

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 2026.07.00.00 Release Notes for VMware ESXi 8.0

[BIOS - System ROM](#)
[Driver - Network](#)
[Driver - Storage Controller](#)
[Firmware - Network](#)
[Firmware - Storage Controller](#)
[Firmware - Storage Fibre Channel](#)
[Software - Management](#)
[Software - Storage Controller](#)
[Software - Storage Fibre Channel](#)

BIOS - System ROM

[Top](#)

ROM Flash Firmware Package - HPE ProLiant Compute DL110/EL140 Gen12 (U77) Servers
Version: 1.42_05-29-2026 (**Recommended**)
Filename: U77_1.42_05_29_2026.fwpkg; U77_1.42_05_29_2026.json

Important Note!

Important Notes:

This version of the System ROM contains VROC uEFI driver v.9.4.0.1052.

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 DL110 Gen12/EL140 Gen12 System ROM - U77

Release Version:

1.42_05-29-2026

Last Recommended or Critical Revision:

1.42_05-29-2026

Previous Revision:

1.40_04-02-2026

Firmware Dependencies:

None

Enhancements/New Features:

Updated the vRAN workload profile based on Intel FlexRAN release 2.5. The vRAN profile now disables Speculative Lock and Clock Modulation, and maps C-State Efficiency Mode to Disabled.

Enhanced iLO-BIOS communication for supporting SPDm policy

Added an Integrated Management Log (IML) entry to indicate when Mission Critical Mode boot recovery has been triggered.

Added an Integrated Management Log (IML) entries for storage firmware update for NVMe devices in M.2 slots.

Added Security Log Event logging for Server Configuration Lock changes made through Redfish.

Added support for 1-slot riser configuration in DL110 Gen12.

Problems Fixed:

Addressed an issue where the IOMMU setting could remain uninitialized after upgrading to a newer version of ROM firmware which will cause Intel VT-d and Hyper-Threading to be inadvertently disabled.

Addressed an issue where system Secure Boot could not be restored to the platform default value when a manufacturing default was triggered through iLO REST API or Redfish.

Addressed an issue where Advanced Memory Protection option is not disabled. This option is not supported for this platform chipset based on Intel RAS specification.

Addressed an issue where the system could encounter an assert during memory address translation when operating in mirror mode.

Addressed an issue where Self-Encrypting Drive (SED) keys containing null bytes could be incorrectly truncated, potentially preventing drive unlock operations.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM contains VROC uEFI driver v.9.4.0.1052.

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

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where the IOMMU setting could remain uninitialized after upgrading to a newer version of ROM firmware which will cause Intel VT-d and Hyper-Threading to be inadvertently disabled.

Addressed an issue where system Secure Boot could not be restored to the platform default value when a manufacturing default was triggered through iLO REST API or Redfish.

Addressed an issue where Advanced Memory Protection option is not disabled. This option is not supported for this platform chipset based on Intel RAS specification.

Addressed an issue where the system could encounter an assert during memory address translation when operating in mirror mode.

Addressed an issue where Self-Encrypting Drive (SED) keys containing null bytes could be incorrectly truncated, potentially preventing drive unlock operations.

Known Issues:

None

Enhancements

Updated the vRAN workload profile based on Intel FlexRAN release 2.5. The vRAN profile now disables Speculative Lock and Clock Modulation, and maps C-State Efficiency Mode to Disabled.

Enhanced iLO-BIOS communication for supporting SPDMM policy

Added an Integrated Management Log (IML) entry to indicate when Mission Critical Mode boot recovery has been triggered.

Added an Integrated Management Log (IML) entries for storage firmware update for NVMe devices in M.2 slots.

Added Security Log Event logging for Server Configuration Lock changes made through Redfish.

Added support for 1-slot riser configuration in DL110 Gen12.

ROM Flash Firmware Package - HPE ProLiant Compute DL320/DL340/DL340e Gen12 (U71) Servers

Version: 1.82_06-26-2026 (**Recommended**)

Filename: U71_1.82_06_26_2026.fwpkg; U71_1.82_06_26_2026.json

Important Note!**Important Notes:**

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

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>).

Deliverable Name:

HPE ProLiant Compute DL320/DL340 Gen12 System ROM - U71

Release Version:

1.82_06-26-2026

Last Recommended or Critical Revision:

1.82_06-26-2026

Previous Revision:

1.80_05-29-2026

Firmware Dependencies:

None

Enhancements/New Features:

Added a new Service Option "CXL Support" to enable/disable CXL support

Added dynamic BIOS special properties reporting via Redfish to accurately reflect processor-specific feature availability for BIOS/RBSU settings.

Added a new Service Option "MMCFG Base" with settings: Auto (2 GB), 1.5 GB, and 1 GB to adjust the base when needed.

Problems Fixed:

Addressed an issue where the system might get stuck at SMBIOS table initialization when performing power cycling via IPMI command.

Addressed an issue where the system did not automatically power on after a Mission Critical Mode auxiliary power cycle.

Addressed an issue where BIOS settings might not revert to platform defaults when BMC configuration overrides are cleared.

Addressed an issue where memory could get stuck at 6000 MT/s in 2-DIMM per channel configurations after a BIOS downgrade to an earlier version.

Known Issues:

None

Fixes**Important Notes:**

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

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>).

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where the system might get stuck at SMBIOS table initialization when performing power cycling via IPMI command.

Addressed an issue where the system did not automatically power on after a Mission Critical Mode auxiliary power cycle.

Addressed an issue where BIOS settings might not revert to platform defaults when BMC configuration overrides are cleared.

Addressed an issue where memory could get stuck at 6000 MT/s in 2-DIMM per channel configurations after a BIOS downgrade to an earlier version.

Known Issues:

None

Enhancements

Added a new Service Option "CXL Support" to enable/disable CXL support

Added dynamic BIOS special properties reporting via Redfish to accurately reflect processor-specific feature availability for BIOS/RBSU settings.

Added a new Service Option "MMCFG Base" with settings: Auto (2 GB), 1.5 GB, and 1 GB to adjust the base when needed.

ROM Flash Firmware Package - System ROM for HPE ProLiant Compute DL380a/DL580 Gen12 (U72)

Version: 1.82_06-26-2026 (**Recommended**)

Filename: U72_1.82_06_26_2026.fwpkg; U72_1.82_06_26_2026.json

Important Note!

Important Notes:

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

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>).

Deliverable Name:

HPE ProLiant Compute DL380a/DL580 Gen12 System ROM - U72

Release Version:

1.82_06-26-2026

Last Recommended or Critical Revision:

1.82_06-26-2026

Previous Revision:

1.80_06-02-2026

Firmware Dependencies:

None

Enhancements/New Features:

Added a new Service Option "CXL Support" to enable/disable CXL support

Added dynamic BIOS special properties reporting via Redfish to accurately reflect processor-specific feature availability for BIOS/RBSU settings.

Added a new Service Option "MMCFG Base" with settings: Auto (2 GB), 1.5 GB, and 1 GB to adjust the base when needed.

Problems Fixed:

Addressed an issue where the system might get stuck at SMBIOS table initialization when performing power cycling via IPMI command.

Addressed an issue where the system did not automatically power on after a Mission Critical Mode auxiliary power cycle.

Addressed an issue where BIOS settings might not revert to platform defaults when BMC configuration overrides are cleared.

Addressed an issue where memory could get stuck at 6000 MT/s in 2-DIMM per channel configurations after a BIOS downgrade to an earlier version.

Known Issues:

None

Fixes

Important Notes:

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

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>).

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where the system might get stuck at SMBIOS table initialization when performing power cycling via IPMI command.

Addressed an issue where the system did not automatically power on after a Mission Critical Mode auxiliary power cycle.

Addressed an issue where BIOS settings might not revert to platform defaults when BMC configuration overrides are cleared.

Addressed an issue where memory could get stuck at 6000 MT/s in 2-DIMM per channel configurations after a BIOS downgrade to an earlier version.

Known Issues:

None

Enhancements

Added a new Service Option "CXL Support" to enable/disable CXL support

Added dynamic BIOS special properties reporting via Redfish to accurately reflect processor-specific feature availability for BIOS/RBSU settings.

Added a new Service Option "MMCFG Base" with settings: Auto (2 GB), 1.5 GB, and 1 GB to adjust the base when needed.

Driver - Network

[Top](#)

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0

Version: 2026.05.00 **(Recommended)**

Filename: cp071478.compsig; cp071478.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, 237.1.148000* or later, for use with this driver.

Fixes

- This product fixes the issue where RDMA resource configuration for VFs may be incorrectly handled when VF RDMA is disabled in BIOS.
- This product fixes the issue where the RoCE traffic priority may be incorrectly updated during RoCE connection handling.

Enhancements

- This product enhances the driver to report a warning in the kernel logs when the module temperature reaches the threshold.

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

HPE Intel ixgben Driver for VMware vSphere 8.0

Version: 2026.03.00 **(Recommended)**

Filename: cp070243.compsig; cp070243.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

Fixes

- This product fixed warning logs generated during driver unload.
- This product fixed PF reset reporting to VF.
- This product fixed auto-advertised speeds for E610 adapters.

Supported Devices and Features

These drivers support the following network adapters:

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

Intel icen Driver for VMware vSphere 8.0
Version: 2026.03.00 (**Recommended**)
Filename: cp068814.compsig; cp068814.zip

Important Note!

- o This component is intended to be used by HPE applications. It is a zip file that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- o HPE recommends the firmware provided in *Intel Firmware Package For E810 Ethernet Adapter*, version 4.71 or later, for use with these drivers.

Fixes

- o This product fixed RDMA configuration cleanup during transitions between Native and ENS modes, as well as state changes.
- o This product removed warning messages during driver unload by improving cleanup of TX scheduler configuration.
- o This product fixed VLAN list cleanup during VF reset, ensuring VLAN properties can be configured correctly by the OS.

Supported Devices and Features

This product supports the following network adapters:

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

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 8.0

Version: 2026.03.01 (**Recommended**)
Filename: cp068884.compsig; cp068884.zip

Important Note!

- o Actual Version is 7.736.02.00

Fixes

- o Fix an issue that driver unload will fail if there is any management command is outstanding

HPE ProLiant Gen10 Smart Array and Gen10 Plus and Gen11 Smart RAID Controller Driver for VMware vSphere 8.0 (Driver Component).

Version: 2026.07.01 (**Recommended**)
Filename: cp071895.compsig; cp071895.zip

Important Note!

- o Actual ESXi8.0 driver version is 80.4902.0.103
- o Actual ESXi9.0 driver version is 90.4902.0.103
- o HPE Service Pack for ProLiant (SPP) provides a fully qualified recipe for specific firmware and drivers released within the same cycle, making it the primary recommended choice.
- o It is strongly recommended to use controller firmware version 8.23 for SR SAS/SATA controllers and firmware version 03.01.47.052 for SR tri-mode controllers, along with Windows 2022/2025 driver version 1016.38.0.1003, Linux driver version 2.1.40-020, and VMware ESXi driver version 80.4902.0.103/90.4902.0.103, as this combination has been fully qualified.
- o For Windows 2016 driver, please use 1010.84.0.1012 in below link: <https://www.hpe.com/global/swpublishing/MTX-c523e081ab344bc4b4bc9d5686>
- o For Windows 2019 driver, please use 1016.10.0.1004 in below link: <https://www.hpe.com/global/swpublishing/MTX-29e86213c3ab4e94b0b54906f7>

Enhancements

- o New release.

Firmware - Network

[Top](#)

Broadcom Firmware Package for BCM57412 adapter
Version: 237.1.148.0 (**Recommended**)
Filename: BCM237.1.148.0_BCM957412A4121HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot
- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57412 OCP3 adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957412N4120HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot
- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57414 adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957414A4142HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot
- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57414 OCP3 adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957414N4140HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot

- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapter:

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

Broadcom Firmware Package for BCM57416 adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957416A4162HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot
- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57416 OCP3 adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957416N4160HC.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where the PXE boot failure due to missing link flap on warm reboot
- o This product fixes the issue where the Firmware timeout errors seen when reloading driver.
- o This product fixes the issue where brcm-niccli show ""Link Down"" even though link is up
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands.
- o This product fixes the issue where Linux: Link down reason is not populated in Linux dmesg.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957504-P425H.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where wrong port speed in MCTP VDM Get PCIe Adapter Attributes response
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands
- o This product fixes the issue where wrong temperature thresholds are reported for QSFP28 transceiver LTA8531
- o This product fixes the issue where PLDM Firmware Update error handling
- o This product fixes the issue where NC-SI Clear Initial State command can result in buffers being freed incorrectly.
- o This product fixes the issue where the power level setting for QSFP, QSFP+, and QSFP28 optical modules.

- This product fixes the issue where link flap during BMC initiated host power cycle

Enhancements

- This product enhancement to adds RDE support for SRIOVEnabled and VirtualFunctionAllocation

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957504-N425H.fwpkg; BCM237.1.148.0_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 237.1.124.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- This product fixes the issue where wrong port speed in MCTP VDM Get PCIe Adapter Attributes response
- This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands
- This product fixes the issue where wrong temperature thresholds are reported for QSFP28 transceiver LTA8531
- This product fixes the issue where PLDM Firmware Update error handling
- This product fixes the issue where NC-SI Clear Initial State command can result in buffers being freed incorrectly.
- This product fixes the issue where the power level setting for QSFP, QSFP+, and QSFP28 optical modules.
- This product fixes the issue where link flap during BMC initiated host power cycle

Enhancements

- This product enhancement to adds RDE support for SRIOVEnabled and VirtualFunctionAllocation

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p Adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957608-P2100HQF00.fwpkg; BCM237.1.148.0_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 237.1.124.0 or later
- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- This product fixes the issue where wrong port speed in MCTP VDM Get PCIe Adapter Attributes response
- This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands
- This product fixes the issue where wrong temperature thresholds are reported for QSFP28 transceiver LTA8531
- This product fixes the issue where PLDM Firmware Update error handling
- This product fixes the issue where NC-SI Clear Initial State command can result in buffers being freed incorrectly.
- This product fixes the issue where the power level setting for QSFP, QSFP+, and QSFP28 optical modules.
- This product fixes the issue where NC-SI OEM Get Media Info command (0x12) returning incorrect MaxMediaSpeed
- This product fixes the issue where link flap during BMC initiated host power cycle

Enhancements

- This product enhancement to adds RDE support for SRIOVEnabled and VirtualFunctionAllocation

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter

Version: 237.1.148.0 (**Recommended**)

Filename: BCM237.1.148.0_BCM957608-N2100HQI00.fwpkg; BCM237.1.148.0_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,

- o Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 237.1.124.0 or later
- o HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-237.1.137.0 or later
- o HPE Broadcom NetXtreme-E Drivers for VMware, version 2026.05.00 or later

Fixes

- o This product fixes the issue where wrong port speed in MCTP VDM Get PCIe Adapter Attributes response
- o This product fixes the issue where NC-SI over MCTP fails after BMC sends concurrent commands
- o This product fixes the issue where wrong temperature thresholds are reported for QSFP28 transceiver LTA8531
- o This product fixes the issue where PLDM Firmware Update error handling
- o This product fixes the issue where NC-SI Clear Initial State command can result in buffers being freed incorrectly.
- o This product fixes the issue where the power level setting for QSFP, QSFP+, and QSFP28 optical modules.
- o This product fixes the issue where NC-SI OEM Get Media Info command (0x12) returning incorrect MaxMediaSpeed
- o This product fixes the issue where link flap during BMC initiated host power cycle

Enhancements

- o This product enhancement to adds RDE support for SRIOVEnabled and VirtualFunctionAllocation

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom NX1 Firmware Package for BCM5719 adapter
Version: 20.37.41 (**Recommended**)
Filename: BCM5719A1907HC-4x1G-20.37.41.fwpkg; BCM5719A1907HC-4x1G-20.37.41.json

Important Note!

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

Fixes

- o This product fixes the issue where BMC ping may fail after host network interfaces are added, removed, or reconfigured.

Supported Devices and Features

This product supports the following network adapter:

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

Broadcom NX1 Firmware Package for BCM5719 OCP3 adapter
Version: 20.37.41 (**Recommended**)
Filename: BCM5719N1905HC-4x1G-20.37.41.fwpkg; BCM5719N1905HC-4x1G-20.37.41.json

Important Note!

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

Fixes

- o This product fixes the issue where BMC ping may fail after host network interfaces are added, removed, or reconfigured.

Supported Devices and Features

This product supports the following network adapter:

- o 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: 1.40 (**Recommended**)
Filename: HPE_E610_IT4_OCP_1p40_8000EC0A.fwpkg; HPE_E610_IT4_OCP_1p40_8000EC0A.json

Important Note!

For Firmware installation, there is no OS and drivers dependency.
For Firmware compatibility during production, HPE recommends the drivers for use with the firmware Package product as below,

- o Intel ixs Driver for Microsoft Windows Server, version 4.2.7.0 or later
- o Intel ixgbe Drivers for Linux, version 6.3.4-1 or later
- o Intel ixgben Driver for VMware, version 2026.03.00 or later

Fixes

- o This product fixed the LED behavior during AC power-on so the indicator correctly reflects the device status before the system boots.
- o This product fixed an issue where IP assignment failed when iLO Sideband was enabled for the front OCP Isorno NIC.

Enhancements

- This product enhanced compatibility with HPE iLO to ensure the device's physical location is accurately reported.
- This product enhanced compatibility with HPE iLO for Redfish functionality.

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: 4.91 (**Recommended**)

Filename: HPE_E810_2CQDA2_O_SEC_4p91_PLDMoMCTP_800214AE.fwpkg; HPE_E810_2CQDA2_O_SEC_4p91_PLDMoMCTP_800214AE.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 4.91 (**Recommended**)

Filename: HPE_E810_CQDA2_4p91_PLDMoMCTP_800214AF.fwpkg; HPE_E810_CQDA2_4p91_PLDMoMCTP_800214AF.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

This product supports the following network adapters:

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

Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter

Version: 4.91 (**Recommended**)

Filename: HPE_E810_CQDA2_OCP_4p91_NCSIwPLDMoMCTP_800214AD.fwpkg; HPE_E810_CQDA2_OCP_4p91_NCSIwPLDMoMCTP_800214AD.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

This product supports the following network adapters:

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

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter

Version: 4.91 (**Recommended**)

Filename: HPE_E810_XXVDA2_SD_4p91_PLDMoMCTP_800214AB.fwpkg; HPE_E810_XXVDA2_SD_4p91_PLDMoMCTP_800214AB.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

This product supports the following network adapters:

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

Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter

Version: 4.91 (**Recommended**)

Filename: HPE_E810_XXVDA2_SD_OCP_4p91_NCSIWPLDMoMCTP_800214B2.fwpkg; HPE_E810_XXVDA2_SD_OCP_4p91_NCSIWPLDMoMCTP_800214B2.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

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: 4.91 (**Recommended**)

Filename: HPE_E810_XXVDA4_FH_4p91_PLDMoMCTP_800214B3.fwpkg; HPE_E810_XXVDA4_FH_4p91_PLDMoMCTP_800214B3.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 2.4.5-1 or later
- Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

This product supports the following network adapters:

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

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter
Version: 4.91 **(Recommended)**
Filename: HPE_E810_XXV4_OCP_4p91_NCSIwPLDMoMCTP_800214AC.fwpkg; HPE_E810_XXV4_OCP_4p91_NCSIwPLDMoMCTP_800214AC.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 2.4.5-1 or later
 - Intel icen Driver for VMware, version 2026.03.00 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 an issue where the Shared NIC IP was not assigned for OCP Slot B network adapters on Gen12 ProLiant servers.

Supported Devices and Features

- This product supports the following network adapters:
- Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 OCP3 Adapter for HPE

Mellanox Firmware Package(FWPKG) for HPE NVIDIA Ethernet 100Gb 2-port NVMe-oF Offload Adapter for HPE
Version: 22.45.1020 **(Recommended)**
Filename: 22_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

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 SKU Part Number	Mellanox Ethernet Only Adapters	PSID
S2A69A	NVIDIA Ethernet 10/25Gb 2-port SFP28 NVMe-oF Crypto Adapter for HPE	HPE0000000077

NVIDIA Firmware Package (FWPKG) - Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE
Version: 26.49.1014 **(Recommended)**
Filename: 26_49_1014-MCX631102AS-ADA_Ax.pldm.fwpkg; 26_49_1014-MCX631102AS-ADA_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 under Section 6 in : <https://docs.nvidia.com/nvidia-connectx-6-lx-adapter-cards-firmware-release-notes-v26-49-1014.pdf>

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 26.49.1014:

- o Live migration target would not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o PCC issue where RDMA traffic would stall at large scale for certain IP and UDP source-port combinations when a PCC user algorithm was active and no CC algorithm was configured in slot 0.

Enhancements

No new features or changes are included in version 26.49.1014.

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

NVIDIA Firmware Package (FWPKG) - Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE

Version: 26.49.1014 **(Recommended)**

Filename: 26_49_1014-MCX631432AS-ADA_Ax.pldm.fwpkg; 26_49_1014-MCX631432AS-ADA_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 under Section 6 in : <https://docs.nvidia.com/nvidia-connectx-6-lx-adapter-cards-firmware-release-notes-v26-49-1014.pdf>

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 26.49.1014:

- o Live migration target would not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o PCC issue where RDMA traffic would stall at large scale for certain IP and UDP source-port combinations when a PCC user algorithm was active and no CC algorithm was configured in slot 0.

Enhancements

No new features or changes are included in version 26.49.1014.

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

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: 28.49.1014 **(Recommended)**

Filename: 28_49_1014-MCX75310AAS-NEAT_HPE2_Ax.pldm.fwpkg; 28_49_1014-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.

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://networking-docs.nvidia.com/connectx7fwrn/28.49.1014/known-issues>

Fixes

The following issues have been fixed in version 28.49.1014:

- NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
- An issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/resume cycles.
- A DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
- An issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
- ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVMI, preventing some RTTs from using it.
- vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
- The live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- A precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
- QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.

Enhancements

New features and changes included in version 28.49.1014:

- Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
- Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
- Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.

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

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Generic Adapter : HPE part number P45641-H24

Version: 28.49.1014 **(Recommended)**

Filename: 28_49_1014-MCX75310AAS-NEA_Ax.pldm.fwpgk; 28_49_1014-MCX75310AAS-NEA_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://networking-docs.nvidia.com/connectx7fwrn/28.49.1014/known-issues>

Fixes

The following issues have been fixed in version 28.49.1014:

- NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
- An issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/resume cycles.
- A DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
- An issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
- ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVMI, preventing some RTTs from using it.
- vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
- The live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- A precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
- QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.

Enhancements

New features and changes included in version 28.49.1014:

- o Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
- o Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
- o Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.

Supported Devices and Features

HPE Part Number	NVIDIA VPI Adapter	PSID
P45641-H24	HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Generic Adapter (P45641-H24)	MT_0000000838

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: 28.49.1014 **(Recommended)**

Filename: 28_49_1014-MCX75310AAS-HEAT_HPE2_Ax.pldm.fwpkg; 28_49_1014-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.

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://networking-docs.nvidia.com/connectx7fwrn/28.49.1014/known-issues>

Prerequisites

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

Fixes

The following issues have been fixed in version 28.49.1014:

- o NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
- o An issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/resume cycles.
- o A DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
- o An issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
- o ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVMI, preventing some RTTs from using it.
- o vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- o RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
- o The live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o A precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
- o QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.

Enhancements

New features and changes included in version 28.49.1014:

- o Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
- o Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
- o Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.

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

NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Generic Adapter : HPE part number P45642-H23

Version: 28.49.1014 **(Recommended)**

Filename: 28_49_1014-MCX75310AAS-HEA_Ax.pldm.fwpkg; 28_49_1014-MCX75310AAS-HEA_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://networking-docs.nvidia.com/connectx7fwrn/28.49.1014/known-issues>

Prerequisites

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

Fixes

The following issues have been fixed in version 28.49.1014:

- o NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
- o An issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/resume cycles.
- o A DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
- o An issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
- o ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVMI, preventing some RTTs from using it.
- o vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- o RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
- o The live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o A precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
- o QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.

Enhancements

New features and changes included in version 28.49.1014:

- o Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
- o Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
- o Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.

Supported Devices and Features

HPE Part Number	NVIDIA VPI Adapter	PSID
P45642-H23	HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Generic Adapter (P45642-H23)	MT_0000000844

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: 28.49.1014 (Recommended)

Filename: 28_49_1014-MCX755106AC-HEAT_HPE_Ax.pldm.fwpkg; 28_49_1014-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.

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://networking-docs.nvidia.com/connectx7fwrn/28.49.1014/known-issues>

Fixes

The following issues have been fixed in version 28.49.1014:

- o NSM Get-Port-Network-Addresses returned an invalid format on B200/B300 HMC. It now follows the documented non-compact format.
- o An issue that could prevent the adapter's PCIe link from re-establishing after the host resumed from a deep power-down state. This fix improves the reliability of suspend/resume cycles.

- o A DEAD IRISC assert that could occur during TLV NV_DATA flash access by suspending the watchdog while waiting for flash IPC (until timeout), preventing the assert on TLV access.
- o An issue where repeatedly writing NVCONFIG TLVs could cause excessive NV_DATA partition swaps during garbage collection. This rapid cycling could accelerate flash wear (end-of-life at 100,000 erases) and potentially render the device inoperable. Firmware now avoids unnecessary physical writes by returning OK when the requested configuration already exists in flash, and increases the maximum supported NV_DATA partition swaps from 100,000 to 200,000.
- o ICM_RES_HW_DMFS_ENCAP_H_FW was allocated per GVM, preventing some RTTs from using it.
- o vDPA doorbell resources were not released, which could cause failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- o RDMA traffic could stall in large-scale deployments for certain source IP and UDP source-port combinations when DOCA PCC was active and no congestion-control algorithm was configured in algorithm slot 0.
- o The live migration target did not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o A precopy image was processed during the stop-copy phase, causing prolonged downtime due to a software limitation. The handling was slow because the handler performed a linear search for data; this was improved by replacing it with a faster search approach enabled via compile-time preprocessing.
- o QPs established before loading DOCA PCC could exhibit inconsistent algorithm-selected behavior between ports in LAG mode after DOCA PCC is loaded.

Enhancements

New features and changes included in version 28.49.1014:

- o Added support for Congestion-Control histogram collection in the PCC/ZTR-RTT algorithm. After enabling this capability, customers can read RATE and RTT histogram counters for PCC-managed flows.
- o Added a new parameter to the ZTR_RTTCC algorithm to define the probe-packet timeout threshold.
- o Added support for a new packet reformat type for PSP transport packets. This reformat removes the PSP trailer and the UDP + PSP transport headers, and updates the IP Protocol field based on the PSP next_header value.

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

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

Version: 22.49.1014 (**Recommended**)

Filename: 22_49_1014-MCX623106AS-CDA_Ax.pldm.fwpkg; 22_49_1014-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://networking-docs.nvidia.com/connectx6dxfrn/22.49.1014/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 22.49.1014:

- o vDPA doorbell resources were not released causing failures when running other functionality after a vDPA FLR. Doorbell resources are now properly unlocked.
- o Live migration target would not receive a port state change event on the resume VHCA command. The target now generates this event so software that depends on port state is notified of any changes.
- o PCC issue where RDMA traffic would stall at large scale for certain IP and UDP source-port combinations when a PCC user algorithm was active and no CC algorithm was configured in slot 0.

Enhancements

No new features or changes are included in version 22.49.1014.

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

Firmware - Storage Controller

[Top](#)

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

Version: 8.23 (**Recommended**)

Filename: HPE_SR_Gen10_8.23_A.fwpkg

Important Note!

- o HPE Service Pack for ProLiant (SPP) provides a fully qualified recipe for specific firmware and drivers released within the same cycle, making it the primary recommended choice.

- It is strongly recommended to use controller firmware version 8.23 for SR SAS/SATA controllers and firmware version 03.01.47.052 for SR tri-mode controllers, along with Windows 2022/2025 driver version 1016.38.0.1003, Linux driver version 2.1.40-020, and VMware ESXi driver
- **For Windows 2016 driver, please use 1010.84.0.1012 in below link:**

<https://www.hpe.com/global/swpublishing/MTX-c523e081ab344bc4b4bc9d5686>

- **For Windows 2019 driver, please use 1016.10.0.1004 in below link:**

<https://www.hpe.com/global/swpublishing/MTX-29e86213c3ab4e94b0b54906f7>

Fixes

- Fixed an issue where the system could lock up with controller lockup code 0x27006 during heavy I/O when a drive reported a predictive failure, by ensuring failure handling does not block critical system monitoring operations.
- Fixed an issue where volume creation could fail when using mixed OPAL V1 and OPAL V2 self-encrypting drives (SEDs), ensuring consistent validation and successful configuration.
- Fixed an issue that could cause reduced 4K random write performance in degraded RAID 60 configurations.
- Fixed an issue where the system could crash when hot-adding drives to failed RAID 50/60 volumes, improving stability during recovery operations.
- Fixed an issue where CBE remote encryption could remain enabled after being disabled in UEFI HII, ensuring settings are applied correctly.
- Fixed an issue where the system could fail to boot during device discovery due to invalid device identification data, improving boot reliability.
- Fixed an issue where encryption key mismatches could occur during master key updates, ensuring consistent and reliable encryption operations.
- Fixed an issue where a drive could be incorrectly marked as failed during boot when a sanitize operation was in progress, preventing false drive failures.
- Fixed an issue where secure erase operations using ATA passthrough could fail to start, ensuring successful execution of secure erase commands.
- Fixed an issue where sanitize operations did not resume after a controller reboot, ensuring proper continuation of secure erase processes.
- Added support to display drive depopulation and restoration status in UEFI HII, providing better visibility into ongoing drive operations.
- Added support to display the remaining duration of array drive identification in UEFI HII, improving visibility into ongoing LED identification activity.

Adding the CA detail as below:

- For E208e-p A new Microsoft Option ROM UEFI CA 2023 certificate has been added to replace the expired CA 2011 one. To prevent Secure Boot issues, please update BIOS and "Reset All Keys to Platform Defaults" following the instructions in Advisory: (Revision) Microsoft Windows - Information About Windows UEFI CA 2023 Certificate

CA: https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00157968en_us

Enhancements

- Added HDD Power-On Hours reporting based on the PowerOnHours property in Drive Metrics, with periodic updates to improve drive usage visibility and indicate whether the attribute is supported by the drive.

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: 1.2.14.1031 (**Recommended**)

Filename: HPE_NS204i_1.2.14.1031_A.fwpkg; HPE_NS204i_1.2.14.1031_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-84a4e0bb354f48ead65cf9451>
- 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

Enhancements

- Aligning OCP specification to enhance stability with particular SSDs.

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR216i-o_Gen11_52.36.3-6584_A.fwpkg; HPE_MR216i-o_Gen11_52.36.3-6584_A.json

Important Note!

- This firmware version to be used on HPE MR216i-o Gen11 Controller.
- The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVME drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVME drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOPiBytes, WriteIOPiBytes, PowerOnHours, NVMeSMART (MVMesSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR216i-p_Gen11_52.36.3-6584_A.fwpgk; HPE_MR216i-p_Gen11_52.36.3-6584_A.json

Important Note!

- o This firmware version to be used on HPE MR216i-p Gen11 Controller.
- o The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVMe drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVMe drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOKiBytes, WriteIOKiBytes, PowerOnHours, NVMeSMART (NVMeSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR408i-o_Gen11_52.36.3-6584_A.fwpkg; HPE_MR408i-o_Gen11_52.36.3-6584_A.json

Important Note!

- o This firmware version to be used on HPE MR408i-o Gen11 Controller.
- o The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVME drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVME drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConfiglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOPKiBytes, WriteIOPKiBytes, PowerOnHours, NVMeSMART (MVMesSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR408i-p_Gen11_52.36.3-6584_A.fwpkg; HPE_MR408i-p_Gen11_52.36.3-6584_A.json

Important Note!

- o This firmware version to be used on HPE MR408i-p Gen11 Controller.
- o The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVME drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVME drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOPKiBytes, WriteIOPKiBytes, PowerOnHours, NVMeSMART (MVMesSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR416i-o_Gen11_52.36.3-6584_A.fwpkg; HPE_MR416i-o_Gen11_52.36.3-6584_A.json

Important Note!

- o This firmware version to be used on HPE MR416i-o Gen11 Controller.
- o The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVMe drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVMe drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOPiBytes, WriteIOPiBytes, PowerOnHours, NVMeSMART (MVeSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller

Version: 52.36.3-6584 (**Recommended**)

Filename: HPE_MR416i-p_Gen11_52.36.3-6584_A.fwpkg; HPE_MR416i-p_Gen11_52.36.3-6584_A.json

Important Note!

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

- o The minimum iLO versions required to support 52.36.3-6584 are iLO 7 1.20, iLO 6 1.74, and iLO 5 3.18.

Prerequisites

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

Fixes

- o Fix an issue that Backup Exec doesn't work with LTO drives in Linux systems
- o Fix a rare issue that controller VM fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that poor performance is observed during small-range writes
- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix a rare issue that PL fault 0x4318 is observed during the IPMI power-cycle test
- o Fix a rare issue that cache restore failure observed after firmware update followed by a server UMCE (unrecoverable machine check error)
- o Fix an issue that firmware may assert when NVMe drives take long time for Task Management
- o Fix a rare issue that PL fault 0x6054 observed during patrol read in progress
- o Fix a rare issue that firmware may assert during firmware update with IOs and task managements on JBOD drives.
- o Fix an issue that foreign drive is shown in HotspareType@Redfish.AllowableValues
- o Fix an issue that SATA LFF drives list the "DriveFormFactor" as "2_5" under the Storage tab and in Redfish
- o Fix an issue that Server health shows Warning when a degraded volume is present
- o Fix a rare issue that GET operation on Redfish Drive URI occasionally return 404 Not Found
- o Fix an issue that rebuild does not start on an SED drive when inserted in the missing slot of a R1 drive
- o Fix an issue that NVMe drive undergoing sanitize is not detected after server reboot
- o Fix a rare issue that Redfish Chassis properties are not properly displayed for UBM10 backplane
- o Fix an issue that PCIConglink page events may come continuously in snapdump log
- o Fix a rare issue that firmware may assert when user starts crypto erase and removed the drive
- o Fix an issue that the sanitize percentage does not progress when monitoring drive's sanitize state
- o Fix a rare issue that PLDM Fault 0x5: Command abort failed observed when doing backplane firmware update
- o Fix a rare firmware crash that may occur during concurrent Virtual Machine clone operations and JBOD creation
- o Fix an issue that firmware may assert if drive goes through shield recovery and is subsequently removed
- o Fix a rare issue that firmware may assert while running IO's and Task Management

Enhancements

- o Add additional escape sequences for special characters when encoding BEJString to comply with the DMTF specification. iLO 7 1.20, iLO6 1.74 and iLO5 3.18 are required to support this change.
- o DMTF PLDM Redfish Device Enablement enhancements
 - Add support for Redfish Conditions (GET)
 - Each resource contains a conditions table that lists the appropriate MessageId and MessageSeverity. Redfish messages impact the Redfish resource Status object. Any outstanding message will appear in the Redfish Status[Conditions] array. The highest Status[Conditions][Severity] sets the overall Status[Health] of the resource. When the Status[Conditions] array is empty the Status[Health] shall be OK.
 - Port Conditions do not display any condition other than OK
 - In scenarios where ControllerPreviousError condition happens, the same is listed under StorageController.Status. Usually after iLO acknowledges ControllerPreviousError event, FW clears the condition from the StorageController.Status.Conditions[] list.
 - Redfish Metrics GET Support for DriveMetrics, EnvironmentMetrics and VolumeMetrics
 - DriveMetrics: BadBlockCount, ReadIOPKiBytes, WriteIOPKiBytes, PowerOnHours, NVMeSMART (MVMesSMART attributes are supported for NVMe drive only)
 - EnvironmentMetrics for Drive Resource: TemperatureCelsius.Reading
 - VolumeMetrics: ConsistencyCheckCount, ConsistencyCheckErrorCount, RebuildErrorCount
 - 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.
- o Add support for Redfish Parallel Resource PDR. The feature reduce iLO resource required to support controller related Metrics.
- o Add support for UBM11 backplane
- o Enhanced the UBM backplane firmware update process to eliminate the risk of firmware corruption when transferred data becomes corrupted
- o Refine the message on HII prereview configuration for the foreign import
- o Removed the Sanitize Secure Erase option from MRSA for SED drives, as SEDs support only Cryptographic Erase
- o Return error when enabling encryption with 256 characters in the "EncryptionKeyIdentifier" property through Redfish

Firmware - Storage Fibre Channel

HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters
Version: 14.4.731.21 (**Recommended**)
Filename: PP14.4.731.21_header.pldm.fwpkg

[Top](#)

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	14.4.731.21	14.4.731.21	14.4.731.20	14.4.718.0
HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.731.21	14.4.731.21	14.4.731.20	14.4.718.0

Fixed the following:

- Garbled characters are observed in the System Utilities(F9) configuration screens with Japanese Environment when HPE Emulex Fibre Channel Host Bus Adapter is installed on ProLiant Gen11 and ProLiant Gen12 servers
- Unified Extensible Firmware Interface (UEFI) protocol driver does not complete the polling device; causing the UEFI diagnostics system board component test incomplete.

Added Following Enhancements:

- Add logic to detect Small Form-Factor Pluggable(SFP) is stuck holding Serial Clock Line(SCL) Low.
- Return a new state in Acquisition and Control Query Executive (ACQE) to indicate Small Form-Factor Pluggable(SFP) is non-responsive

Prerequisites

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

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

Fixes

Fixed the following:

- Garbled characters are observed in the System Utilities(F9) configuration screens with Japanese Environment when HPE Emulex Fibre Channel Host Bus Adapter is installed on ProLiant Gen11 and ProLiant Gen12 servers
- Unified Extensible Firmware Interface (UEFI) protocol driver does not complete the polling device; causing the UEFI diagnostics system board component test incomplete.

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	14.4.731.21	14.4.731.21	14.4.731.20	14.4.718.0
HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.731.21	14.4.731.21	14.4.731.20	14.4.718.0

Added Following Enhancements:

- Add logic to detect Small Form-Factor Pluggable(SFP) is stuck holding Serial Clock Line(SCL) Low.
- Return a new state in Acquisition and Control Query Executive (ACQE) to indicate Small Form-Factor Pluggable(SFP) is non-responsive

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

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

Version: 02.11.14 (**Recommended**)

Filename: mh021114.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	MPI FW	PEP FW	PEP SoftROM	PEP Brd Cfg 2P	PEP Brd Cfg 1P	FC Brd Cfg 2P	FC Brd Cfg 1P	PCIe Serdes	Preload FWA 2P	Preload FWA 1P
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	3.01.00	NA	3.07.02	NA	3.00.07	4.01.16	NA
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	NA	3.02.00	NA	3.07.02	3.00.07	NA	4.05.07
HPE SN1700Q 64Gb Dual Port Fibre Channel Host	64Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	3.01.00	NA	3.07.02	NA	3.00.07	4.01.16	NA

Bus Adapter														
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	NA	3.02.00	NA	3.07.02	3.00.07	NA	4.05.07

Updated the validity of UEFI signature

Fixes

Updated the validity of UEFI signature

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	MPI FW	PEP FW	PEP SoftROM	PEP Brd Cfg 2P	PEP Brd Cfg 1P	FC Brd Cfg 2P	FC Brd Cfg 1P	PCIe Serdes	Preload FWA 2P	Preload FWA 1P
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	3.01.00	NA	3.07.02	NA	3.00.07	4.01.16	NA
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	NA	3.02.00	NA	3.07.02	3.00.07	NA	4.05.07
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	3.01.00	NA	3.07.02	NA	3.00.07	4.01.16	NA
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.14	09.15.19	7.39	3.04.21	3.01.41	3.00.13	NA	3.02.00	NA	3.07.02	3.00.07	NA	4.05.07

Supported Devices and Features

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

32Gb Fibre Channel Host Bus Adapter:

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

64Gb Fibre Channel Host Bus Adapter:

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

Software - Management

Smart Storage Administrator (SSA) CLI Smart Component for ESXi 8.0 for Gen10/Gen10 Plus/Gen11 Controllers

Version: 2026.07.01 **(Recommended)**

Filename: cp072100.compsig; cp072100.zip

[Top](#)

Important Note!

- o [Actual ESXi8.0 ssaccli version is 6.65.9.0](#)
- o [Actual ESXi9.0 ssaccli version is 6.65.11.0](#)
- o To support upgrades from ESXi 8.0 to ESXi 9.0, VMware requires the SSA CLI package version for ESXi 9.0 to be higher than the package version installed on ESXi 8.0. Therefore, the ESXi 9.0 package version is 6.65.11, while the internal SSA CLI version remains 6.65.9. This is expected behavior.

Enhancements

- o Added a new reboot reason indicator when a debug token is invalidated

Software - Storage Controller

HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers)

Version: 2026.03.01 **(Recommended)**

Filename: cp068889.compsig; cp068889.zip

[Top](#)

Important Note!

- o Actual ESXi Version is 007.3604.0000.0000

Fixes

- o Fix an issue that storcli show /cx/ex/sx poh (power on hour) command report error on NVMe drives
- o Fix an issue that PSOC update is not allowing when the part number is beyond 65535

Enhancements

- o Return error when enabling encryption with 256 characters for keyid in Drive Security command
- o Display the controller serial number as "NA" when not programmed

Software - Storage Fibre Channel

[Top](#)

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 vibsddepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.
This driver is only supported on VMware ESXi 8.0u3.

Prerequisites

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

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

Enhancements

Driver version 5.4.86.0

This driver is only supported on VMware ESXi 8.0u3

Supported Devices and Features

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

32Gb Fibre Channel Host Bus Adapter:

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

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
-

Get connected

hpe.com/info/getconnected

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

© Copyright 2023 Hewlett Packard Enterprise Development Company, L.P.

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

Trademark acknowledgments, if needed.

Update August 07 2026

