

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 2025.07.00.00 Release Notes for VMware ESXi 9.0

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ROM Flash Firmware Package - HPE ProLiant Compute DL360/DL380/ML350 Gen12/Alletra Storage Server 4210 Servers (U68) Servers

Version: 1.40_05-22-2025 (**Recommended**)

Filename: U68_1.40_05_22_2025.fwpkg; U68_1.40_05_22_2025.json

Important Note!

Important Notes:

This version of the System ROM contains updates aligned with Intel GNR/SRF 2S MR2 and 4S PV BKC update. This version of the System ROM contains updates aligned with Intel VROC to 9.1 PV update.

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

Deliverable Name:

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

Release Version:

1.40_05-22-2025

Last Recommended or Critical Revision:

1.40_05-22-2025

Previous Revision:

1.34_04-18-2025

Firmware Dependencies:

None

Enhancements/New Features:

Added help description to avoid having wrong configuration values of PPL1 or PPL2.

Updated some wordings in the VROC pop-up string for better alignment.

Enabled Bifurcation capability support for system OCP slots.

Enabled VROC options on DL320 Gen12 OEM.

Problems Fixed:

Addressed an issue where the options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.

Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu > Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.

Addressed an issue where the OS (Operating System) system time might shift when the time-zone setting in System Configuration (RBSU) menu is "unspecified time zone".

Addressed an issue where the system might have incorrect drive storage information shown in the One-Time Boot menu.

Addressed an issue where the system might encounter RSOD when performing drive encryption without select any drive in "System Configuration (RBSU) > Server Security > Device Encryption Options > Drive Encryption Settings > Encrypted Drives".

Addressed an issue where the Product Names of DVD Drive might not be displayed in the boot options of System Configuration (RBSU).

Addressed an issue where the system virtual media might malfunction.

Addressed an issue where the display content of "System Configuration (RBSU) -> Power and Performance Options -> Advanced Power Options -> Efficiency Latency Control (ELC)" might be incorrect.

Addressed an issue where the logical drive name of MR controllers might be incorrect in the System Configuration (RBSU) menu.

Addressed an issue where the "Enhanced C-states" did not gray out after setting the Core C-states to No C-states in "System Configuration (RBSU) > Power and Performance options".

Addressed an issue where the system might log "Unsupported DIMM configuration detected" with Intel GNR HCC processor installed.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM contains updates aligned with Intel GNR/SRF 2S MR2 and 4S PV BKC update. This version of the System ROM contains updates aligned with Intel VROC to 9.1 PV update.

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Firmware Dependencies:

None

Problems Fixed:

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Addressed an issue where the system might log "Unsupported DIMM configuration detected" with Intel GNR HCC processor installed.

Known Issues:

None

Enhancements

Added help description to avoid having wrong configuration values of PPL1 or PPL2.

Updated some wordings in the VROC pop-up string for better alignment.

Enabled Bifurcation capability support for system OCP slots.

Enabled VROC options on DL320 Gen12 OEM.

ROM Flash Firmware Package - HPE ProLiant Compute XD230 (U66) Servers
Version: 1.40_05-22-2025 (**Recommended**)
Filename: U66_1.40_05_22_2025.fwpkg; U66_1.40_05_22_2025.json

Important Note!**Important Notes:**

This version of the System ROM contains updates aligned with Intel GNR/SRF 2S MR2 and 4S PV BKC update. This version of the System ROM contains updates aligned with Intel VROC to 9.1 PV update.

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

Deliverable Name:

HPE ProLiant Compute XD230 System ROM - U66

Release Version:

1.40_05-22-2025

Last Recommended or Critical Revision:

1.40_05-22-2025

Previous Revision:

1.34_04-18-2025

Firmware Dependencies:

None

Enhancements/New Features:

Added help description to avoid having wrong configuration values of PPL1 or PPL2.

Updated some wordings in the VROC pop-up string for better alignment.

Enabled Bifurcation capability support for system OCP slots.

Enabled VROC options on DL320 Gen12 OEM.

Problems Fixed:

Addressed an issue where the options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.

Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu > Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.

Addressed an issue where the OS (Operating System) system time might shift when the time-zone setting in System Configuration (RBSU) menu is "unspecified time zone".

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Addressed an issue where the system virtual media might malfunction.

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Addressed an issue where the system might log "Unsupported DIMM configuration detected" with Intel GNR HCC processor installed.

Known Issues:

None

Fixes

Important Notes:

This version of the System ROM contains updates aligned with Intel GNR/SRF 2S MR2 and 4S PV BKC update. This version of the System ROM contains updates aligned with Intel VROC to 9.1 PV update.

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 options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.

Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu > Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.

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Addressed an issue where the system might log "Unsupported DIMM configuration detected" with Intel GNR HCC processor installed.

Known Issues:

None

Enhancements

Added help description to avoid having wrong configuration values of PPL1 or PPL2.

Updated some wordings in the VROC pop-up string for better alignment.

Enabled Bifurcation capability support for system OCP slots.

Enabled VROC options on DL320 Gen12 OEM.

Driver - Network

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0

Version: 2025.05.00 **(Recommended)**

Filename: cp066626.compsig; cp066626.zip

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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 *HPE Broadcom NetXtreme-E Firmware Version*, 233.1.135007 or later, for use with this driver.

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Intel icen Driver for VMware vSphere 9.0

Version: 2025.05.00 (**Recommended**)

Filename: cp065383.compsig; cp065383.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 vib depot.hpe.com webpages, plus an HPE specific CP0xxxxx.xml file.
- o HPE recommends the firmware provided in *Intel Firmware Package For E810 Ethernet Adapter*, version 4.71 or later, for use with these drivers.

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Firmware - Network

Broadcom Firmware Package for BCM5741x adapters

Version: 233.1.135.7 (**Recommended**)

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

Important Note!

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

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

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Broadcom Firmware Package for BCM5750x adapters
Version: 233.1.135.7 (**Recommended**)
Filename: bcm233.1.135.7_Thor.pup.fwpkg; bcm233.1.135.7_Thor.pup.json

Important Note!

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p Adapter
Version: 233.1.135.7 (**Recommended**)
Filename: BCM233.1.135.7_BCM957608-P2100HQF00.fwpkg; BCM233.1.135.7_BCM957608-P2100HQF00.json

Important Note!

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter
Version: 233.1.135.7 (**Recommended**)
Filename: BCM233.1.135.7_BCM957608-N2100HQI00.fwpkg; BCM233.1.135.7_BCM957608-N2100HQI00.json

Important Note!

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Broadcom NX1 Firmware Package for BCM5719 adapter

Version: 20.33.41 **(Recommended)**

Filename: BCM5719A1907HC-4x1G-14E4-1657-14E4-1591.fwpkg; BCM5719A1907HC-4x1G-14E4-1657-14E4-1591.json

Important Note!

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

Fixes

This product fixes where MBA configuration reset to defaults after updating firmware.

Supported Devices and Features

This product supports the following network adapter:

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

Broadcom NX1 Firmware Package for BCM5719 OCP3 adapter

Version: 20.33.41 **(Recommended)**

Filename: BCM5719N1905HC-4x1G-14E4-1657-14E4-1590.fwpkg; BCM5719N1905HC-4x1G-14E4-1657-14E4-1590.json

Important Note!

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

Fixes

This product fixes where MBA configuration reset to defaults after updating firmware.

Supported Devices and Features

This product supports the following network adapter:

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

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

Version: 4.71 **(Recommended)**

Filename: HPE_E810_2CQDA2_O_SEC_4p71_PLDMoMCTP_80020037.fwpkg; HPE_E810_2CQDA2_O_SEC_4p71_PLDMoMCTP_80020037.json

Important Note!

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

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

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 4.71 **(Recommended)**

Filename: HPE_E810_CQDA2_4p71_PLDMoMCTP_8002003C.fwpkg; HPE_E810_CQDA2_4p71_PLDMoMCTP_8002003C.json

Important Note!

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

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

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

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- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 4.71 (**Recommended**)

Filename: HPE_E810_CQDA2_OCP_4p71_NCSIwPLDMoMCTP_80020036.fwpkg; HPE_E810_CQDA2_OCP_4p71_NCSIwPLDMoMCTP_80020036.json

Important Note!

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
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- o This product fixes an issue where the RDE property (FlowControlStatus) does not report the correct status after the RDE property FlowControlConfiguration is set to Tx.
- o This product fixes an issue where the RDE patch operation fails on the AutoSpeedNegotiationEnabled property.

Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 4.71 (**Recommended**)

Filename: HPE_E810_XXVDA2_SD_4p71_PLDMoMCTP_80020038.fwpkg; HPE_E810_XXVDA2_SD_4p71_PLDMoMCTP_80020038.json

Important Note!

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

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

- o Intel icea Driver for Microsoft Windows Server, version 1.15.121.0 or later
- o Intel ice Drivers for Linux, version 1.15.4-1 or later
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Supported Devices and Features

This product supports the following network adapters:

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

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

Version: 4.71 (**Recommended**)

Filename: HPE_E810_XXVDA2_SD_OCP_4p71_NCSIwPLDMoMCTP_8002003D.fwpkg; HPE_E810_XXVDA2_SD_OCP_4p71_NCSIwPLDMoMCTP_8002003D.json

Important Note!

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

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

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

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

Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter

Version: 4.71 (**Recommended**)

Filename: HPE_E810_XXVDA4_FH_4p71_PLDMoMCTP_8002003E.fwpkg; HPE_E810_XXVDA4_FH_4p71_PLDMoMCTP_8002003E.json

Important Note!

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

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

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

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

Fixes

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

Supported Devices and Features

This product supports the following network adapters:

- o Intel E810-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: 4.71 (**Recommended**)

Filename: HPE_E810_XXV4_OCP_4p71_NCSIwPLDMoMCTP_80020035.fwpkg; HPE_E810_XXV4_OCP_4p71_NCSIwPLDMoMCTP_80020035.json

Important Note!

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

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

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

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

Fixes

- o This product fixes an issue where the speed may be downgraded to Gen3.
- o This product fixes an issue where the Linux driver fails to load due to an EEPROM checksum error when the RDE:MACAddress property is patched.
- o This product fixes an issue where the NIC is not detected after performing the RDE patch operation on NetworkDeviceFunctions settings.

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

Supported Devices and Features

This product supports the following network adapters:

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

Mellanox Firmware Package (FWPKG) - Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE

Version: 26.44.1036 **(Recommended)**

Filename: 26_44_1036-MCX631102AS-ADA_Ax.pldm.fwpkg; 26_44_1036-MCX631102AS-ADA_Ax.pldm.json

Important Note!

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

Prerequisites

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

Fixes

The following issues have been fixed in version 26.44.1036:

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

Enhancements

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

New features and changes included in version 26.44.1036:

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

Supported Devices and Features

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

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

Version: 26.44.1036 **(Recommended)**

Filename: 26_44_1036-MCX631432AS-ADA_Ax.pldm.fwpkg; 26_44_1036-MCX631432AS-ADA_Ax.pldm.json

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

Prerequisites

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

Fixes

The following issues have been fixed in version 26.44.1036:

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

Enhancements

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

New features and changes included in version 26.44.1036:

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

Supported Devices and Features

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

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

Version: 22.44.1036 (**Recommended**)

Filename: 22_44_1036-MCX623106AS-CDA_Ax.pldm.fwpkg; 22_44_1036-MCX623106AS-CDA_Ax.pldm.json

Important Note!

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

Prerequisites

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

Fixes

The following issues have been fixed in version 22.44.1036:

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

Enhancements

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

New features and changes included in version 22.44.1036:

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

Supported Devices and Features

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

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

Version: 28.45.1200 (**Recommended**)

Filename: 28_45_1200-MCX75310AAS-NEAT_HPE2_Ax.pldm.fwpkg; 28_45_1200-MCX75310AAS-NEAT_HPE2_Ax.pldm.json

Important Note!

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

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

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

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the terms and conditions of your purchase of the HPE product or solution.

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

Fixes

The following fixes have been included in version 28.45.1200:

- o Fixed DC InfiniBand functionality.

Enhancements

New features and changes included in version 28.45.1200:

- o Introduced a 1ms delay for SPDM responses.

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 NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter : HPE part numbers P45642-B22 and P45642-H22

Version: 28.45.1200 **(Recommended)**

Filename: 28_45_1200-MCX75310AAS-HEAT_HPE2_Ax.pldm.fwpkg; 28_45_1200-MCX75310AAS-HEAT_HPE2_Ax.pldm.json

Important Note!

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

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

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

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

Prerequisites

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

Fixes

The following fixes have been included in version 28.45.1200:

- o Fixed DC InfiniBand functionality.

Enhancements

New features and changes included in version 28.45.1200:

- o Introduced a 1ms delay for SPDM responses.

Supported Devices and Features

HPE Part Number	NVIDIA VPI Adapter	PSID
P45642-B22	HPE InfiniBand NDR200/Ethernet 200Gb 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter (P45642-B22 and P45642-H22)	MT_0000001119

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

Version: 28.45.1200 **(Recommended)**

Filename: 28_45_1200-MCX755106AC-HEAT_HPE_Ax.pldm.fwpkg; 28_45_1200-MCX755106AC-HEAT_HPE_Ax.pldm.json

Important Note!

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

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

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

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

Fixes

The following fixes have been included in version 28.45.1200:

- o Fixed DC InfiniBand functionality.

Enhancements

New features and changes included in version 28.45.1200:

- o Introduced a 1ms delay for SPDM responses.

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

Firmware - Storage Controller

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

Version: 1.2.14.1018 (D) **(Recommended)**

Filename: HPE_NS204i_Gen10p_Gen11_1.2.14.1018_D.fwpkg; HPE_NS204i_Gen10p_Gen11_1.2.14.1018_D.json

Important Note!

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

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

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

Prerequisites

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

Enhancements

- o Support new Gen 12 servers.

Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 **(Recommended)**

Filename: HPE_MR216i-o_Gen11_52.32.3-6118_A.fwpkg; HPE_MR216i-o_Gen11_52.32.3-6118_A.json

Important Note!

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

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

Prerequisites

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

Fixes

- o Fix a00147824en_us: HPE MR408i-p Gen11 Storage Controller - A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- o Fix a00143381en_us: HPE MR Gen10 Plus/Gen11 Controllers - A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- o Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
- o Filter out underruns error prints to avoid flooding of TTY logs
- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- o Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
- o Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
- o Fix an issue that firmware may assert while doing full initialization on logical drive with NVME drives which have task management timeout
- o Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
- o Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
- o Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop

- o Fix a rare issue that controller brick may happen if Task Management failure recovery reset in the middle of a firmware flashing sequence
- o Fix an issue that Cryptographic Erase option may be shown for a drive that does not support it. The issue happens when replacing a few Crypto-Erase-capable drives with drives that do not support Crypto Erase.
- o Fix an issue that SPD is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- o Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIdentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- o Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- o Fix an issue that foreign configuration import is not accessible from RDE after reboot
- o Fix a rare timing issue that Cache Offload failed with error No offload detected
- o Fix a rare issue that firmware may assert while running firmware update when the bootloaders in two firmwares are different versions.
- o Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- o Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

Enhancements

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

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

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.
 - o GET Port[PortProtocol], [PortType]
 - o EKM Rekey support
 - o POST #Storage.RekeyExternalKey Action from the Storage Schema.
 - o Reboot the server to obtain the new EKM Key from UEFI driver.
 - o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
 - o This improvement resolves a00143111en_us: HPE MR Gen11 and Gen10 Plus Controllers - Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
- o Increased Frequency of Temperature Polling for NVMe Drives
 - o Default value is set to 15 seconds
 - o The parameter can be queried and configured using StorCLI
- o Second Source NAND Flash
 - o Controller firmware downgrades to below 7.26 (PR3 or earlier) are blocked on a controller using second source NAND flash.
 - o The first source NAND flash size is 23.625 GB; the second source NAND flash size is 21.301 GB. This information can be obtained from "CacheVault Flash Size" parameter in the "storcli /cx show all" command.
- o Add support for NVMe 2.0 drives
- o When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- o Add support for enable/disable controller phys
 - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- o Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- o Added support for reporting Gen 5 physical disk speed
- o Support for SCSI NVMe Translation Layer Specification version 1.15
- o Enhance Smart Poll Failures
 - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
 - o If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next cycle.
 - o On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
 - o Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.
- o Set physical drive media type to unknown when the drive is misbehaving
- o Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- o Improve handling of malformed/invalid/bad CDBs.
 - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
 - o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller
 Version: 52.32.3-6118 (**Recommended**)
 Filename: HPE_MR216i-p_Gen11_52.32.3-6118_A.fwpkg; HPE_MR216i-p_Gen11_52.32.3-6118_A.json

Important Note!

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

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

Prerequisites

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

Fixes

- o Fix a00147824en_us: HPE MR408i-p Gen11 Storage Controller - A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- o Fix a00143381en_us: HPE MR Gen10 Plus/Gen11 Controllers - A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- o Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
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- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- o Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
- o Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
- o Fix an issue that firmware may assert while doing full initialization on logical drive with NVMe drives which have task management timeout
- o Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
- o Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
- o Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop
- o Fix a rare issue that controller brick may happen if Task Management failure recovery reset in the middle of a firmware flashing sequence
- o Fix an issue that Cryptographic Erase option may be shown for a drive that does not support it. The issue happens when replacing a few Crypto-Erase-capable drives with drives that do not support Crypto Erase.
- o Fix an issue that SPD is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- o Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIdentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- o Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- o Fix an issue that foreign configuration import is not accessible from RDE after reboot
- o Fix a rare timing issue that Cache Offload failed with error No offload detected
- o Fix a rare issue that firmware may assert while running firmware update when the bootloaders in two firmwares are different versions.
- o Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- o Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

Enhancements

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

Note: The Storage.HotspareActivationPolicy is modifiable only when the Copyback feature is enabled in FW. By default, Copyback feature is turned on along with smarthdd and smartssd. User can disable the Copyback feature from storcli. To enable or disable the Copyback feature, see "storcli /cx set copyback" details in the MR SW user guide.
 - o GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]
 - Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.
 - o GET Port[PortProtocol], [PortType]
- o EKM Rekey support
 - o POST #Storage.RekeyExternalKey Action from the Storage Schema.
 - o Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
 - o This improvement resolves a00143111en_us: HPE MR Gen11 and Gen10 Plus Controllers - Logical Drive Functions May be Blocked Unexpectedly Without IML Notification
- o Increased Frequency of Temperature Polling for NVMe Drives
 - o Default value is set to 15 seconds
 - o The parameter can be queried and configured using StorCLI
- o Second Source NAND Flash
 - o Controller firmware downgrades to below 7.26 (PR3 or earlier) are blocked on a controller using second source NAND flash.
 - o The first source NAND flash size is 23.625 GB; the second source NAND flash size is 21.301 GB. This information can be obtained from "CacheVault Flash Size" parameter in the "storcli /cx show all" command.
- o Add support for NVMe 2.0 drives
- o When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- o Add support for enable/disable controller phys
 - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- o Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- o Added support for reporting Gen 5 physical disk speed
- o Support for SCSI NVMe Translation Layer Specification version 1.15
- o Enhance Smart Poll Failures
 - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
 - o If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next cycle.

- o On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
- o Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.
- o Set physical drive media type to unknown when the drive is misbehaving
- o Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- o Improve handling of malformed/invalid/bad CDBs.
 - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
 - o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 (**Recommended**)

Filename: HPE_MR408i-o_Gen11_52.32.3-6118_A.fwpgk; HPE_MR408i-o_Gen11_52.32.3-6118_A.json

Important Note!

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

Prerequisites

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

Fixes

- o Fix a00147824en_us: HPE MR408i-p Gen11 Storage Controller - A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- o Fix a00143381en_us: HPE MR Gen10 Plus/Gen11 Controllers - A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- o Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
- o Filter out underruns error prints to avoid flooding of TTY logs
- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- o Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
- o Fix an issue that Logical Drive Status is not consistent while using the drive Hiding Options
- o Fix an issue that firmware may assert while doing full initialization on logical drive with NVME drives which have task management timeout
- o Fix a rare issue that firmware fault may occur when drive hotplug and Logical Drive property changes simultaneously
- o Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
- o Fix a rare issue that firmware fault may occur while controller reset with rebuild and PLDM type 0 in loop
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- o Fix an issue that SPDm is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- o Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIdentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
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 - o Redfish Compliance to 2024.2 Schema Bundle
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 - o GET/PATCH StorageController[AssetTag]
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 - o GET Drive[DriveFormFactor], [SlotCapableProtocols], [FirmwareVersion]

Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.
 - o GET Port[PortProtocol], [PortType]
- o EKM Rekey support
 - o POST #Storage.RekeyExternalKey Action from the Storage Schema.
 - o Reboot the server to obtain the new EKM Key from UEFI driver.
- o Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).
 - o This improvement resolves a00143111en_us: HPE MR Gen11 and Gen10 Plus Controllers - Logical Drive Functions May be Blocked Unexpectedly Without IML Notification

- o Increased Frequency of Temperature Polling for NVMe Drives
 - o Default value is set to 15 seconds
 - o The parameter can be queried and configured using StorCLI
- o Second Source NAND Flash
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- o Add support for NVMe 2.0 drives
- o When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- o Add support for enable/disable controller phys
 - o Use storcli /cx/px set state= <on|off> to enable/disable controller phys
- o Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- o Added support for reporting Gen 5 physical disk speed
- o Support for SCSI NVMe Translation Layer Specification version 1.15
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 - o Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
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- o Improve handling of malformed/invalid/bad CDBs.
 - o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
 - o Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller

Version: 52.32.3-6118 **(Recommended)**

Filename: HPE_MR408i-p_Gen11_52.32.3-6118_A.fwpgk; HPE_MR408i-p_Gen11_52.32.3-6118_A.json

Important Note!

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

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

Prerequisites

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

Fixes

- o Fix a00147824en_us: HPE MR408i-p Gen11 Storage Controller - A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- o Fix a00143381en_us: HPE MR Gen10 Plus/Gen11 Controllers - A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- o Fix an issue that imported secured drives in a span became unsecured
- o Filter drive spin-up sense prints to avoid flooding of log
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- o Fix a rare issue that UBM backplane discovery fails, blocking the enclosure management state machine
- o Fix a rare timing issue that controller firmware asserts due to bar address change while still in device scanning state. Please note that updating from an old firmware version can still see the issue, since the issue happens when reset to activate new firmware.
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- o Fix an issue that SPDm is disabled when upgrading from firmware using Mbed TLS 2.6.12 to firmware using Mbed TLS 2.26.0+
- o Fix an issue that fails to enable local encryption with 255 characters in EncryptionKeyIdentifier property using Redfish. AllowablePattern is updated from {0, 255} to {1, 255}.
- o Fix an issue that Trim command shows as "Not supported" on NVMe 1.x drive.
- o Fix an issue that foreign configuration import is not accessible from RDE after reboot
- o Fix a rare timing issue that Cache Offload failed with error No offload detected
- o Fix a rare issue that firmware may assert while running firmware update when the bootloaders in two firmwares are different versions.
- o Redfish None Type Volume created with "Encrypted" property should not be allowed to POST
- o Fix an issue that VM with PCIe passthrough configuration fails to bootup after a host reboot on Linux hypervisor
- o Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress.

Enhancements

- o DMTF PLDM Redfish Device Enablement enhancements
 - o Redfish Compliance to 2024.2 Schema Bundle
 - o Updated the dictionary to the 2024.2 schema bundle

- GET/PATCH StorageController[AssetTag]
- GET/PATCH Storage.HotspareActivationPolicy

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

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

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

- GET Port[PortProtocol], [PortType]

◦ EKM Rekey support

- POST #Storage.RekeyExternalKey Action from the Storage Schema.
- Reboot the server to obtain the new EKM Key from UEFI driver.

◦ Added support for WriteCacheDegraded Redfish Alert and correct CacheSummary State and Health for Pinned Cache scenario (Data trapped in cache).

- This improvement resolves a00143111en_us: HPE MR Gen11 and Gen10 Plus Controllers - Logical Drive Functions May be Blocked Unexpectedly Without IML Notification

◦ Increased Frequency of Temperature Polling for NVMe Drives

- Default value is set to 15 seconds
- The parameter can be queried and configured using StorCLI

◦ Second Source NAND Flash

- Controller firmware downgrades to below 7.26 (PR3 or earlier) are blocked on a controller using second source NAND flash.
- The first source NAND flash size is 23.625 GB; the second source NAND flash size is 21.301 GB. This information can be obtained from "CacheVault Flash Size" parameter in the "storcli /cx show all" command.

- Add support for NVMe 2.0 drives
- When an NVMe drive is being initialized using Write Same command, check against the max write same length from VPD B0.
- Add support for enable/disable controller phys

- Use storcli /cx/px set state= <on|off> to enable/disable controller phys

- Keep Locate LED state when a JBOD drive transitions to Unconfigured Good
- Added support for reporting Gen 5 physical disk speed
- Support for SCSI NVMe Translation Layer Specification version 1.15
- Enhance Smart Poll Failures

- Per physical drive tracker is added to identify if the drive supported smart poll feature in its lifetime.
- If the drive supported the feature and for any reason smart poll fails, previously reported temperature is not overwritten, and smart poll is retried in next cycle.
- On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
- Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.

- Set physical drive media type to unknown when the drive is misbehaving
- Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- Improve handling of malformed/invalid/bad CDBs.

- Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.
- Check and fail command for out of bound access scenarios for certain non- Read/Write commands like Mode Select which could cause controller exceptions by accessing memory out of bounds.

Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller

Version: 52.32.3-6118 (**Recommended**)

Filename: HPE_MR416i-o_Gen11_52.32.3-6118_A.fwpkg; HPE_MR416i-o_Gen11_52.32.3-6118_A.json

Important Note!

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

Prerequisites

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

Fixes

- Fix a00147824en_us: HPE MR408i-p Gen11 Storage Controller - A False Error Message, "400 Bad Request," Indicates Reset Is Not Successful When Using the Redfish Command to Reset the Controller to Factory Default Settings
- Fix a00143381en_us: HPE MR Gen10 Plus/Gen11 Controllers - A Predictive Failed Drive Fault Status LED Will Not Flash Amber As Expected When Configured As a JBOD
- Fix an issue that imported secured drives in a span became unsecured
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- Fix an issue that firmware may assert while doing full initialization on logical drive with NVME drives which have task management timeout
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- o Fix a rare issue that data abort exception may occur when a physical drive is removed before enclosure or RDE (Redfish Device Enablement) module initialization is completed
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Enhancements

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 - o Updated the dictionary to the 2024.2 schema bundle
 - o GET/PATCH StorageController[AssetTag]
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Note: The Storage.HotspaceActivationPolicy is modifiable only when the Copyback feature is enabled in FW. By default, Copyback feature is turned on along with smarthdd and smartssd. User can disable the Copyback feature from storcli. To enable or disable the Copyback feature, see "storcli /cx set copyback" details in the MR SW user guide.
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Note: DriveFormFactor is not supported for the NVMe drives as the method for arriving at the form factor is not currently supported.
 - o GET Port[PortProtocol], [PortType]
 - o EKM Rekey support
 - o POST #Storage.RekeyExternalKey Action from the Storage Schema.
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Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller
 Version: 52.32.3-6118 (**Recommended**)
 Filename: HPE_MR416i-p_Gen11_52.32.3-6118_A.fwpkg; HPE_MR416i-p_Gen11_52.32.3-6118_A.json

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- o On the drives, where SCSI format command is pending, changes are made to try smart poll in next cycle.
- o Smart polling is skipped on physical drives, where drive erase or sanitize operation is in progress.

- o Set physical drive media type to unknown when the drive is misbehaving
- o Improve the handle for simultaneous single and double ECC errors. Ensure uncorrectable errors halt system boot and appropriate alerts are raised.
- o Improve handling of malformed/invalid/bad CDBs.

o Check SGEs (Scatter-Gather Element) and data lengths are non-zero for Read/Write CDBs with non-zero block count to ensure controller does not hit DMA errors.

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

Firmware - Storage Fibre Channel

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

Version: 14.4.473.24 (**Recommended**)

Filename: PP14.4.473.24_header.pldm.fwpkg

Important Note!

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

Release notes:

[Broadcom Release notes](#)

This Firmware package contains following firmware versions:

Adapter	Speed	Universal Boot Image	Firmware	UEFI	Boot Bios
HPE SN1620E 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	14.4.473.24	14.4.473.24	14.4.473.8	14.4.469.0
HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.24	14.4.473.24	14.4.473.8	14.4.469.0

Prerequisites

The minimum version for adapter to support PLDM is 14.4.473.14

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	14.4.473.24	14.4.473.24	14.4.473.8	14.4.469.0
HPE SN1720E 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	14.4.473.24	14.4.473.24	14.4.473.8	14.4.469.0

Supported Devices and Features

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

32Gb FC Adapter:

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

64Gb FC Adapter:

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

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

Version: 02.11.01 (**Recommended**)

Filename: mh021101.upd_header.pldm.fwpkg

Important Note!

Release Notes:

[HPE QLogic Adapters Release Notes](#)

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0

Fixed the following:

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

Fixes

Fixed the following:

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

Enhancements

This Firmware package contains following firmware versions:

Adapter	Speed	MBI	Firmware	UEFI	Boot Bios
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter	32Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0
HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter	64Gb	02.11.01	09.15.05	7.39	0.0

Supported Devices and Features

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

32Gb Fibre Channel Host Bus Adapter:

- 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 - Storage Controller Top

HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers)
Version: 2025.05.01 **(Recommended)**
Filename: cp064828.compsig; cp064828.zip

Important Note!

- o Actual ESXi Version is 007.3210.0000.0000

Enhancements

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

Software - Storage Fibre Channel Top

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

Important Note!

This component is supported only on Gen12 ProLiant servers.

Release Notes:
[HPE QLogic Adapters Release Notes](#)

This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsdepot.hpe.com webpages, plus an HPE specific CPXXXX.xml file.
This driver is only supported on VMware ESXi 9.0.

Prerequisites

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

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

Enhancements

Driver version 5.5.85.0
This driver is only supported on VMware ESXi 9.0

Supported Devices and Features

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

32Gb Fibre Channel Host Bus Adapter:

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

[Top](#)

HPE Agentless Management Bundle for ESXi for Gen11 and Gen12 Servers

Version: 802.12.2.0 (**Recommended**)

Filename: amsdvComponent_802.12.2.0.8-1_24764940.zip

Fixes

See the [AMS Release Notes](#) for information about the issues resolved in this release.

Enhancements

See the [AMS Release Notes](#) for information about the enhancements in this release.

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

Version: 2025.05.01 (**Recommended**)

Filename: cp066690.compsig; cp066690.zip

Prerequisites

For HPE servers with iLO 7:

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

Fixes

See the [AMS Release Notes](#) for information about the issues resolved in this release.

Enhancements

See the [AMS Release Notes](#) for information about the enhancements in this release.

Get connected

hpe.com/info/getconnected

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

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