple E-Switches grouped in a LAG. VPort members of a Physical Function can be added to a rate group from another Physical Function and rate limits of the group will apply to those VPort members as well.
- Increased the maximum number of supported "ARC-IN" from 1 to 8 and "ARCOUT" from 3 to 8 for the dynamic flex parser.

## **Supported Devices and Features**

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P25960-B21	Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	MT_0000000437

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Mellanox Firmware Package(FWPKG) for HPE NV60025M Ethernet 10/25Gb 2-port Secure Network Adapter  
Version: 26.43.1014 **(Recommended)**  
Filename: 26\_43\_1014-S2A69-63001\_Ax\_header.pldm.fwpkg

**Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 22.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

**Enhancements**

Upgraded to version 26.43.1014

**Supported Devices and Features**

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P46603-B21	HPE NV60025M Ethernet 10/25Gb 2-port Secure Network Adapter	HPE0000000062

---

Mellanox Firmware Package(FWPKG) for HPE NV60100M 100Gb 2-port Storage Offload Adapter  
Version: 22.43.1014 **(Recommended)**  
Filename: 22\_43\_1014-R8M41-63001\_Ax\_header.pldm.fwpkg

**Prerequisites**

FWPKG will work only if the firmware version flashed on the adapter is 22.27.1016 or later and iLO5 firmware version must be 2.30 or higher.

**Enhancements**

Upgraded to version 22.43.1014

**Supported Devices and Features**

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
P46603-B21	HPE NV60100M 100Gb 2-port Storage Offload Adapter	HPE0000000062

---

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter : HPE part numbers P45641-B23 and P45641-H23  
Version: 28.44.1036 **(Recommended)**  
Filename: 28\_44\_1036-MCX75310AAS-NEAT\_HPE2\_Ax.pldm.fwpkg; 28\_44\_1036-MCX75310AAS-NEAT\_HPE2\_Ax.pldm.json

**Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**Disclaimer:** Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you

to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution.

A list of known issues with this release is available

at: <https://docs.nvidia.com/networking/display/connectx7firmwarev28441036/known+issues>

## Fixes

### The following issues have been fixed in version 28.44.1036:

- Cable info semaphore deadlock.
- Improper error handling for the TLV full list, which caused the TLV mechanism to hang.
- The SPDM GET\_CERTIFICATE operation did not support all certificate chain offsets and chunk sizes.
- An issue in VDPA where destroying a virtq would cause a health buffer syndrome with ext\_synd=0x8f33 if the virtq was created without an mkey or with unmanned and mapped mkeys during live migration.
- The VDPA feature bits GUEST\_TSO4 and GUEST\_TSO6 were unexpectedly set by default, leading to traffic interruptions.
- Enabling PCC NP and setting the link type to one port as IB and the other as Ethernet could cause an assert to appear in dmesg with ext\_synd 0x8309.

## Enhancements

### New features and changes included in version 28.44.1036:

- Increased the RX lossless buffer size to delay the transmission of Pause/PFC frames during NIC congestion.
- Added support for SyncE at 1G link speed.
- Added a new mechanism for allocations and deallocations flows to enhance parallelism.
- When using a multi-host deployment, each host is assigned unique ports and PFs and manages its own LAG.
- Added support for a new synchronized flow, including a tool and driver, to perform a fwreset on setups with a PCIe switch configuration.
- Unified PTP is now supported across different VFs on the same PF.
- Added support for new MADs: PortRecoveryPolicyConfig and PortRecoveryPolicyCounters . During the PHY recovery process, the firmware core will indicate the port\_logical\_state as Active.
- Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

## Supported Devices and Features

HPE Part Number	Mellanox InfiniBand Only Adapter	PSID
P45641-B23	HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter (P45641-B23 and P45641-H23)	MT_0000001120

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter : HPE part numbers P45642-B22 and P45642-H22

Version: 28.44.1036 **(Recommended)**

Filename: 28\_44\_1036-MCX75310AAS-HEAT\_HPE2\_Ax.pldm.fwpkg; 28\_44\_1036-MCX75310AAS-HEAT\_HPE2\_Ax.pldm.json

## Important Note!

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

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A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx7firmwarev28441036/known+issues>

## Prerequisites

FWPKG will work only if the iLO5 firmware version is 2.30 or higher.

## Fixes

### The following issues have been fixed in version 28.44.1036:

- o Cable info semaphore deadlock.
- o Improper error handling for the TLV full list, which caused the TLV mechanism to hang.
- o The SPDM GET\_CERTIFICATE operation did not support all certificate chain offsets and chunk sizes.
- o An issue in VDPA where destroying a virtq would cause a health buffer syndrome with ext\_synd=0x8f33 if the virtq was created without an mkey or with unmanned and mapped mkeys during live migration.
- o The VDPA feature bits GUEST\_TSO4 and GUEST\_TSO6 were unexpectedly set by default, leading to traffic interruptions.
- o Enabling PCC NP and setting the link type to one port as IB and the other as Ethernet could cause an assert to appear in dmesg with ext\_synd 0x8309.

## Enhancements

### New features and changes included in version 28.44.1036:

- o Increased the RX lossless buffer size to delay the transmission of Pause/PFC frames during NIC congestion.
- o Added support for SyncE at 1G link speed.
- o Added a new mechanism for allocations and deallocations flows to enhance parallelism.
- o When using a multi-host deployment, each host is assigned unique ports and PFs and manages its own LAG.
- o Added support for a new synchronized flow, including a tool and driver, to perform a fwreset on setups with a PCIe switch configuration.
- o Unified PTP is now supported across different VFs on the same PF.
- o Added support for new MADs: PortRecoveryPolicyConfig and PortRecoveryPolicyCounters . During the PHY recovery process, the firmware core will indicate the port\_logical\_state as Active.
- o Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- o Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

## Supported Devices and Features

HPE Part Number	Mellanox InfiniBand Only Adapter	PSID
P45642-B22	HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter (P45642-B22 and P45642-H22)	MT_0000001119

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter : HPE part numbers P65333-B21 and P65333-H21

Version: 28.44.1036 (**Recommended**)

Filename: 28\_44\_1036-MCX755106AC-HEAT\_HPE\_Ax.pldm.fwpkg; 28\_44\_1036-MCX755106AC-HEAT\_HPE\_Ax.pldm.json

## Important Note!

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPE.com:

1. HPE signed PLDM Firmware Package (.FWPKG filename extension) updatable via iLO.
2. Firmware binary (.bin filename extension) updatable via mstflint utility from the Operating System.

Choose the appropriate firmware file format based on your preference and what suits your environment.

**Disclaimer:** Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution.

A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx7firmwarev28441036/known+issues>

## Fixes

### The following issues have been fixed in version 28.44.1036:

- Cable info semaphore deadlock.
- Improper error handling for the TLV full list, which caused the TLV mechanism to hang.
- The SPDM GET\_CERTIFICATE operation did not support all certificate chain offsets and chunk sizes.
- An issue in VDPA where destroying a virtq would cause a health buffer syndrome with ext\_synd=0x8f33 if the virtq was created without an mkey or with unmanned and mapped mkeys during live migration.
- The VDPA feature bits GUEST\_TSO4 and GUEST\_TSO6 were unexpectedly set by default, leading to traffic interruptions.
- Enabling PCC NP and setting the link type to one port as IB and the other as Ethernet could cause an assert to appear in dmesg with ext\_synd 0x8309.

## Enhancements

### New features and changes included in version 28.44.1036:

- Increased the RX lossless buffer size to delay the transmission of Pause/PFC frames during NIC congestion.
- Added support for SyncE at 1G link speed.
- Added a new mechanism for allocations and deallocations flows to enhance parallelism.
- When using a multi-host deployment, each host is assigned unique ports and PFs and manages its own LAG.
- Added support for a new synchronized flow, including a tool and driver, to perform a fwreset on setups with a PCIe switch configuration.
- Unified PTP is now supported across different VFs on the same PF.
- Added support for new MADs: PortRecoveryPolicyConfig and PortRecoveryPolicyCounters . During the PHY recovery process, the firmware core will indicate the port\_logical\_state as Active.
- Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

## Supported Devices and Features

HPE Part Number	Mellanox InfiniBand Only Adapter	PSID
P65333-B21	HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter (P65333-B21 and P65333-H21)	MT_0000001108

## Firmware - Storage Controller

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR216i-o Gen11 Tri Mode Controller  
Version: 52.26.3.5487 (B) **(Recommended)**  
Filename: CP066018.compsig; CP066018.zip

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### Enhancements

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR216i-p Gen11 Tri Mode Controller  
Version: 52.26.3.5487 (B) **(Recommended)**  
Filename: CP066019.compsig; CP066019.zip

### Enhancements

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR408i-o Gen11 Tri Mode Controller  
Version: 52.26.3.5487 (B) **(Recommended)**  
Filename: CP066020.compsig; CP066020.zip

### Enhancements

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR416i-o Gen11 Tri Mode Controller  
Version: 52.26.3.5487 (B) **(Recommended)**  
Filename: CP066021.compsig; CP066021.zip

### **Enhancements**

Support VMware ESXi 9.0.

---

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR416i-p Gen11 Tri Mode Controller  
Version: 52.26.3.5487 (B) **(Recommended)**  
Filename: CP066022.compsig; CP066022.zip

### **Enhancements**

Support VMware ESXi 9.0.

---

Firmware Package - HPE Expander Backplane Firmware for HPE Alletra 4140 servers  
Version: 1.59 **(Recommended)**  
Filename: HPE\_Alletra4140\_BP\_EXP\_Gen11\_1.59\_A.fwpkg

### **Important Note!**

1.24 is a initial version.

### **Fixes**

- Fixed an issue that the health LED lights may turn on after hot plugging SATA drives

### **Enhancements**

- Support firmware update for the UBM attached to the expander
- 

Firmware Package - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P204i-c, P416ie-m and P816i-a SR Gen10 and SR308i-o,SR308i-p Gen11 controllers  
Version: 7.43 **(Recommended)**  
Filename: HPE\_SR\_Gen10\_7.43\_A.fwpkg

### **Enhancements**

SR 2.9.2 patch 1

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Firmware Package - HPE Gen11 Boot Controller NS204i-u, NS204i-d and HPE Gen10 Plus Boot Controller NS204i-p, NS204i-d, NS204i-t, NS204i-r  
Version: 1.2.14.1018 (C) **(Recommended)**  
Filename: HPE\_NS204i\_Gen10p\_Gen11\_1.2.14.1018\_C.fwpkg; HPE\_NS204i\_Gen10p\_Gen11\_1.2.14.1018\_C.json

### **Important Note!**

**1.2.14.1018 is the minimum firmware requirement for AMD Turin DL365/385 and Intel Gen12 platforms. Downgrading NS204i firmware to version lower than 1018 will lead to MCTP failure.**

**For Gen10 plus server users, the NS204i firmware has to be 1.0.14.1063 or later in order to enable PLDM firmware update functionality for the controller. Please find the smart component versions of 1.0.14.1063 in below link:**

- Windows: <https://www.hpe.com/global/swpublishing/MTX-be195b2891724ec8bb72c8bb2>
- Linux: <https://www.hpe.com/global/swpublishing/MTX-269e14d0e2524277bf699f433>
- Vmware: <https://www.hpe.com/global/swpublishing/MTX-1ffaca997cf248cd9f832a04c6>

### **Prerequisites**

- iLO 6 version 1.10 or later is required for Gen11 servers.
- iLO 5 version 2.81 or later is required for Gen10/Gen10 Plus servers

### **Enhancements**

- Support new servers.

---

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR216i-o\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR216i-o\_Gen11\_52.30.3-5917\_B.json

**Important Note!**

- **This firmware version to be used on HPE MR216i-o Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

**Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

**Enhancements**

- Support new Gen12 servers.

---

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR216i-p\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR216i-p\_Gen11\_52.30.3-5917\_B.json

**Important Note!**

- **This firmware version to be used on HPE MR216i-p Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

**Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

**Enhancements**

- Support new Gen12 servers.

---

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR408i-o\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR408i-o\_Gen11\_52.30.3-5917\_B.json

**Important Note!**

- **This firmware version to be used on HPE MR408i-o Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

**Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

**Enhancements**

- Support new Gen12 servers.

---

Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR408i-p\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR408i-p\_Gen11\_52.30.3-5917\_B.json

**Important Note!**

- **This firmware version to be used on HPE MR408i-p Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

**Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

## **Enhancements**

- Support new Gen12 servers.
- 

Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR416i-o\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR416i-o\_Gen11\_52.30.3-5917\_B.json

## **Important Note!**

- **This firmware version to be used on HPE MR416i-o Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

## **Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

---

## **Enhancements**

- Support new Gen12 servers.
- 

Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller

Version: 52.30.3-5917 (B) **(Recommended)**

Filename: HPE\_MR416i-p\_Gen11\_52.30.3-5917\_B.fwpkg; HPE\_MR416i-p\_Gen11\_52.30.3-5917\_B.json

## **Important Note!**

- **This firmware version to be used on HPE MR416i-p Gen11 Controller.**
- **Please do not update MR controller FW/MRSA/StorCLI if systems installed both SR100i and MR controllers.**

## **Prerequisites**

iLO6 version should be at least 1.53 is required for **chassis&Fabric support**.

---

## **Enhancements**

- Support new Gen12 servers.
- 

Firmware Package - HPE SR932i-p Gen10 Plus /SR416i-a Gen10 Plus/SR932i-p Gen11/SR416ie-m Gen11 Controllers

Version: 03.01.33.044 **(Recommended)**

Filename: HPE\_SR416\_SR932\_Gen10P\_Gen11\_03.01.33.044\_A.fwpkg

## **Enhancements**

SR 2.9.2/SR 3.4.2 RC2

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HPE D3600/D3700/D3610/D3710 12Gb SAS Disk Enclosure ROM Flash Component

Version: 5.04 (C) **(Recommended)**

Filename: D3000.fwpkg

## **Important Note!**

**WARNING!** Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

## **Prerequisites**

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

## **Fixes**

**The following fixes were incorporated in this version:**

- The Enabled-ClusterS2D command now completes successfully when executed on a SATA drive within a D3610 disk enclosure for a NonStop solution.
- The smart carrier, which is the drive case for SAS drives, now authenticates in the D3610/D3710 drive enclosure.
- Added new 7-segment error codes E0 and E1 to report issues with Fan modules A and B, respectively. These new codes only apply to the D3610/D3710 and only display when running firmware 5.04.
- If the storage enclosure processor within the I/O module fails, a hard reset (power down and then power up) is executed to ensure the processor comes back online.

Please refer to the [Release Notes](#) for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

### **Supported Devices and Features**

The D3600 / D3700 / D3610 / D3710 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- HPE Smart Array SR P416ie-m Gen11 Controller
- HPE Smart Array E208e-p Controller

HPE D3610B/D3710B 12Gb SAS Disk Enclosure ROM Flash Component  
Version: 6.00 (C) **(Recommended)**  
Filename: D3000B.fwpkg

### **Important Note!**

**WARNING!** Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

### **Prerequisites**

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted.

WARNING! Do not power cycle or restart during the firmware update as this can result in loss of capabilities for this unit. It typically takes several minutes for the firmware to load.

### **Fixes**

**The following fixes were incorporated in this version:**

- Code optimization to save memory repo.
- TLB exception seen while doing esp reset when expander reset was in progress.
- Added the psoc 8.93 binary in peripheral images, updated the reveille version numbers.
- Added whole new Delta PS-pmbus code , Updated the ESP version number.

Please refer to the [Release Notes](#) for the complete listing of fixes, enhancements, known issues and work-arounds corresponding to this firmware.

### **Supported Devices and Features**

The D3610B / D3710B Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- HPE Smart Array SR P416ie-m Gen11 Controller
- HPE Smart Array E208e-p Controller

Online Firmware Flash for ESXi - HPE Gen10 Plus Boot Controller NS204i-p, NS204i-d, NS204i-t, NS204i-r, NS204i-u and NS204i-d Gen11  
Version: 1.0.14.1063 (C) **(Recommended)**  
Filename: CP064740.compsig; CP064740.zip

### **Important Note!**

- **This version is the minimum required version for Gen10 Plus device to upgrade to latest FW**
- **You can get Firmware Package version 1.2.14.1004 or latest FW version from <https://www.hpe.com/global/swpublishing/MTX-318c8e8298704d8bb4f991eb4d> and update it via iLO without any OS dependency.**

## Enhancements

- Added ESXi9.0 support.

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Online ROM Flash Component for VMware ESXi - HPE Smart Array P816i-a,P416ie-m,P408i-p, P408e-p, P408i-a,P408i-c,P204i-c,E208i-p, E208e-p, E208i-a, P208i-c SR Gen10  
Version: 5.61 (E) (**Recommended**)  
Filename: CP064739.compsig; CP064739.zip

## Enhancements

- Added ESXi9.0 support.

## Firmware - Storage Fibre Channel

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HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters  
Version: 14.4.473.14 (**Recommended**)  
Filename: P14.4.473.14\_header.pldm.fwpkg

### Important Note!

This component is supported only on Gen11 ProLiant servers.

### Release notes:

[Broadcom Release notes](#)

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1700E 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0

## Prerequisites

The minimum version for adapter to support PLDM is 14.0.499.25

## Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1700E 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0
HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.14	14.4.473.14	14.4.473.8	14.4.469.0

## Supported Devices and Features

This component is supported on following Emulex Fibre Channel Host Bus adapters:

### 32Gb Fibre Channel Host Bus Adapter:

- HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter

### 64Gb Fibre Channel Host Bus Adapter:

- HPE SN1700E 64Gb Dual port Fibre Channel Host Bus Adapter

- HPE SN1700E 64Gb Single port Fibre Channel Host Bus Adapter

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 8.0

Version: 2022.08.01 **(Recommended)**

Filename: CP050072.compsig; CP050072.zip

### **Important Note!**

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1700E 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

### **Enhancements**

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1700E 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0

### **Supported Devices and Features**

This component is supported on following Emulex Fibre Channel Host Bus adapters:

#### **32Gb FC Adapter:**

- HPE SN1610E 32Gb Dual port Fibre Channel Host Bus Adapter
- HPE SN1610E 32Gb Single port Fibre Channel Host Bus Adapter

#### **64Gb FC Adapter:**

- HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700E 64Gb Single Port Fibre Channel Host Bus Adapter

HPE Firmware Flash for QLogic 32Gb and 64Gb Fibre Channel Host Bus Adapters

Version: 02.10.08 **(Recommended)**

Filename: mh021008.upd\_header.pldm.fwpkg

### **Important Note!**

Release Notes:

[HPE QLogic Adapters Release Notes](#)

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.10.08	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.10.08	09.15.05	7.39	0.0

HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.10.08	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.10.08	09.15.05	7.39	0.0

## Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.10.08	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.10.08	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.10.08	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.10.08	09.15.05	7.39	0.0

## Supported Devices and Features

This component is supported on following HPE QLogic Fibre Channel Host Bus adapters:

### 32Gb Fibre Channel Host Bus Adapter:

- o HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter
- o HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter

### 64Gb Fibre Channel Host Bus Adapter:

- o HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- o HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

## Software - Management

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HPE iLO Driver Bundle Smart Component for ESXi 8.0 and ESXi 9.0

Version: 2025.03.00 (**Recommended**)

Filename: cp064439.compsig; cp064439.zip

## Enhancements

Support VMware ESXi 9.0.

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 8.0 for Gen10/Gen10 Plus/Gen11 Controllers

Version: 2025.02.01 (**Recommended**)

Filename: cp062924.compsig; cp062924.zip

## Important Note!

- o Actual ESXi ssacli version is 6.45.8.0

## Fixes

- o Corrected wrong wording of Parity Initialization messages.
- o Fixed vulnerability CVE-2023-45853.

## Enhancements

- o Added Write Cache Status field to the info page for physical drives when "pd all show detail" is used.

## Software - Storage Controller

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HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers)

Version: 2025.01.01 (B) (**Recommended**)

Filename: cp065471.compsig; cp065471.zip

## Important Note!

- o Actual ESXi Version is 007.3011.0000.0000

## Enhancements

- Support new Gen12 servers.

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## Software - Storage Fibre Channel

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HPE QLogic Fibre Channel driver component for VMware vSphere 8.0  
Version: 2024.09.01 **(Recommended)**  
Filename: cp061889.compsig; cp061889.zip

### **Important Note!**

This component is supported only on Gen11 ProLiant servers.

Release Notes:

[HPE QLogic Adapters Release Notes](#)

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.  
This driver is only supported on VMware ESXi 8.0u3.

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

### **Enhancements**

Driver version 5.4.83.1

This driver is only supported on VMware ESXi 8.0u3

### **Supported Devices and Features**

This component is supported on following Qlogic Fibre Channel Host Bus adapters:

#### **32Gb Fibre Channel Host Bus Adapter:**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter

#### **64Gb Fibre Channel Host Bus Adapter:**

- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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HPE QLogic Fibre Channel driver component for VMware vSphere 8.0  
Version: 2024.09.01 **(Recommended)**  
Filename: cp062112.compsig; cp062112.zip

### **Important Note!**

This component is supported only on Gen11 ProLiant servers.

Release Notes:

[HPE QLogic Adapters Release Notes](#)

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link:

<http://www.hpe.com/storage/spock/>

### **Enhancements**

Driver version 5.4.82.1

### **Supported Devices and Features**

This component is supported on following Qlogic Fibre Channel Host Bus adapters:

### **32Gb Fibre Channel Host Bus Adapter:**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter

### **64Gb Fibre Channel Host Bus Adapter:**

- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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## **Software - System Management**

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HPE Agentless Management Bundle for ESXi for Gen11 and Gen12 Servers

Version: 802.12.1.0 **(Recommended)**

Filename: amsdvComponent\_802.12.1.0.25-1\_24627551.zip

### **Fixes**

See the [AMS Release Notes](#) for information about the issues resolved in this release.

### **Enhancements**

See the [AMS Release Notes](#) for information about the enhancements in this release.

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HPE Agentless Management Bundle Smart Component on ESXi for Gen11 and Gen12 Servers

Version: 2025.03.01 **(Recommended)**

Filename: cp064726.compsig; cp064726.zip

### **Prerequisites**

#### **For HPE servers with iLO 7:**

Ensure that the iLO Virtual NIC(VNIC) feature is enabled. Please refer to the HPE iLO User Guide for VNIC configuration procedure

### **Fixes**

See the [AMS Release Notes](#) for information about the issues resolved in this release.

### **Enhancements**

See the [AMS Release Notes](#) for information about the enhancements in this release.

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Integrated Smart Update Tools for VMware ESXi 8.0 and ESXi 9.0

Version: 800.6.0.0 **(Recommended)**

Filename: sutComponent\_800.6.0.0.37-0-signed\_component-24607449.zip

### **Important Note!**

Integrated Smart Update Tools for ESXi 8.0 and ESXi 9.0 which provides support for firmware and driver updates via iLO Repository

### **Fixes**

See the [iSUT Release Notes](#) for information about the issues resolved in this release

### **Enhancements**

See the [iSUT Release Notes](#) for information about the enhancements in this release.

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