# 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 8.0

BIOS - System ROM

Driver - Lights-Out Management Driver - Storage Controller Firmware - Network Firmware - Storage Controller Firmware - Storage Fibre Channel Software - Management Software - Storage Fibre Channel Software - System Management

## Driver - Lights-Out Management

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 - Storage Controller

HPE ProLiant Gen11 Smart RAID Controller Driver for VMware vSphere 8.0 (Bundle file) Version: 80.4380.0.108 (Recommended) Filename: Microchip-smartpqi\_80.4380.0.108-10EM.800.1.0.20613240\_20828555.zip

#### Enhancements

Gen11 PR2 ,2023 March MSB Usage

HPE ProLiant Gen11 Smart RAID Controller Driver for VMware vSphere 8.0 (Driver Component). Version: 2023.01.01 (**Recommended**) Filename: cp054371.compsig; cp054371.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

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,

Top

Top

Top

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

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 OCP3 Adapter for HPE

## 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\_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 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

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: <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 mIxreg and the max\_shaper\_rate field.

HPE Part Number	Mellanox Ethernet Only Adapters	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: <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 mIxreg 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: 16.35.1012 (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.

**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: <u>https://docs.nvidia.com/networking/display/ConnectX5Firmwarev16351012/Known+Issues</u>

## 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 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.

**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: <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 Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT 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.

**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: <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

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)	20.35.1012	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)

Filename: 20\_35\_1012-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 <u>http://www.nvidia.com/</u>, you are then leaving HPE.com. Please follow the instructions on <u>http://www.nvidia.com/</u> 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 <u>http://www.nvidia.com/</u>, 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: <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.

# 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:

	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT 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		
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 <u>http://www.nvidia.com/</u>, you are then leaving HPE.com. Please follow the instructions on <u>http://www.nvidia.com/</u> 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 <u>http://www.nvidia.com/</u>, 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: <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.
- OoS priority trust default state can now be changed using the new nvconfig below:

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

**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/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 InifiniBand Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter (P23665-B21 and P23665-H21)	20.35.1012	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: 20.35.1012 (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 FI		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		

**Disclaimer**: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <u>http://www.nvidia.com/</u>, you are then leaving HPE.com. Please follow the instructions on <u>http://www.nvidia.com/</u> 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 <u>http://www.nvidia.com/</u>, 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: <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 Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter (P23666-B21 and P23666-H21)	20.35.1012	MT_0000000453

## 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.

## <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_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 <u>http://www.nvidia.com/</u>, you are then leaving HPE.com. Please follow the instructions on <u>http://www.nvidia.com/</u> 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 <u>http://www.nvidia.com/</u>, 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: <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.

<u>Top</u>

## 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!

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

#### **Enhancements**

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** 

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 Image	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus 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 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 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 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 I mage	Firmware	UEFI	Boot Bios
HPE SN1610E 32Gb Single Port Fibre Channel Host Bus 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 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 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 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 8.0 Version: 2023.03.01 **(Recommended)** Filename: CP054355.compsig; CP054355.zip

Important Note!

<u>Top</u>

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.07.03	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

# <u>Prerequisites</u>

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	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

## <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 Bundle Smart Component for ESXi 8.0 Version: 2022.09.01 **(Recommended)** Filename: cp051152.compsig; cp051152.zip

# **Enhancements**

Supports VMware ESXi 8.0

## **Fixes**

 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

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 8.0 for Gen11 Controllers Version: 2023.02.01 **(Recommended)** Filename: cp054522.compsig; cp054522.zip

## Enhancements

For Gen11 PR2 usage.

Software - Storage Fibre Channel HPE QLogic Fibre Channel driver component for VMware vSphere 8.0 Version: 2023.03.01 (Recommended) Filename: cp054352.compsig; cp054352.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

Driver version 5.3.1.0

# 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 - 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.

# Top

Top

# **Enhancements**

Supports VMware ESXi 8.0

Integrated Smart Update Tools for VMware ESXi 8.0 Version: 800.4.0.0 (**Recommended**) Filename: sutComponent\_800.4.0.0.9-0-signed\_component-20628878.zip

# Important Note!

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

# <u>Fixes</u>

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 8.0 Version: 6.15.11.0 (**Recommended**) Filename: ssacli2-component\_6.15.11.0-8.0.0\_20754055.zip

# Enhancements

Gen11 PR2 Usage

# 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:

Тор

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.

Get connected

hpe.com/info/getconnected

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

© Copyright 2023 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.



Updated February 21 2023