# 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 2023.02.00.00 Release Notes for VMware ESXi 7.0

BIOS (Login Required) - System ROM Driver - Lights-Out Management Driver - Network Driver - Storage Controller Firmware - Network Firmware - Storage Controller Firmware - Storage Fibre Channel Software - Management Software - Storage Controller Software - Storage Fibre Channel Software - Storage Fibre Channel Software - Storage Fibre Channel

#### BIOS (Login Required) - System ROM

ROM Flash Firmware Package - HPE ProLiant DL320 Gen11 (U63) Servers Version: 1.22\_01-18-2023 (Recommended) Filename: U63\_1.22\_01\_18\_2023.fwpkg

## Important Note!

## Important Notes:

None

## Deliverable Name:

HPE ProLiant DL320 Gen11 Servers System ROM - U63

## **Release Version:**

1.22\_01-18-2023

## Last Recommended or Critical Revision:

This is the initial version of the firmware.

## **Previous Revision:**

This is the initial version of the firmware.

#### Firmware Dependencies:

None

## Enhancements/New Features:

This is the initial version of the firmware.

**Problems Fixed:** 

None

## Known Issues:

None

## Enhancements

Important Notes:

None

## Firmware Dependencies:

None

Enhancements/New Features:

<u>Top</u>

This is the initial version of the firmware.

## Known Issues:

None

ROM Flash Firmware Package - HPE Alletra 4110/Alletra 4120/ProLiant DL380a Gen11 (U58) Servers Version: 1.22\_01-18-2023 (**Recommended**) Filename: U58\_1.22\_01\_18\_2023.fwpkg

# Important Note!

## Important Notes:

None

## Deliverable Name:

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

## **Release Version:**

1.22\_01-18-2023

# Last Recommended or Critical Revision:

This is the initial version of the firmware.

# **Previous Revision:**

This is the initial version of the firmware.

## Firmware Dependencies:

None

## Enhancements/New Features:

This is the initial version of the firmware.

## **Problems Fixed:**

None

## Known Issues:

None

## **Enhancements**

Important Notes:

None

Firmware Dependencies:

None

## Enhancements/New Features:

This is the initial version of the firmware.

#### **Known Issues:**

None

ROM Flash Firmware Package - HPE ProLiant ML350/DL360/DL380 Gen11 (U54) Servers Version: 1.22\_01-18-2023 (**Recommended**) Filename: U54\_1.22\_01\_18\_2023.fwpkg

# Important Note!

## Important Notes:

None

**Deliverable Name:** 

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

## **Release Version:**

1.22\_01-18-2023

# Last Recommended or Critical Revision:

This is the initial version of the firmware.

# **Previous Revision:**

This is the initial version of the firmware.

# Firmware Dependencies:

None

## Enhancements/New Features:

This is the initial version of the firmware.

# **Problems Fixed:**

None

#### **Known Issues:**

None

## Enhancements

#### Important Notes:

None

Firmware Dependencies:

None

## Enhancements/New Features:

This is the initial version of the firmware.

## Known Issues:

None

ROM Flash Universal Firmware Package - HPE ProLiant DL325/DL345 Gen11 (A56) Servers Version: 1.20\_01-06-2023 (**Recommended**) Filename: A56\_1.20\_01\_06\_2023.fwpkg

## Important Note!

## Important Notes:

None

## Deliverable Name:

HPE ProLiant DL325/DL345 Gen11 System ROM - A56

# **Release Version:**

1.20\_01-06-2023

## Last Recommended or Critical Revision:

1.20\_01-06-2023

## **Previous Revision:**

1.12\_11-24-2022

## Firmware Dependencies:

None

Enhancements/New Features:

Added support for 128GB/256GB DIMM and mixed 128GB/256GB DIMM installation.

## **Problems Fixed:**

This revision of the System ROM includes an updated revision of the AMD reference code for AMD 4th Generation EPYC processors.

Addressed an issue where SMBIOS Type17 memory width showed non-zero for empty DIMM slot.

Addressed an issue where system would RSOD if DesiredBootDevice was set but not matched with any boot option.

Addressed an issue where POST progress bar was shown in the wrong position.

Addressed an issue where AGESA PI version did not show in SMBIOS type40.

Corrected Ext Maximum Memory value in SMBIOS entry.

Removed Boot Mode Option from BIOS/Platform Configuration (RBSU) Menu due to no legacy boot support in HPE ProLiant and Synergy Gen11 servers.

Removed unsupported Enhanced Processor Performance Profile from BIOS/Platform Configuration (RBSU) Menu.

## Known Issues:

None

## <u>Fixes</u>

## Important Notes:

None

## Firmware Dependencies:

None

## **Problems Fixed:**

This revision of the System ROM includes an updated revision of the AMD reference code for AMD 4th Generation EPYC processors.

Addressed an issue where SMBIOS Type17 memory width showed non-zero for empty DIMM slot.

Addressed an issue where system would RSOD if DesiredBootDevice was set but not matched with any boot option.

Addressed an issue where POST progress bar was shown in the wrong position.

Addressed an issue where AGESA PI version did not show in SMBIOS type40.

Corrected Ext Maximum Memory value in SMBIOS entry.

Removed Boot Mode Option from BIOS/Platform Configuration (RBSU) Menu due to no legacy boot support in HPE ProLiant and Synergy Gen11 servers.

Removed unsupported Enhanced Processor Performance Profile from BIOS/Platform Configuration (RBSU) Menu.

#### Known Issues:

None

## Enhancements

Added support for 128GB/256GB DIMM and mixed 128GB/256GB DIMM installation.

ROM Flash Universal Firmware Package - HPE ProLiant DL365/DL385 Gen11 (A55) Servers Version: 1.20\_01-06-2023 (**Recommended**) Filename: A55\_1.20\_01\_06\_2023.fwpkg

## Important Note!

## Important Notes:

None

# **Deliverable Name:**

HPE ProLiant DL365/DL385 Gen11 System ROM - A55

#### **Release Version:**

1.20\_01-06-2023

## Last Recommended or Critical Revision:

1.20\_01-06-2023

## **Previous Revision:**

1.12\_11-24-2022

## Firmware Dependencies:

None

## Enhancements/New Features:

Added support for 128GB/256GB DIMM and mixed 128GB/256GB DIMM installation.

## Problems Fixed:

This revision of the System ROM includes an updated revision of the AMD reference code for AMD 4th Generation EPYC processors.

Addressed an issue where SMBIOS Type17 memory width showed non-zero for an empty DIMM slot.

Addressed an issue where system would RSOD if DesiredBootDevice was set but not matched with any boot option.

Addressed an issue where the POST progress bar was shown in the wrong position.

Addressed an issue where AGESA PI version did not show in SMBIOS type40.

Corrected Ext Maximum Memory value in SMBIOS entry.

Removed Boot Mode Option from BIOS/Platform Configuration (RBSU) Menu due to no legacy boot support in HPE ProLiant and Synergy Gen11 servers.

Removed unsupported Enhanced Processor Performance Profile from BIOS/Platform Configuration (RBSU) Menu.

## Known Issues:

None

# <u>Fixes</u>

Important Notes:

None

Firmware Dependencies:

None

## **Problems Fixed:**

This revision of the System ROM includes an updated revision of the AMD reference code for AMD 4th Generation EPYC processors.

Addressed an issue where SMBIOS Type17 memory width showed non-zero for empty DIMM slot.

Addressed an issue where system would RSOD if DesiredBootDevice was set but not matched with any boot option.

Addressed an issue where POST progress bar was shown in the wrong position.

Addressed an issue where AGESA PI version did not show in SMBIOS type40.

Corrected Ext Maximum Memory value in SMBIOS entry.

Removed Boot Mode Option from BIOS/Platform Configuration (RBSU) Menu due to no legacy boot support in HPE ProLiant and Synergy Gen11 servers.

Removed unsupported Enhanced Processor Performance Profile from BIOS/Platform Configuration (RBSU) Menu.

## Known Issues:

None

## Enhancements

Added support for 128GB/256GB DIMM and mixed 128GB/256GB DIMM installation.

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

## <u>Fixes</u>

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

## **Enhancements**

• Added support for vSphere 8.0

#### Driver - Network

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 7.0 Version: 2022.12.00 (**Recommended**) Filename: cp053755.compsig; cp053755.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.

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• HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 218.0.303000 or later, for use with this driver.

#### **Enhancements**

This product enhancement driver logging which in generic ,appropriate and correct format.

#### 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: 2023.01.00 (Recommended) Filename: cp052337.compsig; cp052337.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 3.15.0 or later, for use with this driver.

## Enhancements

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

#### 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: 2023.01.00 **(Recommended)** Filename: cp054525.compsig; cp054525.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 4.00 or later, for use with this driver.

## Enhancements

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## 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

## <u>Fixes</u>

## 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

## 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<br>Number | Device Name  | PSID          |
|--------------------|--|---------------|
| P24837-B21         | HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter   | HPE000000054  |
| 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   | HPE000000009  |
| 879482-B21         | HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter                                     | HPE000000022  |
| 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_000000241  |
| 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_000000238  |
| 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_000000437  |
| P06154-B21         | HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe3 x16 MCX653105A-HDAT Adapter                  | HPE000000034  |
| P06250-B21         | P06250-B21 HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe3 x16 MCX653105A-ECAT<br>Adapter |               |
| P06251-B21         | HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe3 x16 MCX653106A-ECAT<br>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<br>Adapter            | MT_000000452  |
| P23666-B21         | HDE InfiniPand HDP100/Ethorpot 100Ch 2 port OSEDE6 PCIo4 v16 MCV6521064 ECAT                       |               |
| P10180-B21         | Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE                             | MT_000000435  |
| P31246-B21         | HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter                                    | MT_0000000591 |
| P31323-B21         | 1323-B21 HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI<br>Adapter |               |
| P31348-B21         | HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI                     | MT_0000000593 |

|            | Adapter   |               |
|------------|---|---------------|
| 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   | <u>Top</u> |
| 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                       |            |

HPE MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p Gen11 controller (64-bit) Driver for vSphere 7.0 Version: 2022.11.01 (B) **(Recommended)** Filename: cp054206.compsig; cp054206.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

Support Gen11 Intel servers.

HPE ProLiant Gen11 Smart RAID Controller Driver for VMware vSphere 7.0 (Bundle file) Version: 70.4380.0.108 **(Recommended)** Filename: Microchip-smartpqi\_70.4380.0.108-10EM.700.1.0.15843807\_20826503.zip

## **Enhancements**

Gen11 PR2,2023 March MSB Usage

HPE ProLiant Gen11 Smart RAID Controller Driver for VMware vSphere 7.0 (Driver Component). Version: 2023.01.01 (**Recommended**) Filename: cp054370.compsig; cp054370.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

For Gen11 PR2 usage.

#### Firmware - Network

Broadcom Firmware Package for BCM5741x adapters Version: 223.1.96.0 **(Recommended)** Filename: bcm223.1.96.0.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,

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- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 223.0.157.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.2-223.0.162.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2022.12.00 or later

## <u>Fixes</u>

- This product addresses an issue the additional firmware installation command checkpoint.
- This product addresses an issue the reporting of thermal threshold to BMC.

## 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: 223.1.96.0 **(Recommended)** Filename: bcm223.1.96.0\_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 223.0.157.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.2-223.0.162.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2022.12.00 or later

## <u>Fixes</u>

- This product addresses an issue the additional firmware installation command checkpoint.
- This product addresses an issue the reporting of thermal threshold to BMC.

#### 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: 1.32.0 (**Recommended**) Filename: CP053057.compsig; CP053057.zip

## Important Note!

This software package contains combo image v20.23.41 with the following firmware versions:

| NIC                                | Boot Code Version | PXE Version | NCSI Version | UEFI Version | CCM Version |
|------------------------------------|-------------------|-------------|--------------|--------------|-------------|
| BCM 5719 1GbE 4p BASE-T Adptr      | 1.46              | 21.6.2      | 1.5.38       | 21.6.40      | 223.0.148.0 |
| BCM 5719 1GbE 4p BASE-T OCP3 Adptr | 1.46              | 21.6.2      | 1.5.38       | 21.6.40      | 223.0.148.0 |
| BCM 5720 1GbE 2p BASE-T LOM Adptr  | 1.42              | 21.6.2      | 1.5.38       | 21.6.40      | 223.0.148.0 |

# Prerequisites

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

# <u>Fixes</u>

This product addresses an issue the adjustment of firmware read-write commands on corresponding OS.

# 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 (B) **(Recommended)** Filename: HPE\_E810\_2CQDA2\_0\_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 2023.01.00 or later

## **Enhancements**

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## 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 (B) (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 2023.01.00 or later

## **Enhancements**

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## 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 (B) **(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 2023.01.00 or later

## **Enhancements**

## 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 (B) (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 2023.01.00 or later

## Enhancements

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

#### 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 (B) (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 2023.01.00 or later

## **Enhancements**

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

# 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 (B) **(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 2023.01.00 or later

## Enhancements

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## 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 (B) **(Recommended)** Filename: HPE\_E810\_XXV4\_OCP\_4p01\_NCS1wPLDMoMCTP\_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 2023.01.00 or later

# Enhancements

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## 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: 3.19.0 **(Recommended)** Filename: CP054539.compsig; CP054539.zip

## Important Note!

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

| NIC  | EEPROM/NVM<br>Version | OROM<br>Version | NVM<br>Version |
|--|-----------------------|-----------------|----------------|
| HPE Ethernet 10Gb 2-port SFP+ OCP3 X710-<br>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<br>OCP3 Adapter | 80001199              | 1.3256.0        | N/A            |
| Intel(R) I350 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 140E - 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.

This product now supports HPE ProLiant Gen11 Platforms with Intel processors

## Supported Devices and Features

This package supports the following network adapters:

- Intel(R) 1350 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!

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A list of known issues with this release is available at: <u>https://docs.nvidia.com/networking/display/ConnectX6LxFirmwarev26331048/Known+Issues</u>

## 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 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         |
|-----------------|---|--------------|
| P42044-B21      | Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE | MT_000000575 |

## Important Note!

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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.

## <u>Fixes</u>

## 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   |               |
|-----------------|--|---------------|
| 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: 16.35.1012 (Recommended)

Filename: 16\_35\_1012-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.

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A list of known issues with this release is available

at: https://docs.nvidia.com/networking/display/ConnectX5Firmwarev16351012/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.

## <u>Fixes</u>

#### The following issues have been fixed in version 16.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- Bad configuration of number of VFs and SFs led to the consumption of too many functions and triggered a FW assert 0x888E. The reduction flows behavior was fixed to ensure the configuration does not exceed the total number of supported functions.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.

## **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 16.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

#### Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox Ethernet Only Adapters  | Firmware<br>Version | PSID          |
|--|---------------------|---------------|
| HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter(P31246-B21 and P31246-H21) | 16.35.1012          | 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: 20.35.1012 (Recommended)

Filename: 20\_35\_1012-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.

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A list of known issues with this release is available at: <u>https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20351012/Known+Issues</u>

## 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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

## 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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

• Added support for using SetEventReceiver PLDM command with mode polling.

## Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InfiniBand Adapter  | Firmware<br>Version | PSID          |
|--|---------------------|---------------|
| HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT<br>Adapter (P23664-B21 and P23664-H21) | 20.35.1012          | 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: 20.35.1012 (Recommended)

Filename: 20\_35\_1012-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: <u>https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20351012/Known+Issues</u>

## 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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

## 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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

• Added support for using SetEventReceiver PLDM command with mode polling.

## Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InfiniBand Adapter   | Firmware<br>Version | PSID          |
|---|---------------------|---------------|
| HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI<br>Adapter (P31323-B21 and P31323-H21) | 20.35.1012          | 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: 20.35.1012 (Recommended)

#### 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: <u>https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20351012/Known+Issues</u>

#### 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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.

- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

• Added support for using SetEventReceiver PLDM command with mode polling.

#### Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InfiniBand Adapter   | Firmware<br>Version | PSID          |
|---|---------------------|---------------|
| HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT<br>Adapter(P31324-B21 and P31324-H21) | 20.35.1012          | 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: 20.35.1012 (Recommended)

Filename: 20\_35\_1012-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 |  |
| 1                    | 1            | 1            | <b></b> 1     |           |  |

| 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/ConnectX6Firmwarev20351012/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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

## 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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

• Added support for using SetEventReceiver PLDM command with mode polling.

# Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InfiniBand Adapter   | Firmware<br>Version    | PSID          |
|---|------------------------|---------------|
| HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-F (P31348-B21 and P31348-H21) | DAI Adapter 20.35.1012 | 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: 20.35.1012 (Recommended)

Filename: 20\_35\_1012-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.

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A list of known issues with this release is available at: <u>https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20351012/Known+Issues</u>

# 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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

## 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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP • Added support for using SetEventReceiver PLDM command with mode polling.

## Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InifiniBand Adapter   | Firmware<br>Version | PSID         |
|--|---------------------|--------------|
| HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter (P23665-B21 and P23665-H21) | 20.35.1012          | MT_000000452 |

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: 20.35.1012 (Recommended)

Filename: 20\_35\_1012-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   | 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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at: https://docs.nvidia.com/networking/display/ConnectX6Firmwarev20351012/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 20.35.1012:

- RDE (Redfish) PATCH operation to LLDPTransmit properties "ManagementAddressIPv4", "ManagementAddressIPv6" and "ManagementAddressMAC" were applied only in the first attempt, but failed in the next.
- The RXT E2E inflight went into an unresposive state occasionally.
- RDMA partition was reported even if NIC+RDMA mode was disabled.
- PLDM AEN event receiver media was changed unexpectedly and destination BDF was overridden with garbage when some PLDM packet were received from the SMBus layer.
- An incorrect address issue for XRQ Event Backend Controller Px Syndrome event in multi-host system during FLR.
- PCIe SKP OS generation interval issue for Gen1 and Gen2.
- InfiniBand L2 QP could not receive RDMA traffic occasionally.
- Running with a debug firmware reduced security as if token was applied.
- PLDM AEN event receiver was required to be cleared on PCIe reset in case the media type was MCTP over PCIe VDM.
- Asynchronous messages were sent over MTCP before endpoint discovery was done.

## 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 20.35.1012:

- Added support for copy modify header steering action to/from the UDP field.
- Enabled ADP timer to allow the user to configure RC or DC qp\_timeout values lower than 16.
- QoS priority trust default state can now be changed using the new nvconfig below:

QOS\_TRUST\_STATE\_P1 QOS\_TRUST\_STATE\_P2 The values that can be used to set the default state are: TRUST\_PORT TRUST\_PCP TRUST\_DSCP TRUST\_DSCP\_PCP

• Added support for using SetEventReceiver PLDM command with mode polling.

#### Supported Devices and Features

This software package contains the following firmware versions:

| Mellanox InfiniBand Adapter   | Firmware<br>Version | PSID          |
|---|---------------------|---------------|
| HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT<br>Adapter (P23666-B21 and P23666-H21) | 20.35.1012          | 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

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A list of known issues with this release is available at: <u>https://docs.nvidia.com/networking/display/ConnectX6DxFirmwarev22341002/Known+Issues</u>

# 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         |
|-----------------|--|--------------|
| P10180-B21      | Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE | MT_000000435 |

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

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A list of known issues with this release is available at: <u>https://docs.nvidia.com/networking/display/ConnectX6DxFirmwarev22341002/Known+Issues</u>

## 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_000000437 |

## Firmware - Storage Controller

Firmware Package - HPE Gen10 E208e-p controller for Gen11 servers Version: 5.61 **(Recommended)** Filename: HPE\_E208e-p\_Gen11\_5.61\_A.fwpkg

## Enhancements

For Gen11 PR2 usage.

Firmware Package - HPE Gen11 Boot Controller NS204i-u, NS204i-d and Gen10P Boot Controller NS204i-p for Gen11 Servers Version: 1.2.14.1004 (B) **(Recommended)** Filename: HPE\_NS204i\_Gen11\_1.2.14.1004\_B.fwpkg

## Enhancements

Support Gen11 Intel servers

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller Version: 52.22.3-4650 (B) **(Recommended)** Filename: HPE\_MR216i-o\_Gen11\_52.22.3-4650\_B.fwpkg

## Important Note!

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

## Enhancements

Support Gen11 Intel servers.

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller Version: 52.22.3-4650 (B) **(Recommended)** Filename: HPE\_MR216i-p\_Gen11\_52.22.3-4650\_B.fwpkg

## Important Note!

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Support Gen11 Intel servers.

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller Version: 52.22.3-4650 (B) **(Recommended)** Filename: HPE\_MR408i-o\_Gen11\_52.22.3-4650\_B.fwpkg

## Important Note!

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

## **Enhancements**

Support Gen11 Intel servers.

Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller Version: 52.22.3-4650 (B) **(Recommended)** Filename: HPE\_MR416i-o\_Gen11\_52.22.3-4650\_B.fwpkg

## Important Note!

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

## **Enhancements**

Support Gen11 Intel servers.

Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller Version: 52.22.3-4650 (B) **(Recommended)** Filename: HPE\_MR416i-p\_Gen11\_52.22.3-4650\_B.fwpkg

## Important Note!

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

## Enhancements

Support Gen11 Intel servers.

Firmware Package - HPE SR932i-p Gen11/SR416i-o Gen11/SR416ie-m Gen11 Controllers Version: 03.01.17.056 (**Recommended**) Filename: HPE\_SR416\_SR932\_Gen11\_03.01.17.056\_A.fwpkg

## Enhancements

For Gen11 PR2 SPP

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

HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters Version: 14.0.499.29 **(Recommended)** Filename: P14.0.499.29\_header.pldm.fwpkg

# Important Note!

This Firmware package contains following firmware versions:

| Adapter  | Speed | Universal Boot<br>Image | Firmware    | UEFI       | Boot Bios  |
|--|-------|-------------------------|-------------|------------|------------|
| HPE SN1610E 32Gb Single Port Fibre Channel Host Bus<br>Adapter | 32Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus<br>Adapter   | 32Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1700E 64Gb Single Port Fibre Channel Host Bus<br>Adapter | 64Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus<br>Adapter   | 64Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |

## Enhancements

This Firmware package contains following firmware versions:

| Adapter  | Speed | Universal Boot<br>Image | Firmware    | UEFI       | Boot Bios  |
|--|-------|-------------------------|-------------|------------|------------|
| HPE SN1610E 32Gb Single Port Fibre Channel Host Bus<br>Adapter | 32Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1610E 32Gb Dual Port Fibre Channel Host Bus<br>Adapter   | 32Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1700E 64Gb Single Port Fibre Channel Host Bus<br>Adapter | 64Gb  | 14.0.499.29             | 14.0.499.29 | 14.0.499.2 | 14.0.490.0 |
| HPE SN1700E 64Gb Dual Port Fibre Channel Host Bus<br>Adapter   | 64Gb  | 14.0.499.29             | 14.0.499.29 | 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: 2023.03.01 **(Recommended)** Filename: CP054354.compsig; CP054354.zip

## Important Note!

This Firmware package contains following firmware versions:

| Adapter   |      | MBI      | Firmware | UEFI | Boot Bios |
|---|------|----------|----------|------|-----------|
| HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter   | 32Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter | 32Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter   | 64Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter | 64Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |

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   |      | MBI      | Firmware | UEFI | Boot Bios |
|---|------|----------|----------|------|-----------|
| HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter   | 32Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter | 32Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter   | 64Gb | 02.07.03 | 09.09.20 | 7.28 | 0.0       |
| HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter | 64Gb | 02.07.03 | 09.09.20 | 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

#### 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

## Software - Management

HPE Agentless Management Bundle Smart Component on ESXi for Gen11 Servers Version: 2023.02.01 **(Recommended)** Filename: cp054510.compsig; cp054510.zip

## **Fixes**

#### Agentless Management Service

- Removed incorrect reporting of NS204i device in cpqSePCIeDisk MIB.
- Fixed incorrect speed of 100G network adapter reported in cpqNicIfPhysAdapterSpeedMbps OID.
- Fixed missing OS Logical Disk entries in the iLO AHS log.

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

## <u>Fixes</u>

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

## **Enhancements**

• Added support for vSphere 8.0

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For Gen11 PR2 usage.

## Software - Storage Controller

HPE MegaRAID Storage Administrator StorCLI for VMware7.0 (For Gen11 Controllers) Version: 2022.10.00 (C) (Recommended) Filename: cp054794.compsig; cp054794.zip

## **Enhancements**

Support Gen11 Intel servers.

## Software - Storage Fibre Channel

HPE QLogic Fibre Channel driver component for VMware vSphere 7.0 Version: 2023.03.01 **(Recommended)** Filename: cp054353.compsig; cp054353.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 on VMware 7.0U3 only

## 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

This Driver is supported on VMware 7.0U3 only

## 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

HPE Storage Emulex Fibre Channel driver component for VMware vSphere 7.0 Version: 2023.03.01 **(Recommended)** Filename: cp054347.compsig; cp054347.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:

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Updated to Driver version 14.0.543.0

## 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

Software - System Management HPE Agentless Management Bundle for ESXi on HPE Gen11 Servers Version: 701.11.2.0 (Recommended) Filename: amsdvComponent\_701.11.2.0.8-1\_20793543.zip

## <u>Fixes</u>

#### Agentless Management Service

- Removed incorrect reporting of NS204i device in cpqSePCIeDisk MIB.
- Fixed incorrect speed of 100G network adapter reported in cpqNicIfPhysAdapterSpeedMbps OID.
- Fixed missing OS Logical Disk entries in the iLO AHS log.

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

# <u>Fixes</u>

See the iSUT Release Notes 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.

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Smart Storage Administrator (SSA) CLI for VMware 7.0 Version: 6.15.11.0 (**Recommended**) Filename: ssacli2-component\_6.15.11.0-7.0.0\_20754029.zip

# **Enhancements**

Initial Build for Vmware

Get connected

hpe.com/info/getconnected

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

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