# 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

## Gen12 SPP 2026.01.00.00 Release Notes for VMware ESXi 9.0



### BIOS - System ROM Top

ROM Flash Firmware Package - HPE ProLiant Compute DL360/DL380/ML350 Gen12/Alletra Storage Server 4210 Servers (U68) Servers
Version: 1.60_01-09-2026 **(Recommended)**
Filename: U68_1.60_01_09_2026.fwpkg; U68_1.60_01_09_2026.json

**Important Note!**

**Important Notes:**

This version of the System ROM contains updates aligned with Intel Birch Stream UPLR2 and UPLR2.5 BKC updates.

To streamline content and avoid duplication across documents, starting the Gen12 platform, the UEFI Workload Based Profiles and Tuning Guide has been deprecated, and the contents of this document are now available as part of the current UEFI System Utilities User Guide for HPE Compute Gen12 servers based on iLO7 (https://hpe.com/support/UEFIG12-iLO7-UG-en).

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

**Deliverable Name:**

HPE DL360 Gen12/DL380 Gen12/ML350 Gen12 System ROM - U68

**Release Version:**

1.60_01-09-2026

**Last Recommended or Critical Revision:**

1.60_01-09-2026

**Previous Revision:**

1.56_11-28-2025

**Firmware Dependencies:**

**Enhancements/New Features:**

Added support for displaying MRDIMM type in the RBSU memory information page.

Added NFVI-FP and NFVI-SASE profile for DL360/DL380 platforms.

Added OCP NIC Auto-Bifurcation feature

**Problems Fixed:**

Addressed an issue where the system configured with Mirrored Memory in Advanced ECC mode could become unresponsive after performing Memory Address Translation via Redfish.

Addressed an issue where the system secure boot status could appear inconsistent between RBSU and iLO.

Addressed an issue where the BootProgress property’s OSRunning status in Redfish could be report incorrectly.

Addressed an issue where an error message might pop up when accessing Encrypted Device Page (System Utility > System Configurations > RBSU> Server Security > Device Encryption Option > Device Encryptions Settings > Encrypted Device)

Addressed an issue where the system could encounter insufficient resources when GPUs were configured in Shared Direct mode.

Addressed an issue where the system might encounter a Red Screen of Death (RSOD) after installing a SMART Modular CXL card.

**Known Issues:**

**Fixes**

**Important Notes:**

This version of the System ROM contains updates aligned with Intel Birch Stream UPLR2 and UPLR2.5 BKC updates.

To streamline content and avoid duplication across documents, starting the Gen12 platform, the UEFI Workload Based Profiles and Tuning Guide has been deprecated, and the contents of this document are now available as part of the current UEFI System Utilities User Guide for HPE Compute Gen12 servers based on iLO7 (https://hpe.com/support/UEFIG12-iLO7-UG-en).

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 system configured with Mirrored Memory in Advanced ECC mode could become unresponsive after performing Memory Address Translation via Redfish.

Addressed an issue where the system secure boot status could appear inconsistent between RBSU and iLO.

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Addressed an issue where the system could encounter insufficient resources when GPUs were configured in Shared Direct mode.

Addressed an issue where the system might encounter a Red Screen of Death (RSOD) after installing a SMART Modular CXL card.

**Known Issues:**

**Enhancements**

Added support for displaying MRDIMM type in the RBSU memory information page.

Added NFVI-FP and NFVI-SASE profile for DL360/DL380 platforms.

Added OCP NIC Auto-Bifurcation feature

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ROM Flash Firmware Package - HPE ProLiant Compute XD230 (U66) Servers
Version: 1.60_01-09-2026 **(Recommended)**
Filename: U66_1.60_01_09_2026.fwpkg; U66_1.60_01_09_2026.json

**Important Note!**

**Important Notes:**

This version of the System ROM contains updates aligned with Intel Birch Stream UPLR2 and UPLR2.5 BKC updates.

To streamline content and avoid duplication across documents, starting the Gen12 platform, the UEFI Workload Based Profiles and Tuning Guide has been deprecated, and the contents of this document are now available as part of the current UEFI System Utilities User Guide for HPE Compute Gen12 servers based on iLO7 (https://hpe.com/support/UEFIG12-iLO7-UG-en).

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

**Deliverable Name:**

HPE ProLiant Compute XD230 System ROM - U66

**Release Version:**

1.60_01-09-2026

**Last Recommended or Critical Revision:**

1.60_01-09-2026

**Previous Revision:**

1.56_11-28-2025

**Firmware Dependencies:**

**Enhancements/New Features:**

Added support for displaying MRDIMM type in the RBSU memory information page.

Added NFVI-FP and NFVI-SASE profile for DL360/DL380 platforms.

Added OCP NIC Auto-Bifurcation feature

**Problems Fixed:**

Addressed an issue where the system configured with Mirrored Memory in Advanced ECC mode could become unresponsive after performing Memory Address Translation via Redfish.

Addressed an issue where the system secure boot status could appear inconsistent between RBSU and iLO.

Addressed an issue where the BootProgress property's OSRunning status in Redfish could be report incorrectly.

Addressed an issue where an error message might pop up when accessing Encrypted Device Page (System Utility > System Configurations > RBSU> Server Security > Device Encryption Option > Device Encryptions Settings > Encrypted Device)

Addressed an issue where the system could encounter insufficient resources when GPUs were configured in Shared Direct mode.

Addressed an issue where the system might encounter a Red Screen of Death (RSOD) after installing a SMART Modular CXL card.

**Known Issues:**

**Fixes**

**Important Notes:**

This version of the System ROM contains updates aligned with Intel Birch Stream UPLR2 and UPLR2.5 BKC updates.

To streamline content and avoid duplication across documents, starting the Gen12 platform, the UEFI Workload Based Profiles and Tuning Guide has been deprecated, and the contents of this document are now available as part of the current UEFI System Utilities User Guide for HPE Compute Gen12 servers based on iLO7 (https://hpe.com/support/UEFIG12-iLO7-UG-en).

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 system configured with Mirrored Memory in Advanced ECC mode could become unresponsive after performing Memory Address Translation via Redfish.

Addressed an issue where the system secure boot status could appear inconsistent between RBSU and iLO.

Addressed an issue where the BootProgress property's OSRunning status in Redfish could be report incorrectly.

Addressed an issue where an error message might pop up when accessing Encrypted Device Page (System Utility > System Configurations > RBSU> Server Security > Device Encryption Option > Device Encryptions Settings > Encrypted Device)

Addressed an issue where the system could encounter insufficient resources when GPUs were configured in Shared Direct mode.

Addressed an issue where the system might encounter a Red Screen of Death (RSOD) after installing a SMART Modular CXL card.

**Known Issues:**

**Enhancements**

Added support for displaying MRDIMM type in the RBSU memory information page.

Added NFVI-FP and NFVI-SASE profile for DL360/DL380 platforms.

Added OCP NIC Auto-Bifurcation feature

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**Driver - Network** Top

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0
Version: 2025.11.00 **(Recommended)**
Filename: cp068543.compsig; cp068543.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,* 235.1.160000 or later, for use with this driver.

**Fixes**

This product fixes issue where the RoCE driver updated the RoCE priority from the Queue Pair and Address Handle context by suppressing that value and not propagating it to the L2 driver.

**Enhancements**

This product enhances the completion queue design to support two completion queues for each Notification Queue

**Supported Devices and Features**

This product supports the following network adapters:

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

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HPE Intel ixgben Driver for VMware vSphere 9.0
Version: 2025.11.00 **(Recommended)**
Filename: cp068939.compsig; cp068939.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 3.27.0 or later, for use with this driver.
- HPE recommends the firmware provided in *Intel Firmware Package For E610-IT4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter*, version 1.22 or later, for use with this driver

**Enhancements**

This product VMware ESXi 9 supported.

**Supported Devices and Features**

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 561T Adapter
- HPE Ethernet 10Gb 2-port 561FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- Intel E610-IT4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE

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Intel icen Driver for VMware vSphere 9.0
Version: 2025.11.00 **(Recommended)**
Filename: cp067479.compsig; cp067479.zip

**Important Note!**

- This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- HPE recommends the firmware provided in *Intel Firmware Package For E810 Ethernet Adapter*, version 4.90 or later, for use with these drivers.

**Enhancements**

This product VMware ESXi 9 supported.

**Supported Devices and Features**

This product supports the following network adapters:

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

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**Driver - Storage Controller** Top

HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 9.0
Version: 2025.09.01 **(Recommended)**
Filename: cp067967.compsig; cp067967.zip

**Important Note!**

- Actual Version is  7.732.04.00

**Fixes**

- Fix a00145710en_us: HPE MR Gen11 and Gen10 Plus Storage Controllers - Purple Screen of Death (PSOD) May Be Observed When Updating Controller Firmware Via Service Pack for ProLiant (SPP) in Remote Deployment Mode With a VMware ESXi OS

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**Firmware - Network** Top

Broadcom Firmware Package for BCM57412 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957412A4121HC.fwpkg; BCM235.1.164.14_BCM957412A4121HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixed the issue where PCIe Negotiated Link Width is displaying as x4 instead of x8.
- This product fixed the issue where NICs with LR cables and transceivers showing SR mode.

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port SFP+ BCM57412 Adapter

Broadcom Firmware Package for BCM57412 OCP3 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957412N4120HC.fwpkg; BCM235.1.164.14_BCM957412N4120HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.
- This product fixes the issue where iLO BMC shared IP on OCP NIC, link flap occurred during OS reboot.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixed the issue where the System cannot power on and IML log shows Critical Temperature Threshold Exceeded.
- This product fixed the issue where PCIe Negotiated Link Width is displaying as x4 instead of x8.
- This product fixed the issue where NICs with LR cables and transceivers showing SR mode.

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port SFP+ BCM57412 OCP3 Adapter

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Broadcom Firmware Package for BCM57414 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957414A4142HC.fwpkg; BCM235.1.164.14_BCM957414A4142HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixed the issue where NICs with LR cables and transceivers showing SR mode.

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 Adapter

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Broadcom Firmware Package for BCM57414 OCP3 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957414N4140HC.fwpkg; BCM235.1.164.14_BCM957414N4140HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.

- This product fixes the issue where iLO BMC shared  IP on OCP NIC, link flap occurred during OS reboot.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixed the issue where the System cannot power on and IML log shows Critical Temperature Threshold Exceeded.
- This product fixes the issue where NICs with LR cables and transceivers showing SR mode.

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapter:

- HPE Ethernet 10/25Gb 2-port SFP28 BCM57414 OCP3 Adapter

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Broadcom Firmware Package for BCM57416 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957416A4162HC.fwpkg; BCM235.1.164.14_BCM957416A4162HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixes the issue where the Firmeare update failed on 4 MB flash cards.

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port BaseT BCM57416 Adapter

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Broadcom Firmware Package for BCM57416 OCP3 adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957416N4160HC.fwpkg; BCM235.1.164.14_BCM957416N4160HC.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where the firmware version details failed to update and the card showed as not operational after upgrading BCM5741x adapters
- This product fixes the issue where failed to detect a 10GBASE-LR SFP+ causing incorrect defaults and a link failure.
- This product fixes the issue where iLO BMC shared  IP on OCP NIC, link flap occurred during OS reboot.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.
- This product fixed the issue where the System cannot power on and IML log shows Critical Temperature Threshold Exceeded.
- This product fixes the issue where the Firmeare update failed on BCM57416 4 MB flash cards .

**Enhancements**

This product enhancement enables a self-shutdown feature to prevent overheating when certain monitoring features are disabled.
It applies only to newer hardware that originally shipped with firmware version 223.1.135.7 or higher and is not enabled on earlier revisions.

**Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port BaseT BCM57416 OCP3 Adapter

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Broadcom Firmware Package for BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter

Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957504-P425H.fwpkg; BCM235.1.164.14_BCM957504-P425H.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.164.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where, in breakout mode, a cable remove or insert failed to bring the link up because the module did not exit the DPDeactivated (Data Path Deactivated) state in time.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.

**Supported Devices and Features**

This product supports the following network adapters:

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

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Broadcom Firmware Package for BCM57504 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957504-N425H.fwpkg; BCM235.1.164.14_BCM957504-N425H.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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.164.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where, in breakout mode, a cable remove or insert failed to bring the link up because the module did not exit the DPDeactivated (Data Path Deactivated) state in time.
- This product fixes the issue where the adapter is unable to establish link after rebooting when using the "HPE 10GBASE-T SFP+ 30m RJ45 Transceiver" HPE PN 813874-B21 with vendor PN SP7053-HPE.

**Supported Devices and Features**

This product supports the following network adapters:

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

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Broadcom Firmware Package for BCM57608 100GbE 2p Adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957608-P2100HQF00.fwpkg; BCM235.1.164.14_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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where RDE "Location" property is missing under "NetworkAdapter" schema.

**Supported Devices and Features**

This product supports the following network adapters:

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

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Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter
Version: 235.1.164.14 **(Recommended)**
Filename: BCM235.1.164.14_BCM957608-N2100HQI00.fwpkg; BCM235.1.164.14_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 235.1.122.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-235.1.154.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.11.00 or later

**Fixes**

- This product fixes the issue where OS installation failed with shared nic BCM 957508-N2 100Gb/s OCP.
- This product fixes the issue where RDE "Location" property is missing under "NetworkAdapter" schema.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Broadcom NX1 Firmware Package for BCM5719 adapter
Version: 20.35.41 **(Recommended)**
Filename: BCM5719A1907HC-4x1G-20.35.41.fwpkg; BCM5719A1907HC-4x1G-20.35.41.json

**Important Note!**

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.139w or later, for use with this firmware.

**Fixes**

- This product fixes the issue where unique serial number in VPD (Vital Product Data) will be altered to a dummy serial number
- This product fixes the issue where Failing to Obtain iLO shared NIC DHCP IP and MCTP EID Missing during Reboot.
- This product fixes the issue where PCI Temperature sensor might be missing intermittently causing Increase in Fan Speed

**Supported Devices and Features**

This product supports the following network adapter:

- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE

---

Broadcom NX1 Firmware Package for BCM5719 OCP3 adapter
Version: 20.35.41 **(Recommended)**
Filename: BCM5719N1905HC-4x1G-20.35.41.fwpkg; BCM5719N1905HC-4x1G-20.35.41.json

**Important Note!**

HPE recommends *HPE Broadcom tg3 Ethernet Drivers*, versions 3.139w or later, for use with this firmware.

**Fixes**

- This product fixes the issue where unique serial number in VPD (Vital Product Data) will be altered to a dummy serial number
- This product fixes the issue where Failing to Obtain iLO shared NIC DHCP IP and MCTP EID Missing during Reboot.
- This product fixes the issue where PCI Temperature sensor might be missing intermittently causing Increase in Fan Speed

**Supported Devices and Features**

This product supports the following network adapter:

- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE

---

Intel Firmware Package For E610-IT4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter
Version: 1.30 **(Recommended)**
Filename: HPE_E610_IT4_OCP_1p30_8000E897.fwpkg; HPE_E610_IT4_OCP_1p30_8000E897.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 ixs Driver for Microsoft Windows Server, version 4.2.7.0 or later
- Intel ixgbe Drivers for Linux, version 6.2.5-1 or later
- Intel ixgben Driver for VMware, version 2025.11.00 or later

**Fixes**

- This product fixed RDE PATCH for WakeOnLANEnabled property.
- This product fixed Firmware OROM version display in VMware ESXi environment.
- This product fixed Firmware OROM version display in Linux environment.
- This product fixed NVM Version display with double digits under NIC Configuration in HPE RBSU menu.

**Supported Devices and Features**

This product supports the following network adapters:

- Intel E610-IT4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE

---

Intel Firmware Package For E810-2CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_2CQDA2_O_SEC_4p90_PLDMoMCTP_80020EF7.fwpkg; HPE_E810_2CQDA2_O_SEC_4p90_PLDMoMCTP_80020EF7.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.

**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: 4.90 (B) **(Recommended)**
Filename: HPE_E810_CQDA2_4p90_PLDMoMCTP_80020EF2.fwpkg; HPE_E810_CQDA2_4p90_PLDMoMCTP_80020EF2.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

- This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.
- This product enhanced media type detection function on PHY on 100G adapter.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_CQDA2_OCP_4p90_NCSIwPLDMoMCTP_80020EF8.fwpkg; HPE_E810_CQDA2_OCP_4p90_NCSIwPLDMoMCTP_80020EF8.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

- This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.
- This product enhanced media type detection function on PHY on 100G adapter.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_XXVDA2_SD_4p90_PLDMoMCTP_80020EF6.fwpkg; HPE_E810_XXVDA2_SD_4p90_PLDMoMCTP_80020EF6.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_XXVDA2_SD_OCP_4p90_NCSIwPLDMoMCTP_80020F00.fwpkg; HPE_E810_XXVDA2_SD_OCP_4p90_NCSIwPLDMoMCTP_80020F00.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_XXVDA4_FH_4p90_PLDMoMCTP_80020F02.fwpkg; HPE_E810_XXVDA4_FH_4p90_PLDMoMCTP_80020F02.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter
Version: 4.90 (B) **(Recommended)**
Filename: HPE_E810_XXV4_OCP_4p90_NCSIwPLDMoMCTP_80020EF3.fwpkg; HPE_E810_XXV4_OCP_4p90_NCSIwPLDMoMCTP_80020EF3.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 1.18.71.0 or later
- Intel ice Drivers for Linux, version 2.3.10-1 or later
- Intel icen Driver for VMware, version 2025.11.00 or later

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

**Fixes**

- This product fixed PXE Boot does not work when MS secured-core enabled with HPE ProLiant Gen11 AMD platform server.
- This product fixed Link Speed selection under NIC Configuration in HPE RBSU menu.

**Enhancements**

This product adds Automatic Link on Startup option under the NIC Configuration in HPE RBSU menu.

**Supported Devices and Features**

This product supports the following network adapters:

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

---

Mellanox Firmware Package(FWPKG) for HPE NVIDIA Ethernet 100Gb 2-port NVMe-oF Offload Adapter for HPE
Version: 22.45.1020 **(Recommended)**
Filename: 23_45_1020-R8M41-63001_Ax_header.pldm.fwpkg

**Prerequisites**

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

**Enhancements**

Upgraded to version 22.45.1020

**Supported Devices and Features**

| HPE Part Number | Mellanox Ethernet Only Adapters | PSID |
|---|---|---|
| P46603-B21 | NVIDIA Ethernet 100Gb 2-port NVMe-oF Offload Adapter for HPE | HPE0000000062 |

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Mellanox Firmware Package(FWPKG) for NVIDIA Ethernet 10/25Gb 2-port SFP28 NVMe-oF Crypto Adapter for HPE
Version: 26.45.1020 **(Recommended)**
Filename: 26_45_1020-S2A69-63001_Ax_header.pldm.fwpkg

**Prerequisites**

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

**Enhancements**

Upgraded to version 26.45.1020

**Supported Devices and Features**

| HPE Part Number | Mellanox Ethernet Only Adapters | PSID |
|---|---|---|
| P46603-B21 | NVIDIA Ethernet 10/25Gb 2-port SFP28 NVMe-oF Crypto Adapter for HPE | HPE0000000062 |

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NVIDIA Firmware Package (FWPKG) - Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE
Version: 26.46.3048 **(Recommended)**
Filename: 26_46_3048-MCX631102AS-ADA_Ax.pldm.fwpkg; 26_46_3048-MCX631102AS-ADA_Ax.pldm.json

**Important Note!**

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26463048/known+issues

**Prerequisites**

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

**Fixes**

**The following issues have been fixed in version 26.46.3048:**

- Configuring a small MTU led to fragmentation of packets critical for the PXE boot process. As a result, the PXE boot filters mistakenly discarded these packets, causing the PXE boot to fail.

**Enhancements**

**New features and changes included in version 26.46.3048:**

- Added support for RSS with crypto offload enabling the NIC to parallelize packet processing across CPU cores while performing encryption/decryption in hardware. Additionally, introduced a new l4_type_ext parameter with values: 0 (None), 1 (TCP), 2 (UDP), 3 (ICMP).
- Added an extra validation for the payload_len field in incoming NC-SI messages. Previously, invalid packets might have been accepted; now, such packets are silently dropped.
- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

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

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NVIDIA Firmware Package (FWPKG) - Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE
Version: 26.46.3048 **(Recommended)**
Filename: 26_46_3048-MCX631432AS-ADA_Ax.pldm.fwpkg; 26_46_3048-MCX631432AS-ADA_Ax.pldm.json

**Important Note!**

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26463048/known+issues

**Prerequisites**

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

**Fixes**

**The following issues have been fixed in version 26.46.3048:**

- Configuring a small MTU led to fragmentation of packets critical for the PXE boot process. As a result, the PXE boot filters mistakenly discarded these packets, causing the PXE boot to fail.

**Enhancements**

**New features and changes included in version 26.46.3048:**

- Added support for RSS with crypto offload enabling the NIC to parallelize packet processing across CPU cores while performing encryption/decryption in hardware. Additionally, introduced a new l4_type_ext parameter with values: 0 (None), 1 (TCP), 2 (UDP), 3 (ICMP).
- Added an extra validation for the payload_len field in incoming NC-SI messages. Previously, invalid packets might have been accepted; now, such packets are silently dropped.
- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

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

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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: 28.46.3048 **(Recommended)**
Filename: 28_46_3048-MCX75310AAS-NEAT_HPE2_Ax.pldm.fwpkg; 28_46_3048-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: https://docs.nvidia.com/networking/display/connectx7firmwarev28463048/known+issues

**Fixes**

**The following fixes have been included in version 28.46.3048:**

- The adapter card would drop NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.

**Enhancements**

**New features and changes included in version 28.46.3048:**

- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

| HPE Part Number | 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 |

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NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter : HPE part numbers P45642-B22 and P45642-H22
Version: 28.46.3048 **(Recommended)**
Filename: 28_46_3048-MCX75310AAS-HEAT_HPE2_Ax.pldm.fwpkg; 28_46_3048-MCX75310AAS-HEAT_HPE2_Ax.pldm.json

**Important Note!**

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

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

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

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A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx7firmwarev28463048/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 28.46.3048:**

- The adapter card would drop NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.

**Enhancements**

**New features and changes included in version 28.46.3048:**

- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

| HPE Part Number | 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 |

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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: 28.46.3048 **(Recommended)**
Filename: 28_46_3048-MCX755106AC-HEAT_HPE_Ax.pldm.fwpkg; 28_46_3048-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/connectx7firmwarev28463048/known+issues

**Fixes**

**The following fixes have been included in version 28.46.3048:**

- The adapter card would drop NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.

**Enhancements**

**New features and changes included in version 28.46.3048:**

- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

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

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NVIDIA Firmware Package (FWPKG) for HPE InfiniBand XDR/Ethernet 2x400GbE 1-port OSFP PCIe6 x16 HHHL CX8 Crypto Adapter : HPE part number P79114-H21
Version: 40.46.3048 **(Critical)**
Filename: 40_46_3048-900-9X81E-00EX-ST0_Ax.pldm.fwpkg; 40_46_3048-900-9X81E-00EX-ST0_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/connectx8firmwarev40463048/known+issues

**Fixes**

Initial version from HPE.

**The following fixes have been included in version 40.46.3048:**

- Fix for the adapter card dropping NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.

**Enhancements**

Initial version.

**Supported Devices and Features**

| HPE Part Number | NVIDIA VPI Adapter | PSID |
|---|---|---|
| P79114-H21 | HPE InfiniBand XDR/Ethernet 2x400GbE 1-port OSFP PCIe6 x16 HHHL CX8 Crypto Adapter (P79114-H21) | MT_0000001167 |

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NVIDIA Firmware Package (FWPKG) for HPE InfiniBand XDR400/Ethernet 400GbE 2-port QSFP112 PCIe6 x16 HHHL CX8 Crypto Adapter : HPE part number P79115-H21
Version: 40.46.3048 **(Critical)**
Filename: 40_46_3048-900-9X81Q-00CN-ST0_Ax.pldm.fwpkg; 40_46_3048-900-9X81Q-00CN-ST0_Ax.pldm.json

**Important Note!**

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

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

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

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

A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx8firmwarev40463048/known+issues

**Fixes**

Initial version from HPE.

**The following fixes have been included in version 40.46.3048:**

- Fix for the adapter card dropping NC-SI over MCTP commands when padding bytes were present after the NC-SI checksum.

**Enhancements**

Initial version.

**Supported Devices and Features**

| HPE Part Number | NVIDIA VPI Adapter | PSID |
|---|---|---|
| P79115-H21 | HPE InfiniBand XDR400/Ethernet 400GbE 2-port QSFP112 PCIe6 x16 HHHL CX8 Crypto Adapter (P79115-H21) | MT_0000001222 |

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NVIDIA Firmware Package (FWPKG) for Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE
Version: 22.46.3048 **(Recommended)**
Filename: 23_46_3048-MCX623106AS-CDA_Ax.pldm.fwpkg; 22_46_3048-MCX623106AS-CDA_Ax.pldm.json

**Important Note!**

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

A list of known issues with this release is available at: https://docs.nvidia.com/networking/display/connectx6dxfirmwarev22463048/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 22.46.3048:**

- Configuring a small MTU led to fragmentation of packets critical for the PXE boot process. As a result, the PXE boot filters mistakenly discarded these packets, causing the PXE boot to fail.

**Enhancements**

**New features and changes included in version 22.46.3048:**

- Added support for RSS with crypto offload enabling the NIC to parallelize packet processing across CPU cores while performing encryption/decryption in hardware. Additionally, introduced a new l4_type_ext parameter with values: 0 (None), 1 (TCP), 2 (UDP), 3 (ICMP).
- Added an extra validation for the payload_len field in incoming NC-SI messages. Previously, invalid packets might have been accepted; now, such packets are silently dropped.
- This release contains important reliability improvements and security hardening enhancements. HPE recommends upgrading your devices firmware to this release to improve the devices' firmware security and reliability.

**Supported Devices and Features**

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

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**Firmware - Storage Controller** Top

Firmware Package - HPE Gen12 Boot Controller NS204i-u, HPE Gen11 Boot Controller NS204i-u, NS204i-d and HPE Gen10 Plus Boot Controller NS204i-p, NS204i-d, NS204i-t, NS204i-r
Version: 1.2.14.1025 **(Recommended)**
Filename: HPE_NS204i_1.2.14.1025_A.fwpkg; HPE_NS204i_1.2.14.1025_A.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.**

- https://www.hpe.com/global/swpublishing/MTX-c75706b8a59d4d8aabc4e4cc30

**For Gen10 plus server users, the NS204i firmware has to be 1.2.14.1018 or later in order to enable PLDM firmware update functionality for the controller. Please find the smart component versions of 1.2.14.1018 in below link:**

- Windows: https://www.hpe.com/global/swpublishing/MTX-84a4e0bb354f48eaad65cf9451
- Linux: https://www.hpe.com/global/swpublishing/MTX-b6448d485ca64fd7a5d0d5f75e
- VMware: https://www.hpe.com/global/swpublishing/MTX-ad49b1acb0d4455c86460c727a

**Prerequisites**

- iLO 6 version 1.10 or later is required for Gen11 and Gen12 servers.
- iLO 5 version 2.81 or later is required for Gen10/Gen10 Plus servers

**Fixes**

- [HPE][WM] Controller "EncryptionMode" shows "Disabled" and Volume Encryption shows "false" state after replacing original encrypted drive with a new foreign drive.
- [WM] Redfish Set EncryptionKey and EncryptionKeyIdentifier returned 200OK when CurrentEncryptionKey is not provided.
- After completing the rebuilding with new drive, followed by powercycle, observed LocalKeyIdenitifer empty and PD2 goes into Foreign statey.
- After Powercycle, PD2 goes into foreign state, once swapping PD1 with Locked(Foreign) from Other LKM configured system and Perform RTOFS on PD1.
- After replacing LKM configured PD1 with different system Locked PD1, Rekey not working After RTOFS+Powercycle.
- LKM Rekey Not working if single Character been provided in payload,also observed PD goes into Foreign state if single Char provided as Key in payload.

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Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR216i-o_Gen11_52.32.3-6333_A.fwpkg; HPE_MR216i-o_Gen11_52.32.3-6333_A.json

**Important Note!**

- **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.**

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML

- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - Redfish Volume Transformation Support
    - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
    - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
    - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
    - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
  - Redfish Metrics GET Support
    - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
    - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
    - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
    - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
- Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
  - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
  - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
  - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
- Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR216i-p_Gen11_52.32.3-6333_A.fwpkg; HPE_MR216i-p_Gen11_52.32.3-6333_A.json

**Important Note!**

- **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.**

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - Redfish Volume Transformation Support
    - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
    - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
    - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
    - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
  - Redfish Metrics GET Support

        - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
        - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
        - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
        - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
    - Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
        - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
        - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
        - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
    - Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR408i-o_Gen11_52.32.3-6333_A.fwpkg; HPE_MR408i-o_Gen11_52.32.3-6333_A.json

**Important Note!**

- **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.**

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
    - Redfish Volume Transformation Support
        - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
        - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
        - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
        - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
    - Redfish Metrics GET Support
        - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
        - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
        - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
        - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
- Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
    - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
    - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
    - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
- Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR408i-p_Gen11_52.32.3-6333_A.fwpkg; HPE_MR408i-p_Gen11_52.32.3-6333_A.json

**Important Note!**

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

**Prerequisites**

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

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - Redfish Volume Transformation Support
    - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
    - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
    - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
    - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
  - Redfish Metrics GET Support
    - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
    - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
    - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
    - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
- Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
  - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
  - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
  - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
- Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR416i-o_Gen11_52.32.3-6333_A.fwpkg; HPE_MR416i-o_Gen11_52.32.3-6333_A.json

**Important Note!**

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

**Prerequisites**

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

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - Redfish Volume Transformation Support
    - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
    - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
    - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
    - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.

        - Redfish Metrics GET Support
            - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
            - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
            - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
            - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
    - Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
        - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
        - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
        - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
    - Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller
Version: 52.32.3-6333 **(Recommended)**
Filename: HPE_MR416i-p_Gen11_52.32.3-6333_A.fwpkg; HPE_MR416i-p_Gen11_52.32.3-6333_A.json

**Important Note!**

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

**Prerequisites**

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

**Fixes**

- Fix a00143124en_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured
- Fix a rare issue that server health shows critical temporally when remove drive continuously.
- Fix an issue that unexpected PCIConfiglink page events, Task management to the virtual SES device time out messages are logged in snapdump
- Fix an issue that Slot capable protocol is missing for empty bay
- Fix an issue that Link Speed for LTO connected to controller shows Unknown
- Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.
- Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.
- Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot
- Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.
- Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

**Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
    - Redfish Volume Transformation Support
        - POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
        - POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
        - PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
        - POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
    - Redfish Metrics GET Support
        - StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
        - PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
        - Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
        - Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.
- Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.
    - Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
    - After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
    - The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.
- Change the backplane bay count information to the actual bay that is connected to controller. For non-hotplug configuration, controller always shows 16 bays.

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**Firmware - Storage Fibre Channel** Top

HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters
Version: 14.4.731.5 **(Recommended)**
Filename: PP14.4.731.5_header.pldm.fwpkg

**Important Note!**

This component is supported only on Gen12 ProLiant and Gen11 AMD servers.

**Release notes:**

Broadcom Release notes

This Firmware package contains following firmware versions:

| Adapter | Speed | Universal Boot Image | Firmware | UEFI | Boot Bios |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| HPE SN1620E 32Gb Dual Port Fibre Channel Host Bus Adapter | 32Gb | 14.4.731.5 | 14.4.731.5 | 14.4.716.0 | 14.4.718.0 |
| HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter | 64Gb | 14.4.731.5 | 14.4.731.5 | 14.4.716.0 | 14.4.718.0 |

**Enhancements**

This Firmware package contains following firmware versions:

| Adapter | Speed | Universal Boot Image | Firmware | UEFI | Boot Bios |
|---|---|---|---|---|---|
| HPE SN1620E 32Gb Dual Port Fibre Channel Host Bus Adapter | 32Gb | 14.4.731.5 | 14.4.731.5 | 14.4.716.0 | 14.4.718.0 |
| HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter | 64Gb | 14.4.731.5 | 14.4.731.5 | 14.4.716.0 | 14.4.718.0 |

**Supported Devices and Features**

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

**32Gb FC Adapter:**

- HPE SN1620E 32Gb Dual port Fibre Channel Host Bus Adapter

**64Gb FC Adapter:**

- HPE SN1720E 64Gb Dual port Fibre Channel Host Bus Adapter

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HPE Firmware Flash for QLogic 32Gb and 64Gb Fibre Channel Host Bus Adapters
Version: 02.11.09 **(Recommended)**
Filename: mh021109.upd_header.pldm.fwpkg

**Important Note!**

Release Notes:
HPE QLogic Adapters Release Notes

This Firmware package contains following firmware versions:

| Adapter | Speed | MBI | Firmware | UEFI | Boot Bios |
|---|---|---|---|---|---|
| HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 32Gb | 02.11.09 | 09.15.15 | 7.39 | 0.0 |
| HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter | 32Gb | 02.11.09 | 09.15.15 | 7.39 | 0.0 |
| HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter | 64Gb | 02.11.09 | 09.15.15 | 7.39 | 0.0 |
| HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter | 64Gb | 02.11.09 | 09.15.15 | 7.39 | 0.0 |

**Enhancements**

This Firmware package contains following firmware versions:

| Adapter | Speed | MBI | Firmware | UEFI | Boot Bios |
|---|---|---|---|---|---|
| HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter | 32Gb | 02.11.06 | 09.15.11 | 7.39 | 0.0 |
| HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter | 32Gb | 02.11.06 | 09.15.11 | 7.39 | 0.0 |
| HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter | 64Gb | 02.11.06 | 09.15.11 | 7.39 | 0.0 |
| HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter | 64Gb | 02.11.06 | 09.15.11 | 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
- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter

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

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

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**Software - Storage Controller** Top

HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers)
Version: 2025.08.01 **(Recommended)**
Filename: cp067757.compsig; cp067757.zip

**Important Note!**

- Actual ESXi Version is 007.3212.0000.0000

**Enhancements**

- Add support for users to clear NVRAM using Factory Repurpose operation
  - Command: storcli /cx set factory repurpose

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**Software - Storage Fibre Channel** Top

HPE QLogic Fibre Channel driver component for VMware vSphere 9.0
Version: 2025.05.01 **(Recommended)**
Filename: cp066388.compsig; cp066388.zip

**Important Note!**

This component is supported only on Gen12 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 5.5.85.0
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
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

**Software - System Management** Top

HPE Agentless Management Bundle for ESXi for Gen11 and Gen12 Servers
Version: 802.12.4.0 **(Recommended)**
Filename: amsdvComponent_802.12.4.0.4-1-signed_component.zip

**Fixes**

See the AMS Release Notes for information about the issues resolved in this release.

**Enhancements**

See the AMS Release Notes for information about the issues resolved in this release.

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HPE Agentless Management Bundle Smart Component on ESXi for Gen11 and Gen12 Servers
Version: 2026.01.01 **(Recommended)**
Filename: cp069992.compsig; cp069992.zip

**Prerequisites**

**For HPE servers with iLO 7:**

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

**Fixes**

See the AMS Release Notes for information about the issues resolved in this release.

**Enhancements**

See the AMS Release Notes for information about the issues resolved in this release.

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Integrated Smart Update Tools for VMware ESXi 8.0 and ESXi 9.0
Version: 800.6.5.0 **(Recommended)**
Filename: sutComponent_800.6.5.0.3-0-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 iSUT Release Notes for information about the issues resolved in this release

**Enhancements**

See the iSUT Release Notes for information about the enhancements in this release.

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