# **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:

VMware OS Support Tool for HPE Synergy

Information on HPE Synergy Software Releases is available at:

HPE Synergy Software Releases - Overview

#### Gen 11 SPP 2022.12.00.00 Release Notes for VMware ESXi 7.0

BIOS (Login Required) - System ROM

Driver - Lights-Out Management

<u> Driver - Network</u>

**Driver - Storage Controller** 

Firmware - Network

Firmware - Storage Controller

Firmware - Storage Fibre Channel

<u>Software - Management</u>

Software - Storage Controller

Software - Storage Fibre Channel

Software - System Management

## BIOS (Login Required) - System ROM

Top

ROM Flash Universal Firmware Package - HPE ProLiant DL325/DL345 Gen11 (A56) Servers

Version: 1.12\_11-24-2022 (Recommended) Filename: A56\_1.12\_11\_24\_2022.fwpkg

#### **Important Note!**

## **Important Notes:**

None

#### **Deliverable Name:**

HPE ProLiant DL325/DL345 Gen11 System ROM - A56

# Release Version:

1.12\_11-24-2022

# Last Recommended or Critical Revision:

1.12\_11-24-2022

# **Previous Revision:**

1.10\_11-13-2022

#### Firmware Dependencies:

None

## **Enhancements/New Features:**

This revision of the System ROM improves the system boot time when Restoring Default Manufacturing Settings.

#### **Problems Fixed:**

This revision of the System ROM includes the latest revision of the AMD reference code for AMD 4th Generation EPYC processors which addresses an issue of potential over voltage condition early in the boot sequence. This issue is not unique to HPE servers.

# Known Issues:

None

## <u>Fixes</u>

# **Important Notes:**

None

# Firmware Dependencies:

None

## **Problems Fixed:**

This revision of the System ROM includes the latest revision of the AMD reference code for AMD 4th Generation EPYC processors which addresses an issue of potential over voltage condition early in the boot sequence. This issue is not unique to HPE servers.

#### **Known Issues:**

None

#### **Enhancements**

This revision of the System ROM improves the system boot time when Restoring Default Manufacturing Settings.

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

Version: 1.12\_11-24-2022 (Recommended) Filename: A55\_1.12\_11\_24\_2022.fwpkg

# **Important Note!**

## **Important Notes:**

None

#### **Deliverable Name:**

HPE ProLiant DL365/DL385 Gen11 System ROM - A55

#### **Release Version:**

1.12\_11-24-2022

# **Last Recommended or Critical Revision:**

1.12\_11-24-2022

#### **Previous Revision:**

1.10\_11-13-2022

#### Firmware Dependencies:

None

## **Enhancements/New Features:**

This revision of the System ROM improves the system boot time when Restoring Default Manufacturing Settings.

#### **Problems Fixed:**

This revision of the System ROM includes the latest revision of the AMD reference code for AMD 4th Generation EPYC processors which addresses an issue of potential over voltage condition early in the boot sequence. This issue is not unique to HPE servers.

#### **Known Issues:**

None

## **Fixes**

#### **Important Notes:**

None

# Firmware Dependencies:

None

#### **Problems Fixed:**

This revision of the System ROM includes the latest revision of the AMD reference code for AMD 4th Generation EPYC processors which addresses an issue of potential over voltage condition early in the boot sequence. This issue is not unique to HPE servers.

# Known Issues:

None

#### **Enhancements**

This revision of the System ROM improves the system boot time when Restoring Default Manufacturing Settings.

#### **Driver - Lights-Out Management**

Top

HPE iLO Native Driver for ESXi 7.0 Version: 10.8.0 (Recommended)

Filename: ilo-driver\_700.10.8.0.6-10EM.700.1.0.15843807\_20300719.zip

#### **Fixes**

• Fixed issue where ilo driver is failing to acquire contiguous physical memory below 4GB causing userworld apps like honcfg to be unable to communicate with iLO.

#### **Enhancements**

Added support for vSphere 8.0

Driver - Network <u>To</u>r

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 7.0

Version: 2022.10.12 **(Recommended)** Filename: cp051496.compsig; cp051496.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 CPOxxxxx.xml file.
- HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 218.0.303000 or later, for use with this driver.

#### **Fixes**

- This product correct an issue which the problem of failing to bring up maximum amount of VFs.
- This product correct an issue which the PSOD if rx-ring size is less than 256 or exact 128.
- This product correct an issue which the vxlan tunnel port config failure symptom during driver reload.

#### **Enhancements**

This product is updated to maintain compatibility with CNSA (Commercial National Security Algorithm) compliance.

## 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

HPE Intel igbn Driver for VMware vSphere 7.0 Version: 2022.09.01 **(Recommended)** Filename: cp049913.compsig; cp049913.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in *HPE Intel Online Firmware Upgrade Utility for VMware*, version 3.2.0 or later, for use with this driver.

#### **Enhancements**

This product now supports HPE ProLiant MicroServer Gen10 Plus v2

#### 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

Intel icen Driver for VMware vSphere 7.0 Version: 2022.11.00 **(Optional)** 

Filename: cp054436.compsig; cp054436.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in *Intel Firmware Package For E810 Ethernet Adapter*, version 3.20 or later, for use with this driver.

#### **Enhancements**

- This product enhances to Collect of FW debug data in different scenarios
- This product now supports HPE ProLiant Gen11 servers

# 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

Mellanox ConnectX-4, ConnectX-5 and ConnectX-6 "nmlx5\_en" Driver Component for VMware ESXi 7.0 Update 2 and Update 3

Version: 2021.04.21 (D) (Recommended) Filename: cp054406.compsig; cp054406.zip

#### Important Note!

Important: Version 4.21.71.1 supports VMware ESXi 7.0 Update 2 and Update 3 only.

## Known Issues with driver version 4.21.71.101:

- A mismatch between the uplink and the VF MTU values may result in CQE with error. Workaround:: Align the uplink and the VF MTU values.
- Enabling sriov\_mc\_isolation module parameter may result in vmknic and emulated NICs multicast and IPv6 traffic loss. Workaround: Unset or set the module parameter to 0.
- RDMA is not supported in the Hypervisor with ENS (Enhanced Network Stack) model 2.
- Setting the "Allow Guest MTU Change" option in vSphere Client is currently not functional. Although guest MTU changes in SR-IOV are allowed, they do not affect the port's MTU and the guest's MTU remains the same as the PF MTU.
- ECN (Explicit congestion notification) statistic counters accumulatorsPeriod and ecnMarkedRocePackets display wrong values and cannot be cleared.
- ECN tunable parameter initialAlphaValue for the Reaction Point protocol cannot be modified.
- Card's speed remains zero after port goes down and reboot is performed.
- RoCE traffic may fail after vMotion when using namespace.

- Legacy SR-IOV is not supported with Model 1.
- When in ENS mode, changing the scheduler to HCLK, may cause traffic loss.
- The 'esxcli mellanox uplink link info -u <vmnic\_name>' command reports the 'Auto negotiation' capability always as 'true'.
- SMP MADs (ibnetdiscover, sminfo, iblinkinfo, smpdump, ibqueryerr, ibdiagnet and smpquery) are not supported on the VFs.
- Although the max\_vfs module parameter range is "0-128", due to firmware limitations, the following are the supported VFs per single port devices:
  - ConnectX-4 / ConnectX-5: up to 127

## **Fixes**

#### Fixes included in driver version 4.21.71.101:

• Fixed a compatibility issue with VMware Update Manager as it wouldn't accept a bundle with metadata xml with old versioning scheme. The metadata xml now contains the new versioning scheme.

#### **Enhancements**

#### The following changes have been made in sub-version 2021.04.21(D):

- Product rebuilt to have the new SHA 384 signature.
- Removed support for the following servers:
  - Blade servers BLxxxx Gen9/Gen10 series.
- Included support for Gen11 Servers.

# New features and changes in driver version 4.21.71.101:

- Added support for the following features:
  - vSan over RDMA.
  - Receive Side Scaling (RSS) for ENS model 0.
  - ENS FPO Model 1 with Rx path flow lookup offloaded (ConnectX5 onwards)
  - ENS FPO Model 1 with Tx path partial action execution offloaded (ConnectX5 onwards)
  - ENS FPO Model 2 with SR-IOV as passthrough technology (ConnectX5 onwards)
  - 200GbE link speed.
  - ConnectX-6 Lx devices.
  - Data Center Bridging Capability Exchange (DCBX) protocol with hardware offload.
  - sriov\_mc\_isolation module parameter to isolate multicast traffic to SR-IOV interfaces. Default value is OFF.
  - ens\_fallback\_model to set the default fallback mode when the option to query ENS model from the OS is no supported. Default to Model 1.
- Scaled support for up to 10K connections over RDMA networks.
- Updated the kernel parameter "supported\_num\_ports" default value to 1 to lower memory constraints. Note: The user must set a value corresponding to the amount of ports installed in the system.

# **Supported Devices and Features**

HPE Part Number	Device Name	PSID
P24837-B21	HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter	HPE0000000054
P11338-B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HP_1200111023
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE00000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022
817749-B21	HPE Ethernet 10/25Gb 2-port FLR-SFP28 MCX4121A-ACFT Adapter	HP_2690110034
817753-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX4121A-ACUT Adapter	HP_2420110034
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417
P10112-B21	Mellanox MCX562A-ACAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	MT_0000000241
P13188-B21	Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	MT_0000000416
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414
874253-B21	HPE Ethernet 100Gb 1-port QSFP28 MCX515A-CCAT Adapter	HPE0000000014
P25960-B21	Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	MT_0000000437
P06154-B21	HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe3 x16 MCX653105A-HDAT Adapter	HPE0000000034
P06250-B21	HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT Adapter	HPE0000000035
P06251-B21	HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT Adapter	HPE000000036

P23664-B21	HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter	MT_0000000451
P23665-B21	HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter	MT_0000000452
P23666-B21	HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter	MT_0000000453
P10180-B21	Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE	MT_0000000435
P31246-B21	HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter	MT_0000000591
P31323-B21	HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter	MT_0000000592
P31348-B21	HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter	MT_0000000593
P31324-B21	HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter	MT_0000000594
P42041-B21	Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	MT_0000000551
P42044-B21	Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	MT_0000000575

#### **Driver - Storage Controller**

Top

HPE MR416i-a, MR416i-p, MR216i-a, MR216i-p, MR416i-o controller (64-bit) Driver for vSphere 7.0

Version: 7.722.02.00 (Recommended)

Filename: Broadcom-Isi-mr3\_7.722.02.00-10EM.700.1.0.15843807\_20225841.zip

#### **Enhancements**

HPE MR416i-p, MR216i-p Gen10 plus and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p Gen11 controller (64-bit) Driver for vSphere

Version: 2022.11.01 (Recommended)
Filename: cp051736.compsig; cp051736.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 and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

#### **Enhancements**

Initial release

HPE ProLiant Gen11 Smart RAID Controller Driver for VMware vSphere 7.0 (Bundle file)

Version: 70.4330.0.116 (B) (Recommended)

 $Filename: Microchip-smartpqi\_70.4330.0.116-10EM.700.1.0.15843807\_20200549.zip$ 

## **Enhancements**

Initial Release

HPE ProLiant Smart RAID Controller Driver for VMware vSphere 7.0 (Driver Component) for Gen11 Servers.

Version: 2022.10.01 (C) (Recommended) Filename: cp054895.compsig; cp054895.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.

## **Enhancements**

Initial driver release for Gen11 servers.

Firmware - Network <u>Top</u>

Broadcom Firmware Package for BCM5741x adapters

Version: 222.1.68.0 (Recommended) Filename: bcm222.1.68.0.pup.fwpkg

#### 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 222.0.126.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.2-222.0.142.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 222.0.118.0 or later

#### **Fixes**

This product addresses some minor adjustment with its internal UEFI code structure.

#### 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

Broadcom Firmware Package for BCM5750x adapters

Version: 222.1.68.0 (B) (Recommended) Filename: bcm222.1.68.0\_Thor.pup.fwpkg

# 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 222.0.126.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.2-222.0.142.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 222.0.118.0 or later

#### Thi

**Fixes** 

This product addresses some minor adjustment with its internal UEFI code structure.

#### **Enhancements**

This product is updated to maintain compatibility with CNSA (Commercial National Security Algorithm) compliance.

# 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 NX1 Online Firmware Upgrade Utility for VMware

Version: 1.30.2 (Recommended)

Filename: CP051467.compsig; CP051467.zip

#### Important Note!

This software package contains combo image v20.22.41 with the following firmware versions:

NIC	<b>Boot Code Version</b>	PXE Version	NCSI Version	UEFI Version	CCM Version
BCM 5719 1GbE 4p BASE-T Adptr	1.46	21.6.2	1.5.35	21.6.36	222.0.137.0
BCM 5719 1GbE 2p BASE-T OCP3 Adptr	1.46	21.6.2	1.5.35	21.6.36	222.0.137.0
BCM 5720 1GbE 2p BASE-T LOM Adptr	1.42	21.6.2	1.5.35	21.6.36	222.0.137.0

# **Prerequisites**

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

#### **Fixes**

This product addresses some minor adjustment with its internal UEFI code structure.

#### 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

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

Version: 4.00 (Recommended)

Filename: HPE\_E810\_2CQDA2\_O\_SEC\_4p01\_PLDMoMCTP\_800135E6.fwpkg

#### 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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

#### **Enhancements**

This product now supports HPE ProLiant Gen11 servers

## 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: 4.00 (Recommended)

Filename: HPE\_E810\_CQDA2\_4p01\_PLDMoMCTP\_800135E8.fwpkg

## **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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

#### **Enhancements**

This product now supports HPE ProLiant Gen11 servers

# 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: 4.00 (Recommended)

Filename: HPE\_E810\_CQDA2\_OCP\_4p01\_NCSIwPLDMoMCTP\_800135E9.fwpkg

# 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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

#### **Fixes**

This product addresses an issue where power on failure is seen when setting up this adpate as shared network port

#### **Enhancements**

This product now supports HPE ProLiant Gen11 servers

#### 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: 4.00 (Recommended)

Filename: HPE\_E810\_XXVDA2\_SD\_4p01\_PLDMoMCTP\_800135EC.fwpkg

#### 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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

# **Enhancements**

This product now supports HPE ProLiant Gen11 servers

#### 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: 4.00 (Recommended)

Filename: HPE\_E810\_XXVDA2\_SD\_OCP\_4p01\_NCSIwPLDMoMCTP\_800135E5.fwpkg

#### 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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

#### **Enhancements**

#### 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: 4.00 (Recommended)

Filename: HPE\_E810\_XXVDA4\_FH\_4p01\_PLDMoMCTP\_800135E3.fwpkg

#### **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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

#### **Enhancements**

This product now supports HPE ProLiant Gen11 servers

#### 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: 4.00 (Recommended)

Filename: HPE\_E810\_XXV4\_OCP\_4p01\_NCSIwPLDMoMCTP\_800135EB.fwpkg

# **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 1.12.144.0 or later
- Intel ice Drivers for Linux, version 1.9.11-1 or later
- Intel icen Driver for VMware, version 2022.09.01 or later

## **Enhancements**

This product now supports HPE ProLiant Gen11 servers

# **Supported Devices and Features**

This product supports the following network adapters:

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

Intel Online Firmware Upgrade Utility for VMware

Version: 3.18.4 (Recommended)

Filename: CP051008.compsig; CP051008.zip

## **Important Note!**

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

EEPROM/NVM	OROM	NVM
------------	------	-----

NIC	Version	Version	Version
HPE Ethernet 10Gb 2-port SFP+ OCP3 X710- DA2 Adapter	8000CBAA	1.3256.0	8.70
HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter	8000CBAB	1.3256.0	8.70
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter	80001099	1.3256.0	N/A
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter	80001199	1.3256.0	N/A
Intel(R) 1350 Gigabit Network Connection (2-port)	8000119C	1.3256.0	N/A
Intel(R) 1350 Gigabit Network Connection (4-port)	8000119D	1.3256.0	N/A

The combo image v1.3256.0 includes: Boot Agent: 1GbE - v1.5.89, Boot Agent I40E - v1.1.42 & UEFI Drivers: 1GbE - v9.8.09, 40 gigabit driver - v4.9.21.

#### **Prerequisites**

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

#### **Fixes**

This product addresses an issue where the adaters isn't recongized with HPE Ethernet 10Gb 2-port SFP+ OCP3 X710-DA2 Adapter and HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter

#### **Enhancements**

This product now supports HPE ProLiant Gen11 servers

#### 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: 26.34.1002 (Recommended)

Filename: 26\_34\_1002-MCX631102AS-ADA\_Ax.pldm.fwpkg

#### **Important Note!**

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6LxFirmwarev26331048/Known+Issues

#### <u>Prerequisites</u>

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 26.34.1002:

- An issue where set\_flow\_table\_entry failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to hang.
- An issue where vPort counters had wrong values.

• An issue where firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **Enhancements**

#### New Features and Changes in Version 26.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added support for PPCC register with bulk operations, MAD for algorithm configuration and tunable parameters.
- Added support for programmable counters for PCC via PPCC register and MAD.
- Added Programmable Congestion Control (PCC) support. Note: User programmability is currently not supported.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.
- Enabled Multi-Host RX Rate-limiter configuration via the QEEC mlxreg and the max\_shaper\_rate field.

# Supported Devices and Features

HPE Part Number	PSID	
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: 26.34.1002 (Recommended)

Filename: 26\_34\_1002-MCX631432AS-ADA\_Ax.pldm.fwpkg

#### Important Note!

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6LxFirmwarev26331048/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 26.34.1002:

- An issue where set\_flow\_table\_entry failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to hang.
- An issue where vPort counters had wrong values.
- An issue where firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **Enhancements**

# New Features and Changes in Version 26.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added support for PPCC register with bulk operations, MAD for algorithm configuration and tunable parameters.
- Added support for programmable counters for PCC via PPCC register and MAD.
- Added Programmable Congestion Control (PCC) support. Note: User programmability is currently not supported.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.
- Enabled Multi-Host RX Rate-limiter configuration via the QEEC mlxreg and the max\_shaper\_rate field.

# Supported Devices and Features

HPE Part Number	Mellanox Ethernet Only Adapters	PSID
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: 16.34.1002 (Recommended)

Filename: 16\_34\_1002-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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX5Firmwarev16341002/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 16.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to hang.
- When all traffic applications sharing the same combination of <function, priority, side> were rate limited (for example by congestion control), this limit was enforced on other applications with different combinations of <function, priority, side> under the same VL. For example, requestor flows (RDMA-write) were limited to rate X, however, this rate was also enforced on a QP sending RDMAread responses. This firmware version prevents rate limit enforcement on traffic applications which should not be limited.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

# **Enhancements**

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

# New features and changes included in version 16.34.1002:

• Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.

## **Supported Devices and Features**

This software package contains the following firmware versions:

Mellanox Ethernet Only Adapters	Firmware Version	PSID
HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter(P31246-B21 and P31246-H21)	16.34.1002	MT_0000000591

Version: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6Firmwarev20341002/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 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

# **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

#### 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)	20.34.1002	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: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-MCX653435A-HDA\_HPE\_Ax.pldm.fwpkg

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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6Firmwarev20341002/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 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

## 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 OCP3 MCX653435A-HDAI Adapter (P31323-B21 and P31323-H21)	20.34.1002	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: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-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		

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6Firmwarev20341002/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.

# <u>Fixes</u>

The following issues have been fixed in version 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

# **Supported Devices and Features**

This software package contains the following firmware versions:

IMELIANOX INTINIBANG AGAPTER	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter(P31324-B21 and P31324-H21)	20.34.1002	MT_0000000594

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: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-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	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			

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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.

at: https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20341002/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 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

#### Supported Devices and Features

This software package contains the following firmware versions:

Melianox InfiniBand Adapter	Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter (P31348-B21 and P31348-H21)	20.34.1002	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: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-MCX653105A-ECA\_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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6Firmwarev20341002/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 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

## Supported Devices and Features

This software package contains the following firmware versions:

Mellanox InitiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter (P23665-B21 and P23665-H21)	20.34.1002	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: 20.34.1002 (Recommended)

Filename: 20\_34\_1002-MCX653106A-ECA\_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	t #1 - Ethernet HDR/HDR100 EDR FDI						
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			

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6Firmwarev20341002/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 20.34.1002:

- "set\_flow\_table\_entry" failed when aso\_flow\_meter action was used.
- A race condition occured between the duplicate read and QP commands (2RST, 2ERR and Destroy) in the signature that caused the command to get into an unresponsive state.
- Firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

## **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 20.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added Queue Counters Allocation capability which allows privileged users to allocate queue counters. With this new feature, the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Added support for InfiniBand MAD packets capturing in RX RDMA Steering table.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

# **Supported Devices and Features**

This software package contains the following firmware versions:

Mellanox IntiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter (P23666-B21 and P23666-H21)	20.34.1002	MT_0000000453

Mellanox Firmware Package (FWPKG) for Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE

Version: 22.34.1002 (Recommended)

Filename: 22\_34\_1002-MCX623105AS-VDA\_Ax.pldm.fwpkg

#### Important Note!

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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/ConnectX6DxFirmwarev22341002/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 22.34.1002:

- An issue that caused the destroy\_match\_definer object command to fail after dumping it using resource\_dump.
- An issue where set\_flow\_table\_entry failed when aso\_flow\_meter action was used.
- An issue where firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

#### **Enhancements**

#### New features and changes included in version 22.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added a 22 nanosecond of propagation delay to the cable delay of the PPS signal when using PPS out.
- Added support for PPCC register with bulk operations, MAD for algorithm configuration and tunable parameters.
- Added support for programmable counters for PCC via PPCC register and MAD.
- Added support for RX multi-host rate limit using an enabler script.
- A new capability that allows privileged users to allocate queue counters. In this new feature the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Enabled Multi-Host RX Rate-limiter configuration via the QEEC mlxreg and the max\_shaper\_rate field.
- Added a new NVconfig parameter "MULTI\_PCI\_RESOURCE\_SHARE" to support modes that allow choosing the utilization of the card's resources on each host in Socket-Direct / Multi host setup.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

# Supported Devices and Features

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

Mellanox Firmware Package (FWPKG) for Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE

Version: 22.34.1002 (Recommended)

Filename: 22\_34\_1002-MCX623106AS-CDA\_Ax.pldm.fwpkg

#### Important Note!

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, you are then leaving HPE.com. Please follow the instructions on <a href="http://www.nvidia.com/">http://www.nvidia.com/</a> 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 <a href="http://www.nvidia.com/">http://www.nvidia.com/</a>, 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.

at: https://docs.nvidia.com/networking/display/ConnectX6DxFirmwarev22341002/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.

#### <u>Fixes</u>

## The following issues have been fixed in version 22.34.1002:

- An issue that caused the destroy\_match\_definer object command to fail after dumping it using resource\_dump.
- An issue where set\_flow\_table\_entry failed when aso\_flow\_meter action was used.
- An issue where firmware update failed or timed out when multiple adapters of the same type were present on a system. This was fixed by adding "Command Unsupported" response code in cases when running the MCTP control command "Get Vendor Defined Messages Supported", and there were no supported VDMs.

## **Enhancements**

#### New features and changes included in version 22.34.1002:

- Added LLDPEnable, LLDPTransmit and LLDPReceive properties to the RDE Port schema implementation.
- Added a 22 nanosecond of propagation delay to the cable delay of the PPS signal when using PPS out.
- Added support for PPCC register with bulk operations, MAD for algorithm configuration and tunable parameters.
- Added support for programmable counters for PCC via PPCC register and MAD.
- Added support for RX multi-host rate limit using an enabler script.
- A new capability that allows privileged users to allocate queue counters. In this new feature the get\_max\_qp\_cnt\_cur\_cap() returns a valid value when the UID is with UCTX\_CAP\_INTERNAL\_DEVICE\_RESOURCES, otherwise it returns 0.
- Enabled Multi-Host RX Rate-limiter configuration via the QEEC mlxreg and the max\_shaper\_rate field.
- Added a new NVconfig parameter "MULTI\_PCI\_RESOURCE\_SHARE" to support modes that allow choosing the utilization of the card's resources on each host in Socket-Direct / Multi host setup.
- Added 50 Usec delay during PML1 exit to avoid any PCIe replay timer timeout.

#### 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

# Firmware - Storage Controller

Top

Firmware Package - HPE Gen11 Boot Controller NS204i-u, NS204i-d and Gen10P Boot Controller NS204i-p for Gen11 Servers

Version: 1.2.14.1004 (Recommended)

Filename: HPE\_NS204i\_Gen11\_1.2.14.1004.fwpkg

#### **Enhancements**

New Initial with NS204i-u

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR216i-o\_Gen11\_52.22.3-4650.fwpkg

#### **Important Note!**

This firmware version to be used on HPE MR216i-o Gen11 Controller.

# **Enhancements**

Initial release.

Firmware Package - HPE MR216i-p Gen10 Plus Tri Mode Controller with Gen11 servers

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR216i-p\_Gen10\_52.22.3-4650.fwpkg

#### **Important Note!**

This firmware version to be used on HPE MR216i-p Gen10 Plus Controller.

#### **Enhancements**

Initial release.

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR216i-p\_Gen11\_52.22.3-4650.fwpkg

# **Important Note!**

This firmware version to be used on HPE MR216i-p Gen11 Controller.

#### **Enhancements**

Initial release.

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR408i-o\_Gen11\_52.22.3-4650.fwpkg

# **Important Note!**

This firmware version to be used on HPE MR408i-o Gen11 Controller.

#### **Enhancements**

Initial release.

Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR416i-o\_Gen11\_52.22.3-4650.fwpkg

#### **Important Note!**

This firmware version to be used on HPE MR416i-o Gen11 Controller.

## **Enhancements**

Initial release.

Firmware Package - HPE MR416i-p Gen10 Plus Tri Mode Controller with Gen11 servers

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR416i-p\_Gen10\_52.22.3-4650.fwpkg

# Important Note!

This firmware version to be used on HPE MR416i-p Gen10 Plus Controller.

## **Enhancements**

Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller

Version: 52.22.3-4650 (Recommended)

Filename: HPE\_MR416i-p\_Gen11\_52.22.3-4650.fwpkg

# **Important Note!**

This firmware version to be used on HPE MR416i-p Gen11 Controller.

#### **Enhancements**

Initial release.

Firmware Package - HPE SR932i-p Gen11 Controllers

Version: 03.01.14.062 (B) (Recommended)

Filename: HPE\_SR932\_Gen11\_03.01.14.062\_B.fwpkg

#### **Enhancements**

Initial fwpkg release for Gen11 servers.

Online ROM Flash Component for VMware ESXi - HPE Smart Array E208e-p SR Gen10 on Gen11 servers

Version: 5.32 (C) (Recommended)

Filename: CP053948.compsig; CP053948.zip

## **Enhancements**

· Add Gen11 servers into support list

## Firmware - Storage Fibre Channel

Top

HPE Firmware Flash for Emulex 16/32Gb Fibre Channel Host Bus Adapters

Version: 14.0.499.25 **(Recommended)** Filename: B14.0.499.25\_header.pldm.fwpkg

#### **Important Note!**

NOTE: This is the first PLDM fwpkg component release and is not supported for upgrade from older versions.

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0

# **Prerequisites**

The minimum version for adapter to support PLDM is 14.0.499.20

# **Enhancements**

NOTE: This is the first PLDM fwpkg component release and is not supported for upgrade from older versions.

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	16Gb	14.0.499.25	14.0.499.25	14.0.499.2	14.0.490.0
HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	16Gb	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:

#### 16Gb FC Adapter:

- HPE SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter

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

Version: 14.0.499.25 **(Recommended)** Filename: P14.0.499.25\_header.pldm.fwpkg

# **Important Note!**

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	<b>Boot Bios</b>
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**

The minimum version for adapter to support PLDM is 14.0.499.20

## **Enhancements**

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	<b>Boot Bios</b>
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 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 QLogic Fibre Channel Host Bus Adapters for VMware vSphere 7.0

Version: 2022.08.01 (Recommended) Filename: CP050074.compsig; CP050074.zip

This Firmware package contains following firmware versions:

Adapter		МВІ	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.07.01	09.09.00	7.28	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.07.01	09.09.00	7.28	0.0

#### **Prerequisites**

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

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

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <a href="http://www.hpe.com/servers/spp/download/">http://www.hpe.com/servers/spp/download/</a>

# **Enhancements**

This Firmware package contains following firmware versions:

Adapter	Speed	МВІ	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.07.01	09.09.00	7.28	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.07.01	09.09.00	7.28	0.0

#### 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

# Software - Management

<u>Top</u>

HPE Agentless Management Bundle Smart Component on ESXi for Gen11 Servers

Version: 2022.11.01 (Recommended) Filename: cp049974.compsig; cp049974.zip

# **Enhancements**

# **Agentless Management Service**

• First release of Agentless Management Service for ESXi HPE ProLiant Gen11 Servers.

HPE Fiber Channel and Storage Enablement Bundle Smart Component for ESXi 7.0

Version: 2022.09.01 (Recommended) Filename: cp050934.compsig; cp050934.zip

## **Enhancements**

• Supports VMware ESXi 7.0 U2 and ESXi 7.0 U3

HPE iLO Driver Bundle Smart Component for ESXi 7.0

Version: 2022.09.01 (Recommended) Filename: cp050763.compsig; cp050763.zip

# **Fixes**

• Fixed issue where ilo driver is failing to acquire contiguous physical memory below 4GB causing userworld apps like honcfg to be unable to communicate with iLO.

#### **Enhancements**

Added support for vSphere 8.0

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 7.0 for Gen11 Servers

Version: 2022.11.01 (B) (Recommended) Filename: cp054900.compsig; cp054900.zip

#### **Enhancements**

Initial release for Gen11 servers.

#### Software - Storage Controller

Top

HPE MegaRAID Storage Administrator StorCLI for VMware7.0 (For Gen11 Controllers)

Version: 2022.10.00 (B) (Recommended) Filename: cp054203.compsig; cp054203.zip

#### **Enhancements**

Initial Release with Gen11 MR controllers.

## Software - Storage Fibre Channel

Top

HPE QLogic Fibre Channel driver component for VMware vSphere 7.0

Version: 2022.08.01 (Recommended) Filename: cp050073.compsig; cp050073.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 and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.

This driver is supported only on 7.0U3

# **Prerequisites**

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

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

#### **Enhancements**

Driver version 5.3.1.0

the Driver is supported only on 7.0U3

# 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

HPE Storage Emulex Fibre Channel driver component for VMware vSphere 7.0

Version: 2022.08.01 (Recommended) Filename: cp050069.compsig; cp050069.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 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**

## 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

#### Software - System Management

Top

HPE Agentless Management Bundle for ESXi on HPE Gen11 Servers

Version: 701.11.1.0 (Recommended)

Filename: amsdvComponent\_701.11.1.0.27-1\_20582115.zip

#### **Enhancements**

## **Agentless Management Service**

• First release of Agentless Management Service for ESXi on HPE ProLiant Gen11 Servers.

HPE Fiber Channel and Storage Enablement Component for ESXi 7.0

Version: 3.9.0 (Recommended)

Filename: fc-enablement-component\_700.3.9.0.4-1\_20266032.zip

## **Enhancements**

Supports VMware ESXi 7.0 U2 and ESXi 7.0 U3

HPE MegaRAID Storage Administrator StorCLI for VMware 7.0 (for Gen11 Controllers)

Version: 007.2207.0000.0000 (B) (Recommended)

Filename: BCM-vmware-storcli64\_007.2207.0000.0000-01\_20701325.zip

#### **Enhancements**

Gen11 PR2 Usage

Integrated Smart Update Tools for VMware ESXi 7.0

Version: 701.4.0.0 (Recommended)

Filename: sutComponent\_701.4.0.0.6-0-signed\_component-20628292.zip

#### Important Note!

Integrated Smart Update Tools for ESXi 7.0 provides support for firmware and driver updates via iLO Repository

#### **Fixes**

See the **<u>iSUT Release Notes</u>** for information about the issues resolved in this release

#### **Enhancements**

See the <u>iSUT Release Notes</u> for information about the enhancements in this release.

Smart Storage Administrator (SSA) CLI for VMware 7.0

Version: 6.10.21.0 (Recommended)

Filename: ssacli2-component\_6.10.21.0-7.0.0\_20531641.zip

## **Enhancements**

Initial Build for Vmware

Get connected
hpe.com/info/getconnected

Current HPE driver, support, and security alerts delivered directly to your desktop

© Copyright 2022 Hewlett Packard Enterprise Development Company, L.P.

The information contained herein is subject to change without notice. The only warranties for HPE products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HPE shall not be liable for technical or editorial errors or omissions contained herein.

Trademark acknowledgments, if needed.

