# **VMware Deliverable Release Notes**

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

HPE Integrity Superdome X HPE Superdome Flex

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

OS Support Tool for HPE Synergy

Information on HPE Synergy Software Releases is available at:

HPE Synergy Software Releases - Overview

#### Gen11 SPP 2025.07.00.00 Release Notes for VMware ESXi 9.0

Driver - Lights-Out Management

Driver - Network

Firmware - Network

Firmware - Storage Controller

Firmware - Storage Fibre Channel

Software - Management

Software - Storage Controller

Software - Storage Fibre Channel

Software - System Management

## Driver - Lights-Out Management

Ton

HPE iLO Native Driver for ESXi 8.0 and ESXi 9.0

Version: 10.9.0 (Recommended)

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

**Fixes** 

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

#### **Enhancements**

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

#### Driver - Network HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0

Version: 2025.05.00 (Recommended)

Filename: cp066626.compsig; cp066626.zip

### **Important Note!**

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the HPE Broadcom NetXtreme-E Firmware Version, 233.1.135007 or later, for use with this driver.

### **Fixes**

- o This product fixes the issue where ESXi Datastore not seen when NPAR is enabled.
- o This product fixes the issue where PSOD is seen when enable NPAR using 2 NICs.

## **Supported Devices and Features**

This product supports the following network adapters:

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

HPE Intel igbn Driver for VMware vSphere 9.0 Version: 2025.05.00 (Recommended) Filename: cp066049.compsig; cp066049.zip

## **Important Note!**

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

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.26.1 or later, for use with this driver.

#### **Enhancements**

This product enhanced the compatibility with firmware.

#### **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 5th arrest 1Gb 2-port 363i Adapter
- o HPE Ethernet 1Gb 2-port 363i Adapter
- HPE Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 4-port 366T Adapter
   10D 4-port 366T Adapter
- HPE Ethernet 1Gb 4-port 366i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- o Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE
- o 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 9.0 Version: 2025.05.00 (**Recommended**) Filename: cp065383.compsig; cp065383.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.
- o HPE recommends the firmware provided in Intel Firmware Package For E810 Ethernet Adapter, version 4.71 or later, for use with these drivers.

#### **Fixes**

This product fixes to align DDP with the new FW version and NVM 4.7.

#### **Supported Devices and Features**

This product supports the following network adapters:

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

Firmware - Network

Broadcom Firmware Package for BCM5741x adapters

Version: 233.1.135.7 (Recommended)

Filename: bcm233.1.135.7.pup.fwpkg; bcm233.1.135.7.pup.json

### **Important Note!**

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

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

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 233.0.148.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-233.0.152. or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.05.00 or later

## <u>Fixes</u>

- This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries.
- This product fixes an issue where VLAN-tagged packets were looped back or misrouted due to VEB behavior, causing TCP retransmissions and link instability in LACP configurations.
- This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.
- o This product fixes an issue where Broadcom NXE NICs could overheat and become unrecognized when MCTP was disabled.

#### **Supported Devices and Features**

This product supports the following network adapters:

- o HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter
- o 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: 233.1.135.7 (Recommended)

Filename: bcm233.1.135.7\_Thor.pup.fwpkg; bcm233.1.135.7\_Thor.pup.json

## Important Note!

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

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

o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 233.0.148.0 or later

- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-233.0.152.2 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.05.00 or later

#### **Fixes**

- o This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries
- This product fixes an issue where VLAN-tagged packets were looped back or misrouted due to VEB behavior, causing TCP retransmissions and link instability in LACP configurations.
- This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

## Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p Adapter

Version: 233.1.135.7 (Recommended)

Filename: BCM233.1.135.7\_BCM957608-P2100HQF00.fwpkg; BCM233.1.135.7\_BCM957608-P2100HQF00.json

#### **Important Note!**

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

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

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 233.0.148.0 or later
   HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-233.0.152.2 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.05.00 or later

#### **Fixes**

- o This product fixes an issue where firmware updates failed when using the UEFI-FMP update method.
- o This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand
- This product fixes an issue where VLAN-tagged packets were looped back or misrouted due to VEB behavior, causing TCP retransmissions and link instability in LACP configurations
- This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

#### **Supported Devices and Features**

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter

Version: 233.1.135.7 (Recommended)

Filename: BCM233.1.135.7\_BCM957608-N2100HQI00.fwpkg; BCM233.1.135.7\_BCM957608-N2100HQI00.json

#### Important Note!

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

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

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 233.0.148.0 or later
   HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-233.0.152. or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.05.00 or later

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

- o This product fixes an issue where firmware updates failed when using the UEFI-FMP update method.
- This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand
- This product fixes an issue where VLAN-tagged packets were looped back or misrouted due to VEB behavior, causing TCP retransmissions and link instability in LACP configurations.
- This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

#### Supported Devices and Features

This product supports the following network adapters:

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

Broadcom NX1 Online Firmware Upgrade Utility for VMware

Version: 1.42.0 (Recommended)

Filename: CP066652.compsig; CP066652.zip

## **Important Note!**

This software package contains combo image v20.33.41 with the following firmware versions:

NIC	<b>Boot Code Version</b>	PXE Version	NCSI Version	<b>UEFI</b> Version
BCM 5719 1GbE 4p BASE-T Adptr	1.60	21.6.4	1.5.61	21.6.90

BCM 5719 1GbE 4p BASE-T OCP3 Adptr	1.60	21.6.4	1.5.61	21.6.90
BCM 5719 1GbE 4p BASE-T LOM Adptr	1.60	21.6.4	1.5.61	21.6.90
BCM 5720 1GbE 2p BASE-T LOM Adptr	1.43	21.6.4	1.5.61	21.6.90

#### **Prerequisites**

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

#### **Fixes**

This product fixes an issue where MBA configuration reset to defaults on port 3 and 4 for BCM5719 4-port adapters after updating firmware.

#### **Supported Devices and Features**

This product supports the following network adapters:

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

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware

Version: 226.1.107.0 (B) (Recommended) Filename: CP065663.compsig; CP065663.zip

### **Important Note!**

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

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

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

### **Prerequisites**

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

## **Fixes**

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

#### **Enhancements**

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

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

Version: 4.71 (Recommended)

Filename: HPE\_E810\_2CQDA2\_0\_SEC\_4p71\_PLDMoMCTP\_80020037.fwpkg; HPE\_E810\_2CQDA2\_0\_SEC\_4p71\_PLDMoMCTP\_80020037.json

#### Important Note!

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- o Intel ice Drivers for Linux, version 1.15.4-1 or later
- o Intel icen Driver for VMware, version 2025.05.00 or later

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

#### **Fixes**

- o This product fixes an issue where the speed may be downgraded to Gen3.
- This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- o This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

#### **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: 4.71 (Recommended)

Filename: HPE\_E810\_CQDA2\_4p71\_PLDMoMCTP\_8002003C.fwpkg; HPE\_E810\_CQDA2\_4p71\_PLDMoMCTP\_8002003C.json

#### **Important Note!**

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- o Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later

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

### **Fixes**

- o This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

#### Supported Devices and Features

This product supports the following network adapters:

o 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: 4.71 (Recommended)

Filename: HPE\_E810\_CQDA2\_OCP\_4p71\_NCSIwPLDMoMCTP\_80020036.fwpkg; HPE\_E810\_CQDA2\_OCP\_4p71\_NCSIwPLDMoMCTP\_80020036.json

## Important Note!

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- o Intel icen Driver for VMware, version 2025.05.00 or later

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

#### **Fixes**

- o This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.

- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

#### **Supported Devices and Features**

This product supports the following network adapters:

o 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: 4.71 (Recommended)

Filename: HPE\_E810\_XXVDA2\_SD\_4p71\_PLDMoMCTP\_80020038.fwpkg; HPE\_E810\_XXVDA2\_SD\_4p71\_PLDMoMCTP\_80020038.json

#### **Important Note!**

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- o Intel icen Driver for VMware, version 2025.05.00 or later

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

#### **Fixes**

- o This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- o This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

#### **Supported Devices and Features**

This product supports the following network adapters:

o 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: 4.71 (Recommended)

Filename: HPE\_E810\_XXVDA2\_SD\_OCP\_4p71\_NCSIwPLDMoMCTP\_8002003D.fwpkg; HPE\_E810\_XXVDA2\_SD\_OCP\_4p71\_NCSIwPLDMoMCTP\_8002003D.json

### Important Note!

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later

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

#### **Fixes**

- This product fixes an issue where the speed may be downgraded to Gen3.
- This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- o This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- o This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- $\bullet \ \ \, \text{This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.} \\$

## Supported Devices and Features

This product supports the following network adapters:

o 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: 4.71 (Recommended)

Filename: HPE\_E810\_XXVDA4\_FH\_4p71\_PLDMoMCTP\_8002003E.fwpkg; HPE\_E810\_XXVDA4\_FH\_4p71\_PLDMoMCTP\_8002003E.json

#### **Important Note!**

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

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

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- o Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later

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

### **Fixes**

- This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- o This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- o This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

#### **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

ersion: 4.71 (Recommended)

Filename: HPE E810\_XXV4\_OCP\_4p71\_NCSIwPLDMoMCTP\_80020035.fwpkg; HPE\_E810\_XXV4\_OCP\_4p71\_NCSIwPLDMoMCTP\_80020035.json

#### **Important Note!**

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

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

- Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- o Intel ice Drivers for Linux, version 1.15.4-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later

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

#### **Fixes**

- This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.
- This product fixes an issue where the RDE: Setting property (AutoSpeedNegotiationEnabled) does not cause the property value to update, returning a code 400.
- o This product fixes an issue where the RDE fails to perform the get operation when the adapter is configured as pass-through.
- This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

## **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: 3.26.1 (Recommended)

Filename: CP065266.compsig; CP065266.zip

## Important Note!

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

NIC	EEPROM/NVM Version	OROM Version	Single NVM Version	FW Version
HPE Ethernet 10Gb 2-port SFP+ OCP3 X710-DA2 Adapter	8000F8E2	1.3755.0	N/A	9.53
HPE Ethernet 10Gb 2-port SFP+ X710-DA2 Adapter	8000F8EE	1.3755.0	N/A	9.53
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter	8000123F	1.3755.0	N/A	N/A
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter	80001234	1.3755.0	N/A	N/A
Intel(R) I350 Gigabit Network Connection (2-port)	8000119C	1.3755.0	N/A	N/A
Intel(R) I350 Gigabit Network Connection (4-port)	8000119D	1.3755.0	N/A	N/A

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

#### **Prerequisites**

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

#### **Enhancements**

This product enhanced the compatibility with the latest drivers.

#### **Supported Devices and Features**

This package supports the following network adapters:

- o Intel(R) I350 Gigabit Network Connection (2-port)
- Intel(R) I350 Gigabit Network Connection (4-port)
- o 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: 26.44.1036 (Recommended)

Filename: 26\_44\_1036-MCX631102AS-ADA\_Ax.pldm.fwpkg; 26\_44\_1036-MCX631102AS-ADA\_Ax.pldm.json

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A list of known issues with this release is available at: <a href="https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26441036/known+issues">https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26441036/known+issues</a>

#### **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 26.44.1036:

• A reference counter issue that resulted in the firmware assertion 0x889f with CQ reference counter underflow to solve a race condition.

### **Enhancements**

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

## New features and changes included in version 26.44.1036:

- Enabled the get\_pf\_mac\_address function for all available PFs.
- Enhanced traffic management of PTP packets to reduce their impact on regular network traffic.
- Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

### **Supported Devices and Features**

<b>HPE Part Number</b>	ber Mellanox Ethernet Only Adapters	
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: 26.44.1036 (Recommended)

Filename: 26\_44\_1036-MCX631432AS-ADA\_Ax.pldm.fwpkg; 26\_44\_1036-MCX631432AS-ADA\_Ax.pldm.json

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A list of known issues with this release is available at: <a href="https://docs.nvidia.com/networking/display/connectx6/kfirmwarev26441036/known+issues">https://docs.nvidia.com/networking/display/connectx6/kfirmwarev26441036/known+issues</a>

#### **Prerequisites**

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

#### **Fixes**

#### The following issues have been fixed in version 26.44.1036:

o A reference counter issue that resulted in the firmware assertion 0x889f with CQ reference counter underflow to solve a race condition.

#### **Enhancements**

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

### New features and changes included in version 26.44.1036:

- Enabled the get\_pf\_mac\_address function for all available PFs.
- Enhanced traffic management of PTP packets to reduce their impact on regular network traffic.
   Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

#### **Supported Devices and Features**

<b>HPE Part Number</b>	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 Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE

Version: 22.44.1036 (Recommended)

Filename: 22\_44\_1036-MCX623105AS-VDA\_Ax.pldm.fwpkg; 22\_44\_1036-MCX623105AS-VDA\_Ax.pldm.json

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6dxfirmwarev22441036/known+issues

#### **Prerequisites**

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

## **Fixes**

### The following issues have been fixed in version 22.44.1036:

o Traffic would halt and recovery would be prevented when the emulation doorbell malfunctioned.

## **Enhancements**

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

#### New features and changes included in version 22.44.1036:

- Unified PTP is now supported across different VFs on the same PF.
- Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

## **Supported Devices and Features**

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

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

Version: 22.44.1036 (Recommended)

Filename: 22\_44\_1036-MCX623106AS-CDA\_Ax.pldm.fwpkg; 22\_44\_1036-MCX623106AS-CDA\_Ax.pldm.fson

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6dxfirmwarev22441036/known+issues

#### **Prerequisites**

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

#### **Fixes**

#### The following issues have been fixed in version 22.44.1036:

o Traffic would halt and recovery would be prevented when the emulation doorbell malfunctioned.

#### **Enhancements**

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

#### New features and changes included in version 22.44.1036:

- o Unified PTP is now supported across different VFs on the same PF.
- Added a new NV config (SM\_DISABLE, default 0) which, when enabled, blocks SMP traffic that does not originate from the SM.
- Added the ability to set cable length as a parameter in the PFCC access register. The cable length is used in the calculation of RX lossless buffer parameters, including size, Xoff, and Xon thresholds.

#### **Supported Devices and Features**

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

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

Version: 16.35.4506 (Recommended)

Filename: 16\_35\_4506-MCX515A-CCA\_HPE\_Ax.pldm.fwpkg; 16\_35\_4506-MCX515A-CCA\_HPE\_Ax.pldm.json

#### Important Note!

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx5firmwarev16354506lts/known+issues

### **Prerequisites**

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

### **Fixes**

#### The following issues have been fixed in version 16.35.4506:

Incorrect MPLS packets discards flow occurred when the GLOBAL pause capability was disabled.

### **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 16.35.4506:

o Added address validation in MLNX OEM CMD 0x0032 (get debug info) to be 4- bytes aligned.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA Ethernet Only Adapters	Firmware Version	PSID
HPE Ethernet 100Gb 1-port QSFP28 PCIe3 x16 MCX515A-CCAT Adapter(P31246-B21 and P31246-H21)	16.35.4506	MT_0000000591

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

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653105A-HDA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653105A-HDA\_HPE\_Ax.pldm.json

#### **Important Note!**

For PLDM enabled VPI (Virtual Protocol Interconnect) adapters supporting both InfiniBand mode and Ethernet modes, every firmware version is made available in two different formats at HPF.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/connectx6firmwarev20432566lts/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 20.43.2566:

o Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

#### **Enhancements**

No changes or new features have been included in version 20.43.2566.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA VPI Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 MCX653105A-HDAT Adapter (P23664-B21 and P23664-H21)	20.43.2566	MT_0000000451

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter: HPE part numbers P31323-B21 and

P31323-H21

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653435A-HDA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653435A-HDA\_HPE\_Ax.pldm.json

#### **Important Note!**

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/known+issues

#### **Prerequisites**

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

### Fixes

The following issues have been fixed in version 20.43.2566:

o Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

#### **Enhancements**

No changes or new features have been included in version 20.43.2566.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA VPI Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 PCIe4 x16 OCP3 MCX653435A-HDAI Adapter (P31323-B21 and P31323-H21)	20.43.2566	MT_0000000592

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter: HPE part numbers P31324-B21 and P31324-H21

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653106A-HDA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653106A-HDA\_HPE\_Ax.pldm.json

### **Important Note!**

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

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

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

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/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 20.43.2566:

• Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

### **Enhancements**

No changes or new features have been included in version 20.43.2566.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA VPI Adapter	Firmware Version	PSID
HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 MCX653106A-HDAT Adapter(P31324-B21 and P31324-H21)	20.43.2566	MT_0000000594

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

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653436A-HDA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653436A-HDA\_HPE\_Ax.pldm.json

#### **Important Note!**

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

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

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

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/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 20.43.2566:

o Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

### **Enhancements**

No changes or new features have been included in version 20.43.2566.

### **Supported Devices and Features**

This software package contains the following firmware versions:

Ī	NVIDIA VPI Adapter	Firmware Version	PSID
E	HPE InfiniBand HDR/Ethernet 200Gb 2-port QSFP56 PCIe4 x16 OCP3 MCX653436A-HDAI Adapter (P31348-B21 and P31348-H21)	20.43.2566	MT_0000000593

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

P23665-H21

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653105A-ECA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653105A-ECA\_HPE\_Ax.pldm.json

#### **Important Note!**

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/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 20.43.2566:

o Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

#### **Enhancements**

No changes or new features have been included in version 20.43.2566.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA VPI Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 PCIe4 x16 MCX653105A-ECAT Adapter (P23665-B21 and P23665-H21)	20.43.2566	MT_0000000452

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

P23666-H21

Version: 20.43.2566 (Recommended)

Filename: 20\_43\_2566-MCX653106A-ÉCA\_HPE\_Ax.pldm.fwpkg; 20\_43\_2566-MCX653106A-ECA\_HPE\_Ax.pldm.json

### **Important Note!**

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

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

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

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

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

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

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A list of known issues with this release is available at:  $\frac{https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/known+issues}{https://docs.nvidia.com/networking/display/connectx6firmwarev20432566lts/known+issues}$ 

### **Prerequisites**

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

#### **Fixes**

#### The following issues have been fixed in version 20.43.2566:

o Resolved an issue that caused the SLRG register to be unreadable when using the SMP AccessRegister MAD.

#### **Enhancements**

No changes or new features have been included in version 20.43.2566.

#### **Supported Devices and Features**

This software package contains the following firmware versions:

NVIDIA VPI Adapter	Firmware Version	PSID
HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 PCIe4 x16 MCX653106A-ECAT Adapter (P23666-B21 and P23666-H21)	20.43.2566	MT_0000000453

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter: HPE part numbers P45641-B23 and P45641-H23 Version: 28.45.1200 (Recommended)

Filename: 28\_45\_1200-MCX75310AAS-NEAT\_HPE2\_Ax.pldm.fwpkg; 28\_45\_1200-MCX75310AAS-NEAT\_HPE2\_Ax.pldm.json

### **Important Note!**

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

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

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

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A list of known issues with this release is available at: <a href="https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues">https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues</a>

#### **Fixes**

The following fixes have been included in version 28.45.1200:

o Fixed DC InfiniBand functionality.

## **Enhancements**

New features and changes included in version 28.45.1200:

Introduced a 1ms delay for SPDM responses.

### **Supported Devices and Features**

<b>HPE Part Number</b>	NVIDIA VPI Adapter	PSID
P45641-B23	HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter (P45641-B23 and P45641-H23)	MT_0000001120

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

Version: 28.45.1200 (Recommended)

Filename: 28\_45\_1200-MCX75310AAS-HEAT\_HPE2\_Ax.pldm.fwpkg; 28\_45\_1200-MCX75310AAS-HEAT\_HPE2\_Ax.pldm.fson

#### **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/connectx7firmwarev28451200/known+issues

#### **Prerequisites**

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

### **Fixes**

The following fixes have been included in version 28.45.1200:

Fixed DC InfiniBand functionality.

#### **Enhancements**

New features and changes included in version 28.45.1200:

o Introduced a 1ms delay for SPDM responses.

#### **Supported Devices and Features**

<b>HPE Part Number</b>	NVIDIA VPI Adapter	PSID
P45642-B22	HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter (P45642-B22 and P45642-H22)	MT_0000001119

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

Version: 28.45.1200 (Recommended)

Filename: 28\_45\_1200-MCX755106AC-HEAT\_HPE\_Ax.pldm.fwpkg; 28\_45\_1200-MCX755106AC-HEAT\_HPE\_Ax.pldm.json

#### **Important Note!**

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues

#### **Fixes**

The following fixes have been included in version 28.45.1200:

o Fixed DC InfiniBand functionality.

#### **Enhancements**

New features and changes included in version 28.45.1200:

• Introduced a 1ms delay for SPDM responses.

#### Supported Devices and Features

HPE Part Number NVIDIA VPI Adapter PSID	
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Firmware - Storage Controller

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Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.26.3.5487 (B) (Recommended) Filename: CP066018.compsig; CP066018.zip

#### **Enhancements**

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR216i-p Gen11 Tri Mode Controller

Version: 52.26.3.5487 (B) (Recommended) Filename: CP066019.compsig; CP066019.zip

#### **Enhancements**

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.26.3.5487 (B) (Recommended) Filename: CP066020.compsig; CP066020.zip

#### **Enhancements**

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.26.3.5487 (B) (Recommended) Filename: CP066021.compsig; CP066021.zip

#### **Enhancements**

Support VMware ESXi 9.0.

Controller Firmware Flash for ESXi8.0 and 9.0 - HPE MR416i-p Gen11 Tri Mode Controller

Version: 52.26.3.5487 (B) (Recommended) Filename: CP066022.compsig; CP066022.zip

#### **Enhancements**

Support VMware ESXi 9.0.

Firmware Package - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P204i-c, P416ie-m and P816i-a SR Gen10 and SR308i-o, SR308i-p Gen11 controllers

Version: 7.43 (**Recommended**)
Filename: HPE SR Gen10 7.43 A.fwpkg

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### <u>Fixes</u>

- Fixed an issue where a lockup occasionally occurs when RAID 0 Predictive Spare Rebuilding (PSR) starts.
- o Fixed an issue where the fault LED remains lit during the rebuild process of a replaced SSD drive.
- Fixed an issue where the host was unable to retrieve new configuration updates after creating a logical drive on PF drives.
  Fixed an issue where the logical volume status was incorrectly reported as OK on a secured volume if a data drive was replaced with an Otherwise Owned SED drive before reboot.
- Fixed an issue where the surface scan period was not reset to default after factory reset.
- Fixed an issue where the predictive failure drive did not fail even after the Predictive Spare Rebuild (PSR) was completed.
- Fixed an issue where the Controller might have a potential lockup after a JBOD power cycle.
- Fixed an issue where the offline replacement of a failed drive during a spare rebuild led to the failure of the replacement drive.
- Fixed a lockup issue that could occur both during a transformation with an abrupt shutdown, and on subsequent bootup.
- Fixed an intermittent MCTP communication issue during AC power cycle tests on specific configurations.
- Fixed an MCTP communication issue in AMD Turin 2P configurations.
- Fixed a lockup issue that could occur when a timeout occurs with expander attached SATA drives.
- Fixed an issue with improper support checking for the secure erase command.
- Fixed issues for missing active dedicated hot spare member in HII logical drive information and failed drive part of a logical drive in the HII disk utilities.
- Fixed an issue which threw wrong error code, 'InternalError' when creating an array on controller that is waiting on adapter password.
- o Fixed an issue When server is powered on with no drives connected to Enclosure. Observe incorrect controller information in iLO Storage tab & Redfish
- Fixed an issue that enclosures Link is missing under Storage URI in Redfish.
- Fixed an issue in which drive resource does not match with Chassis for empty bay.
- Fixed an issue in which incorrect severity warning of drive when sanitize erase operation is in progress.
- Fixed an issue where HealthRollup shows warning during normal state.
- Fixed an issue where CacheSummary.Status.Health shows incorrect during WriteCache degraded.
- o Fixed an issue in which PLDM/RDE Read sometimes take longer than 6s during array deletion.

#### **Enhancements**

- o PLDM Base (Type 0) commands comply with v1.2.0 of the PLDM base specification (DSP0240).
- o PLDM Platform Monitoring and Control (Type 2) commands comply with v1.3.0 of the PLDM Platform Monitoring and Control Specification (DSP0248).
- Long-running task support for volume creation/deletion using Redfish and storage resource RDE action operations.

Firmware Package - HPE Gen11 Boot Controller NS204i-u, NS204i-d and HPE Gen10 Plus Boot Controller NS204i-p, NS204i-d, NS204i-t, NS204i-r

Version: 1.2.14.1018 (D) (Recommended)

Filename: HPE\_NS204i\_Gen10p\_Gen11\_1.2.14.1018\_D.fwpkg; HPE\_NS204i\_Gen10p\_Gen11\_1.2.14.1018\_D.json

#### Important Note!

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

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

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

#### **Prerequisites**

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

#### **Enhancements**

Support new Gen 12 servers.

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 (Recommended)

Filename: HPE\_MR216i-o\_Gen11\_52.32.3-6118\_A.fwpkg; HPE\_MR216i-o\_Gen11\_52.32.3-6118\_A.json

#### **Important Note!**

This new 7.32 release have not completed vSAN certification, please don't update for vSAN environment for now. Target to complete vSAN certification by end of July 2025.

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

#### **Prerequisites**

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

# <u>Fixes</u>

- Fix a00147824en\_us: HPE MR408i-p Gen11 Storage Controller A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- Fix a00143381en\_us: HPE MR Gen10 Plus/Gen11 Controllers A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a IBOD
- Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
- Filter out underruns error prints to avoid flooding of TTY logs
- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
- Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
- o Fix an issue that firmware may assert while doing full initialization on logical drive with NVME drives which have task management timeout
- Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
- Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
- o Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop
- Fix a rare issue that controller brick may happen if Task Management failure recovery reset in the middle of a firmware flashing sequence
- Fix an issue that Cryptographic Erase option may be shown for a drive that does not support it. The issue happens when replacing a few Crypto-Erase-capable drives with drives that do not support Crypto Erase.
- Fix an issue that SPDM is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIndentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- $\circ~$  Fix an issue that foreign configuration import is not accessible from RDE after reboot
- Fix a rare timing issue that Cache Offload failed with error No offload detected
- Fix a rare issue that firmware may assert while running firmware update when the bootloaders in two firmwares are different versions.
- Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- o Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

#### **Enhancements**

- o DMTF PLDM Redfish Device Enablement enhancements
  - o Redfish Compliance to 2024.2 Schema Bundle
    - o Updated the dictionary to the 2024.2 schema bundle
    - GET/PATCH StorageController[AssetTag]
    - GET/PATCH Storage.HotspareActivationPolicy

Note: The Storage.HotspareActivationPolicy is modifiable only when the Copyback feature is enabled in FW. By default, Copyback feature is turned on along with smarthdd and smartssd. User can disable the Copyback feature from storcli. To enable or disable the Copyback feature, see "storcli /cx set copyback" details in the MR SW user guide.

GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.

- GET Port[PortProtocol], [PortType]
- o EKM Rekey support
  - POST #Storage.RekeyExternalKey Action from the Storage Schema.
  - o Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
  - This improvement resolves a00143111en\_us: HPE MR Gen11 and Gen10 Plus Controllers Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
- o Increased Frequency of Temperature Polling for NVMe Drives
  - o Default value is set to 15 seconds
  - o The parameter can be queried and configured using StorCLI
- Second Source NAND Flash
  - o Controller firmware downgrades to below 7.26 (PR3 or earlier) are blocked on a controller using second source NAND flash.
  - o The first source NAND flash size is 23.625 GB; the second source NAND flash size is 21.301 GB. This information can be obtained from "CacheVault Flash Size" parameter in the "storcli /cx show all" command.
- Add support for NVMe 2.0 drives
- o When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- Add support for enable/disable controller phys
  - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- Added support for reporting Gen 5 physical disk speed
- Support for SCSI NVMe Translation Layer Specification version 1.15
- Enhance Smart Poll Failures
  - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
  - o If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next cycle.
  - o On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
  - o Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.
- o Set physical drive media type to unknown when the drive is misbehaving
- o Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- Improve handling of malformed/invalid/bad CDBs.
  - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
  - o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller

Version: 52.32.3-6118 (Recommended)

 $\label{eq:Filename: HPE_MR216i-p_Gen11_52.32.3-6118\_A.fwpkg; HPE\_MR216i-p\_Gen11\_52.32.3-6118\_A.json \\$ 

#### **Important Note!**

This new 7.32 release have not completed vSAN certification, please don't update for vSAN environment for now. Target to complete vSAN certification by end of July 2025.

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

### **Prerequisites**

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

## <u>Fixes</u>

- Fix a00147824en\_us: HPE MR408i-p Gen11 Storage Controller A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- Fix a00143381en\_us: HPE MR Gen10 Plus/Gen11 Controllers A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
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- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
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- $\circ~$  Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
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- o Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
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- Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop
- o Fix a rare issue that controller brick may happen if Task Management failure recovery reset in the middle of a firmware flashing sequence
- Fix an issue that Cryptographic Erase option may be shown for a drive that does not support it. The issue happens when replacing a few Crypto-Erase-capable drives with drives that do not support Crypto Erase.
- o Fix an issue that SPDM is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIndentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- Fix an issue that foreign configuration import is not accessible from RDE after reboot

- Fix a rare timing issue that Cache Offload failed with error No offload detected
- Fix a rare issue that firmware may assert while running firmware update when the bootloaders in two firmwares are different versions.
- o Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

#### **Enhancements**

- o DMTF PLDM Redfish Device Enablement enhancements
  - o Redfish Compliance to 2024.2 Schema Bundle
    - Updated the dictionary to the 2024.2 schema bundle
    - GET/PATCH StorageController[AssetTag]
    - GET/PATCH Storage.HotspareActivationPolicy

Note: The Storage.HotspareActivationPolicy is modifiable only when the Copyback feature is enabled in FW. By default, Copyback feature is turned on along with smarthdd and smartssd. User can disable the Copyback feature from storcli. To enable or disable the Copyback feature, see "storcli /cx set copyback" details in the MR SW user guide.

• GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.

- GET Port[PortProtocol], [PortType]
- o EKM Rekey support
  - o POST #Storage.RekeyExternalKey Action from the Storage Schema.
  - Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
  - This improvement resolves a00143111en\_us: HPE MR Gen11 and Gen10 Plus Controllers Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
- o Increased Frequency of Temperature Polling for NVMe Drives
  - o Default value is set to 15 seconds
  - o The parameter can be queried and configured using StorCLI
- Second Source NAND Flash
  - o Controller firmware downgrades to below 7.26 (PR3 or earlier) are blocked on a controller using second source NAND flash.
  - o The first source NAND flash size is 23.625 GB; the second source NAND flash size is 21.301 GB. This information can be obtained from "CacheVault Flash Size" parameter in the "storcli /cx show all" command.
- o Add support for NVMe 2.0 drives
- o When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- Add support for enable/disable controller phys
  - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- o Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- Added support for reporting Gen 5 physical disk speed
- Support for SCSI NVMe Translation Layer Specification version 1.15
- Enhance Smart Poll Failures
  - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
  - o If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next cycle.
  - o On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
  - o Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.
- o Set physical drive media type to unknown when the drive is misbehaving
- Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- Improve handling of malformed/invalid/bad CDBs.
  - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
  - o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 (Recommended)

Filename: HPE\_MR408i-o\_Gen11\_52.32.3-6118\_A.fwpkg; HPE\_MR408i-o\_Gen11\_52.32.3-6118\_A.json

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

## **Prerequisites**

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

## <u>Fixes</u>

- Fix a00147824en\_us: HPE MR408i-p Gen11 Storage Controller A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- Fix a00143381en\_us: HPE MR Gen10 Plus/Gen11 Controllers A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- Fix an issue that imported secured drives in a span became unsecured
- Filter drive spin-up sense prints to avoid flooding of log
- Filter out underruns error prints to avoid flooding of TTY logs
- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
- Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
   Fix an issue that firmware may assert while doing full initialization on logical drive with NVME drives which have task management timeout
- Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
- Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
- Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop
- Fix a rare issue that controller brick may happen if Task Management failure recovery reset in the middle of a firmware flashing sequence
- o Fix an issue that Cryptographic Erase option may be shown for a drive that does not support it. The issue happens when replacing a few Crypto-Erase-capable drives with drives that do not support Crypto Erase.
- Fix an issue that SPDM is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIndentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- Fix an issue that foreign configuration import is not accessible from RDE after reboot
- Fix a rare timing issue that Cache Offload failed with error No offload detected
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- Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

#### **Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - o Redfish Compliance to 2024.2 Schema Bundle
    - o Updated the dictionary to the 2024.2 schema bundle
    - GET/PATCH StorageController[AssetTag]
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GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.

- GET Port[PortProtocol], [PortType]
- o EKM Rekey support
  - POST #Storage.RekevExternalKev Action from the Storage Schema.
  - o Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
  - This improvement resolves a00143111en\_us: HPE MR Gen11 and Gen10 Plus Controllers Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
- o Increased Frequency of Temperature Polling for NVMe Drives
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- Second Source NAND Flash
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- Add support for NVMe 2.0 drives
- When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- o Add support for enable/disable controller phys
  - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- o Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- Added support for reporting Gen 5 physical disk speed
- Support for SCSI NVMe Translation Layer Specification version 1.15
- **Enhance Smart Poll Failures** 
  - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
  - o If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next
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- Improve handling of malformed/invalid/bad CDBs.
  - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.

o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller

Version: 52.32.3-6118 (Recommended)

Filename: HPE\_MR408i-p\_Gen11\_52.32.3-6118\_A.fwpkg; HPE\_MR408i-p\_Gen11\_52.32.3-6118\_A.json

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

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

#### **Fixes**

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- Fix a00143381en\_us: HPE MR Gen10 Plus/Gen11 Controllers A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a IBOD
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### **Enhancements**

- o DMTF PLDM Redfish Device Enablement enhancements
  - o Redfish Compliance to 2024.2 Schema Bundle
    - o Updated the dictionary to the 2024.2 schema bundle
    - GET/PATCH StorageController[AssetTag]
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GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.

GET Port[PortProtocol], [PortType]

o EKM Rekey support

- POST #Storage.RekeyExternalKey Action from the Storage Schema.
- Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
  - This improvement resolves a00143111en\_us: HPE MR Gen11 and Gen10 Plus Controllers Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
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- Add support for NVMe 2.0 drives
- When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- Add support for enable/disable controller phys
  - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
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- Enhance Smart Poll Failures
  - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
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Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 (Recommended)

Filename: HPE\_MR416i-o\_Gen11\_52.32.3-6118\_A.fwpkg; HPE\_MR416i-o\_Gen11\_52.32.3-6118\_A.json

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- o POST #Storage.RekeyExternalKey Action from the Storage Schema.
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Version: 52.32.3-6118 (Recommended)

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

Version: 5.04 (D) (Recommended)

Filename: D3000.fwpkg

## Important Note!

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

### **Prerequisites**

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

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

#### **Fixes**

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

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

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

#### **Supported Devices and Features**

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

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

HPE D3610B/D3710B 12Gb SAS Disk Enclosure ROM Flash Component

Version: 6.00 (D) (Recommended)

Filename: D3000B.fwpkg

### Important Note!

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

#### **Prerequisites**

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

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

#### **Fixes**

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

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

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

## **Supported Devices and Features**

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

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

Online Firmware Flash for ESXi - HPE Gen10 Plus Boot Controller NS204i-p, NS204i-d, NS204i-t, NS204i-r, NS204i-u and NS204i-d Gen11

Version: 1.0.14.1063 (C) (Recommended) Filename: CP064740.compsig; CP064740.zip

#### **Important Note!**

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

### **Enhancements**

Added ESXi9.0 support.

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

Filename: CP064739.compsig; CP064739.zip

### **Enhancements**

Added ESXi9.0 support.

Version: 02.11.01 (Recommended) Filename: mh021101.upd\_header.pldm.fwpkg

#### **Important Note!**

Release Notes:

**HPE QLogic Adapters Release Notes** 

This Firmware package contains following firmware versions:

Adapter	Speed	мві	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0

Fixed the following:

- 1. Windows BitLocker causes the system boot due to ROM signature failure during POST.
- 2. Increase an internal timeout value for SPI/Flash read.

## **Fixes**

Fixed the following:

- 1. Windows BitLocker causes the system boot due to ROM signature failure during POST.
- 2. Increase an internal timeout value for SPI/Flash read.

#### **Enhancements**

This Firmware package contains following firmware versions:

Adapter	Speed	мві	Firmware	UEFI	<b>Boot Bios</b>
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0

#### **Supported Devices and Features**

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

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

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

### 64Gb Fibre Channel Host Bus Adapter:

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

#### Software - Management

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

Version: 2025.03.00 (Recommended) Filename: cp064439.compsig; cp064439.zip

## **Enhancements**

Support VMware ESXi 9.0.

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 9.0 for Gen10/Gen10 Plus/Gen11 Controllers

Version: 2025.03.01 (Recommended) Filename: cp064903.compsig; cp064903.zip

#### **Important Note!**

o Actual ESXi Version is 6.50.8.0

### **Enhancements**

o Initial Release.

### Software - Storage Controller

HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers)

Version: 2025.05.01 (Recommended) Filename: cp064828.compsig; cp064828.zip

## **Important Note!**

o Actual ESXi Version is 007.3210.0000.0000

#### **Enhancements**

- o Increase the frequency of temperature polling for NVMe drives. Use the following commands to show or set the option.
  - storcli /cx show nvmeThermalPollInterval
  - storcli /cx set nvmeThermalPollInterval=<value>
- Add max drive rate (32 GTPS) display for Gen 5 Drive
- Support Drive makers authority in storcli
  - If the support bit is set displaying new property "Makers Authority Enabled" in drive details show all command
- Physical Disk type Unknown for cases where Physical Drive is misbehaving
- o Enhanced Firmware logging during Boot. Use the following commands to show or set the option.
  - storcli /cx show inactivityprint
  - storcli /cx set inactivityprint=<on|off>
- o Update the readme and license file
- Controller show all command (storcli /cx show all) lists "Power Saving option = Enable"
- o Support for Link isolation power savings. Add below command to enable/disable a phy.
  - storcli /cx/px set state=<on|off>
- Remove DimmerSwitch option from storcli
- Terminology alignment for REFCLK/PERST
  - Refclk property name is changed to "PCIe Reference Clock"
  - Perst output string are changed to: 0 Default (No Override), 1 Deasserted, 2 Asserted

### Software - Storage Fibre Channel

Ton

HPE QLogic Fibre Channel driver component for VMware vSphere 9.0

Version: 2025.05.01 (**Recommended**) Filename: cp066347.compsig; cp066347.zip

#### **Important Note!**

This component is supported only on Gen11 ProLiant servers.

Release Notes:

**HPE QLogic Adapters Release Notes** 

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

This driver is only supported on VMware ESXi 9.0

#### **Prerequisites**

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

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

### **Enhancements**

Driver version 5.5.85.1

This driver is only supported on VMware ESXi 9.0

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

#### Software - System Management

<u>Top</u>

HPE Agentless Management Bundle for ESXi for Gen11 and Gen12 Servers

Version: 802.12.2.0 (Recommended)

Filename: amsdvComponent\_802.12.2.0.8-1\_24764940.zip

## Fixes S

See the  $\underline{\mathsf{AMS}}$  Release Notes for information about the issues resolved in this release.

## **Enhancements**

See the  $\underline{\mathsf{AMS}}$  Release  $\underline{\mathsf{Notes}}$  for information about the enhancements in this release.

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

Version: 2025.05.01 (**Recommended**) Filename: cp066690.compsig; cp066690.zip

## **Prerequisites**

#### For HPE servers with iLO 7:

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

#### **Fixes**

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

### **Enhancements**

See the  $\underline{\mathsf{AMS}}$  Release Notes for information about the enhancements in this release.

Integrated Smart Update Tools for VMware ESXi 8.0 and ESXi 9.0 Version: 800.6.2.0 (Recommended)

Filename: sutComponent\_800.6.2.0.8-0-signed\_component.zip

## **Important Note!**

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

### **Fixes**

See the  $\underline{\mathsf{iSUT}}$  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.

**BIOS - System ROM** 

ROM Flash Firmware Package - HPE ProLiant DL110 Gen11 (U62) Servers Version:  $2.50\_04-22-2025$  (**Recommended**) Filename:  $U62\_2.50\_04\_22\_2025$ .fwpkg

# Important Note! Important Notes:

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### **Deliverable Name:**

HPE ProLiant DL110 Gen11 System ROM - U62

#### **Release Version:**

2.50 04-22-2025

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

2.50\_04-22-2025

#### **Previous Revision:**

2.48\_03-11-2025

## Firmware Dependencies:

None

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

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### **Known Issues:**

None

# **Fixes**

## **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### **Firmware Dependencies:**

None

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### **Known Issues:**

None

#### **Enhancements**

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

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

Version: 2.50\_04-22-2025 (**Recommended**) Filename: U63\_2.50\_04\_22\_2025.fwpkg

#### **Important Note!**

#### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### Deliverable Name:

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

#### Release Version:

2.50 04-22-2025

## Last Recommended or Critical Revision:

2.50 04-22-2025

## Previous Revision:

2.48\_03-11-2025

#### Firmware Dependencies:

None

#### Enhancements/New Features:

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

 $\label{lem:configuration} \mbox{Added help text for "Smooth Cooling" in system configuration (RBSU) option.}$ 

Restored the BIOS/Platform Configuration (RBSU) option called PCIe Device Configuration. This option can be used to enable and disable embedded NICs (Network Interface Cards) on DL320 Gen11.

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

### **Known Issues:**

None

**Fixes** 

#### \_\_\_\_\_

## Important Notes:

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

### Firmware Dependencies:

None

## Problems Fixed:

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

 ${\tt Addressed\ an\ issue\ where\ the\ messages\ of\ "HPE\ Intelligent\ Provisioning"\ is\ incorrect\ for\ OEM\ customers.}$ 

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### Known Issues:

None

#### **Enhancements**

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

Restored the BIOS/Platform Configuration (RBSU) option called PCIe Device Configuration. This option can be used to enable and disable embedded NICs (Network Interface Cards) on DL320 Gen11.

ROM Flash Firmware Package - HPE Alletra 4110/Alletra 4120/ProLiant DL380a Gen11 (U58) Servers

Version: 2.50 04-22-2025 (Recommended)

Filename: U58\_2.50\_04\_22\_2025.fwpkg

#### **Important Note!**

#### Important Notes:

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### **Deliverable Name:**

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

#### Release Version:

2.50\_04-22-2025

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

2.50 04-22-2025

#### Previous Revision:

2.48 03-11-2025

#### Firmware Dependencies:

None

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

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

### **Known Issues:**

None

## **Fixes Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

### Firmware Dependencies:

### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

### **Known Issues:**

#### **Enhancements**

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

ROM Flash Firmware Package - HPE ProLiant DL20 Gen11/ML30 Gen11/MicroServer Gen11 (U65) Servers

Version: 2.22\_05-16-2025 (**Optional**) Filename: U65\_2.22\_05\_16\_2025.fwpkg

#### **Important Note!**

#### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel Catlow Refresh MR1 BKC. This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.03.04.058.0 (2.20\_03\_03\_2025).

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

#### **Deliverable Name:**

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

#### Release Version:

2.22\_05-16-2025

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

2.20\_03-21-2025

## Previous Revision:

2.20\_03-21-2025

#### Firmware Dependencies:

None

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

Updated multi-language translation.

Added the help text for "Smooth Cooling" RBSU option.

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

#### **Known Issues:**

**Important Notes:** 

None

## <u>Fixes</u>

This version of the System ROM contains updates aligned with the Intel Catlow Refresh MR1 BKC. This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.03.04.058.0 (2.20\_03\_03\_2025).

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

## Firmware Dependencies:

None

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

#### **Known Issues:**

None

#### **Enhancements**

Updated multi-language translation.

Added the help text for "Smooth Cooling" RBSU option.

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

Version: 2.50\_04-22-2025 (**Recommended**) Filename: U59\_2.50\_04\_22\_2025.fwpkg

#### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### **Deliverable Name:**

HPE ProLiant DL560 Gen11 System ROM - U59

#### Release Version:

2.50 04-22-2025

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

2.50 04-22-2025

#### **Previous Revision:**

2.48\_03-11-2025

### Firmware Dependencies:

None

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

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

#### Problems Fixed:

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### **Known Issues:**

None

## <u>Fixes</u>

#### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

### Firmware Dependencies:

None

### Problems Fixed:

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### **Known Issues:**

None

## **Enhancements**

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

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

Version: 2.50\_04-22-2025 (**Recommended**) Filename: U54\_2.50\_04\_22\_2025.fwpkg

## Important Note!

### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

#### **Deliverable Name:**

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

#### Release Version:

2.50\_04-22-2025

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

2.50\_04-22-2025

#### **Previous Revision:**

2.48\_03-11-2025

### Firmware Dependencies:

None

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

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

 $Addressed\ an\ issue\ where\ the\ messages\ of\ "HPE\ Intelligent\ Provisioning"\ is\ incorrect\ for\ OEM\ customers.$ 

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

#### **Known Issues:**

None

**Fixes** 

#### **Important Notes:**

This version of the System ROM contains updates aligned with the Intel IPU 2025.2 updates.

This version of the System ROM should be paired with Server Platform Services (SPS) Firmware 06.01.04.089.0 (2.50\_04\_01\_2025).

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

### Firmware Dependencies:

None

#### **Problems Fixed:**

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the Intel PCH model name might be unknown in system configuration (RBSU) -> System information.

Addressed an issue where the system might fail to detect EDSFF SED drives with Intel VROC.

## **Known Issues:**

None

### **Enhancements**

Disabled AMP Prefetch for 'vRAN' Workload Profile to aligned with Intel BIOS Settings for FlexRAN v2.0.

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

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

Version: 1.60\_04-21-2025 (**Recommended**) Filename: A58\_1.60\_04\_21\_2025.fwpkg

### **Important Note!**

### **Important Notes:**

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

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

### Deliverable Name:

HPE System ROM - A58

### Release Version:

1.60\_04-21-2025

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

1.60\_04-21-2025

#### **Previous Revision:**

1.52\_03-11-2025

#### Firmware Dependencies:

None

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

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

Added the System Configuration (RBSU) option "PCIe Device Configuration/Advanced PCIe Configuration/PCIe Hot-Plug Error Control" and set to "Hot-Plug Surprise" by default. This setting has the following Redfish property:

/redfish/v1/systems/1/bios/settings/PcieHotPlugErrControl

#### Problems Fixed:

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the system may encounter RSOD and fail to update firmware while performing firmware update.

Addressed an issue where the system may encounter RSOD if NVMe-oF target did not have partitions.

#### **Known Issues:**

None

**Fixes** 

#### Important Notes:

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

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

#### Firmware Dependencies:

None

#### Problems Fixed:

Addressed an issue where the Name field of the Logical Drive under MR controller page might be missing or changed unintentionally after exiting and going back to the MR controller page.

Addressed an issue where the messages of "HPE Intelligent Provisioning" is incorrect for OEM customers.

Addressed an issue where the system may encounter RSOD and fail to update firmware while performing firmware update.

Addressed an issue where the system may encounter RSOD if NVMe-oF target did not have partitions.

### **Known Issues:**

None

#### **Enhancements**

Added help text for "Smooth Cooling" in system configuration (RBSU) option.

Added the System Configuration (RBSU) option "PCIe Device Configuration/Advanced PCIe Configuration/PCIe Hot-Plug Error Control" and set to "Hot-Plug Surprise" by default. This setting has the following Redfish property:

/redfish/v1/systems/1/bios/settings/PcieHotPlugErrControl

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

Version: 2.60\_07-11-2025 (**Recommended**) Filename: A56\_2.60\_07\_11\_2025.fwpkg

### **Important Note!**

#### Important Notes:

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.6 for AMD 5th Generation EPYC processors.

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

#### **Deliverable Name:**

HPE ProLiant DL325 Gen11/DL345 Gen11 System ROM - A56

#### Release Version:

2.60\_07-11-2025

## Last Recommended or Critical Revision:

2.50\_05-16-2025

### **Previous Revision:**

2.50\_05-16-2025

#### Firmware Dependencies:

None

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

An IML will be logged if the DIMM serial number is identified as "00000000"

### **Problems Fixed:**

Addressed an issue where system may hang when Microsoft secure-core support is enabled.

Addressed an issue where system may hang at RBSU while switch pages in Japanese language.

#### **Known Issues:**

None

<u>Fixes</u>

#### **Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.6 for AMD 5th Generation EPYC processors.

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

#### Firmware Dependencies:

None

#### **Problems Fixed:**

Addressed an issue where system may hang when Microsoft secure-core support is enabled.

Addressed an issue where system may hang at RBSU while switch pages in Japanese language.

#### **Known Issues:**

None

#### **Enhancements**

An IML will be logged if the DIMM serial number is identified as "00000000"

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

Version: 2.60\_07-11-2025 (**Recommended**) Filename: A55\_2.60\_07\_11\_2025.fwpkg

### Important Note!

#### **Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.6 for AMD 5th Generation EPYC processors.

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

#### **Deliverable Name:**

HPE System ROM - A55

## Release Version:

2.60\_07-11-2025

### Last Recommended or Critical Revision:

2.50\_05-16-2025

### Previous Revision:

2.50\_05-16-2025

## Firmware Dependencies:

None

## **Enhancements/New Features:**

An IML will be logged if the DIMM serial number is identified as "00000000"

### **Problems Fixed:**

Addressed an issue where system may hang when Microsoft secure-core support is enabled.

Addressed an issue where system may hang at RBSU while switch pages in Japanese language.

### **Known Issues:**

None

## <u>Fixes</u>

#### **Important Notes:**

This revision of the System ROM includes AMD reference code TurinPI 1.0.0.6 for AMD 5th Generation EPYC processors.

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

## Firmware Dependencies:

None

## **Problems Fixed:**

Addressed an issue where system may hang when Microsoft secure-core support is enabled.

Addressed an issue where system may hang at RBSU while switch pages in Japanese language.

### **Known Issues:**

None

### **Enhancements**

An IML will be logged if the DIMM serial number is identified as "00000000"  $\,$ 

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