# VMware Deliverable Release Notes

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

**HPE Synergy Software Releases** 

HPE Integrity Superdome X

**HPE Superdome Flex** 



# SPP Release Notes for VMware vSphere 6.7

BIOS (Login Required) - System ROM

<u>Driver - Network</u>

Driver - Storage Controller

Firmware - Network

Firmware - NVDIMM

<u>Firmware - Storage Controller</u> <u>Firmware - Storage Fibre Channel</u>

Firmware (Entitlement Required) - Storage Controller

Software - Management

Software - Storage Controller

Software - Storage Fibre Channel

Software - System Management

### BIOS (Login Required) - System ROM

ROM Flash Firmware Package - HPE Apollo 2000 Gen10/HPE ProLiant XL170r/XL190r Gen10 (U38) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: U38\_2.32\_03\_09\_2020.fwpkg

Important Note!

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name**:

HPE Apollo 2000 Gen10/ProLiant XL170r/XL190r Gen10 System ROM - U38

### Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

# Previous Revision:

2.30 02-11-2020

### Firmware Dependencies:

None

## Enhancements/New Features:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

### <u>Fixes</u>

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

ROM Flash Firmware Package - HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 (U39) Servers

Version: 2.32\_03-09-2020 (**Critical**) Filename: U39\_2.32\_03\_09\_2020.fwpkg

## **Important Note!**

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array \$100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array \$100i support.

### **Deliverable Name:**

HPE Apollo 4200 Gen10/HPE ProLiant XL420 Gen10 System ROM - U39

# Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

## **Previous Revision:**

2.30\_02-11-2020

### Firmware Dependencies:

None

### Enhancements/New Features:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

### <u>Fixes</u>

#### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 (U40) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: U40\_2.32\_03\_09\_2020.fwpkg

# **Important Note!**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Deliverable Name

HPE Apollo 4510 Gen10/HPE ProLiant XL450 Gen10 System ROM - U40

# Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

# **Previous Revision:**

2.30\_02-11-2020

## Firmware Dependencies:

None

# Enhancements/New Features:

# **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

## <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Firmware Dependencies:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 (U45) Servers Version: 2.32 03-09-2020 (Critical)

Filename: U45\_2.32\_03\_09\_2020.fwpkg

# Important Note!

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Deliverable Name:

HPE Apollo 6500 Gen10/HPE ProLiant XL270d Gen10 System ROM - U45

### Release Version:

2.32\_03-09-2020

### Last Recommended or Critical Revision:

2.32\_03-09-2020

### **Previous Revision:**

2.30\_02-11-2020

# Firmware Dependencies:

None

# Enhancements/New Features:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

# <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

# Known Issues:

ROM Flash Firmware Package - HPE ProLiant BL460c Gen10 (I41) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: I41\_2.32\_03\_09\_2020.fwpkg

### Important Note!

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant BL460c Gen10 System ROM - I41

### Release Version:

2.32 03-09-2020

### Last Recommended or Critical Revision:

2.32\_03-09-2020

# Previous Revision:

2.30 02-11-2020

### Firmware Dependencies:

Non

# **Enhancements/New Features:**

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### **Known Issues:**

Important Notes:

None

# <u>Fixes</u>

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

## **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL160 Gen10/DL180 Gen10 (U31) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: U31\_2.32\_03\_09\_2020.fwpkg

# Important Note!

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant DL160 Gen10/DL180 Gen10 System ROM - U31

# Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

# Previous Revision:

2.30\_02-11-2020

# Firmware Dependencies:

None

# Enhancements/New Features:

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

#### Known Issues:

None

### Fixes

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Firmware Dependencies:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL20 Gen10 (U43) Servers

Version: 2.14\_03-09-2020 (Critical) Filename: U43\_2.14\_03\_09\_2020.fwpkg

## Important Note!

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant DL20 Gen10 System ROM - U43

### Release Version:

2.14\_03-09-2020

### Last Recommended or Critical Revision:

2.14\_03-09-2020

# Previous Revision:

2.12\_12-06-2019

# Firmware Dependencies:

None

### Enhancements/New Features:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

# Known Issues:

None

## **Fixes**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

## Known Issues:

ROM Flash Firmware Package - HPE ProLiant DL325 Gen10 (A41) Servers Version: 2.36\_03-09-2020 (Critical)

Filename: A41\_2.36\_03\_09\_2020.fwpkg

# **Important Note!**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Deliverable Name:

HPE ProLiant DL325 Gen10 System ROM - A41

### Release Version:

2.36 03-09-2020

### Last Recommended or Critical Revision:

2.36\_03-09-2020

### **Previous Revision:**

2.34\_02-18-2020

### Firmware Dependencies:

None

# Enhancements/New Features:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### **Known Issues:**

None

# <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

## Firmware Dependencies:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL360 Gen10 (U32) Servers Version:  $2.32\_03-09-2020$  (Critical)

Filename: U32\_2.32\_03\_09\_2020.fwpkg

# Important Note!

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Deliverable Name:

HPE ProLiant DL360 Gen10 System ROM - U32

### Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

# **Previous Revision:**

2.30\_02-11-2020

# Firmware Dependencies:

# Enhancements/New Features:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### **Known Issues:**

None

### **Fixes**

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### Firmware Dependencies:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL380 Gen10 (U30) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: U30\_2.32\_03\_09\_2020.fwpkg

### **Important Note!**

#### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array \$100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array \$100i support.

### **Deliverable Name:**

HPE ProLiant DL380 Gen10 System ROM - U30

## Release Version:

2.32 03-09-2020

# Last Recommended or Critical Revision:

2.32\_03-09-2020

### **Previous Revision:**

2.30\_02-11-2020

# Firmware Dependencies:

None

# Enhancements/New Features:

None

# Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

# <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

## Firmware Dependencies:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

# Known Issues:

ROM Flash Firmware Package - HPE ProLiant DL385 Gen10 (A40) Servers

Version: 2.36\_03-09-2020 (Critical)

Filename: A40\_2.36\_03\_09\_2020.fwpkg

### **Important Note!**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array \$100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array \$100i support.

### **Deliverable Name:**

HPE ProLiant DL385 Gen10 System ROM - A40

### Release Version:

2.36\_03-09-2020

### Last Recommended or Critical Revision:

2.36\_03-09-2020

### Previous Revision:

2.34\_02-18-2020

### Firmware Dependencies:

None

### Enhancements/New Features:

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### **Known Issues:**

None

# Fixes

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

## **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant DL560 Gen10/DL580 Gen10 (U34) Servers

Version: 2.32\_03-09-2020 (Critical)

Filename: U34\_2.32\_03\_09\_2020.fwpkg

# **Important Note!**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant DL560 Gen10/DL580 Gen10 System ROM - U34

# Release Version:

2.32\_03-09-2020

# Last Recommended or Critical Revision:

2.32 03-09-2020

# **Previous Revision:**

2.30\_02-11-2020

### Firmware Dependencies:

	None
	Enhancements/New Features:
	None
	Problems Fixed:
	Addressed an issue where the HPE Smart Array \$100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array \$100i support.
	Known Issues:
	None
<u>Fixes</u>	
	Important Notes:
	This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.
	Firmware Dependencies:
	None
	Problems Fixed:
	Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.
	Known Issues:
	None
Versio	Flash Firmware Package - HPE ProLiant MicroServer Gen10 Plus (U48) Servers on: 2.10_03-09-2020 <b>(Critical)</b> me: U48_2.10_03_09_2020.fwpkg
Impo	ertant Note!
	Important Notes:
	This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support. Please see advisory: <a href="https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00097734en_us">https://support.hpe.com/hpesc/public/docDisplay?docId=emr_na-a00097734en_us</a>
	Deliverable Name:
	HPE ProLiant MicroServer Gen10 Plus System ROM - U48
	Release Version:
	Release Version:           2.10_03-09-2020
	2.10_03-09-2020
	2.10_03-09-2020 Last Recommended or Critical Revision:
	2.10_03-09-2020  Last Recommended or Critical Revision: 2.10_03-09-2020
	2.10_03-09-2020  Last Recommended or Critical Revision: 2.10_03-09-2020  Previous Revision:
	2.10_03-09-2020  Last Recommended or Critical Revision: 2.10_03-09-2020  Previous Revision: 2.00_12-06-2019

None

Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 0/1/5/10 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as single RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

Known Issues:

None

# <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support. Please see advisory: https://support.hpe.com/hpesc/public/docDisplay?docId=emr\_na-a00097734en\_us

Firmware Dependencies:

None

Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 0/1/5/10 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as single RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant ML110 Gen10 (U33) Servers

Version: 2.32\_03-09-2020 (Critical) Filename: U33\_2.32\_03\_09\_2020.fwpkg

# **Important Note!**

## Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant ML110 Gen10 System ROM - U33

### Release Version:

2.32\_03-09-2020

### Last Recommended or Critical Revision:

2.32 03-09-2020

### **Previous Revision:**

2.30 02-11-2020

### Firmware Dependencies:

None

# Enhancements/New Features:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

# <u>Fixes</u>

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

# Firmware Dependencies:

None

### **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant ML30 Gen10 (U44) Servers

Version: 2.14\_03-09-2020 (Critical) Filename: U44\_2.14\_03\_09\_2020.fwpkg

### Important Note!

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

## Deliverable Name:

HPE ProLiant ML30 Gen10 System ROM - U44

## Release Version:

2.14\_03-09-2020

## Last Recommended or Critical Revision:

2.14 03-09-2020

	Previous Revision:
	2.12_12-06-2019
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	Problems Fixed:
	Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.
	Known Issues:
	None
<u>Fixes</u>	
	Important Notes:
	This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.
	Firmware Dependencies:
	None
	Problems Fixed:
	Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.
	Known Issues:
	None
Versio	Flash Firmware Package - HPE ProLiant ML350 Gen10 (U41) Servers on: 2.32_03-09-2020 <b>(Critical)</b> me: U41_2.32_03_09_2020.fwpkg
<u>Impo</u>	rtant Note!
	Important Notes:
	This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.
	Deliverable Name:
	HPE ProLiant ML350 Gen10 System ROM - U41
	Release Version:
	2.32_03-09-2020
	Last Recommended or Critical Revision:
	2.32_03-09-2020
	Previous Revision:
	2.30_02-11-2020
	Firmware Dependencies:
	None
	Enhancements/New Features:
	None
	None Problems Fixed:
	Problems Fixed:  Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not
	Problems Fixed:  Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.
<u>Fixes</u>	Problems Fixed:  Addressed an issue where the HPE Smart Array \$100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array \$100i support.  Known Issues:
<u>Fixes</u>	Problems Fixed:  Addressed an issue where the HPE Smart Array \$100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array \$100i support.  Known Issues:

None

Firmware Dependencies:

# **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Firmware Package - HPE ProLiant XL230k Gen10 (U37) Server

Version: 2.32\_03-09-2020 (Critical) Filename: U37\_2.32\_03\_09\_2020.fwpkg

# **Important Note!**

### Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

### **Deliverable Name:**

HPE ProLiant XL230k Gen10 System ROM - U37

#### Release Version:

2.32 03-09-2020

### Last Recommended or Critical Revision:

2.32\_03-09-2020

# Previous Revision:

2.30 02-11-2020

### Firmware Dependencies:

None

# Enhancements/New Features:

None

# **Problems Fixed:**

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

# Known Issues:

None

### **Fixes**

# Important Notes:

This version of the System ROM contains the latest support for the HPE Smart Array s100i UEFI Driver. This system ROM is critical for customers who have enabled the HPE Smart Array s100i support.

## Firmware Dependencies:

None

### Problems Fixed:

Addressed an issue where the HPE Smart Array s100i Software RAID may experience potential data inconsistency during initial configuration or operation of a RAID volume configured in RAID 5/50/50/60 Fault Tolerant Modes. This issue does not impact systems configured in other RAID configurations such as RAID 0 or 1. This issue does not impact systems that have not enabled Smart Array s100i support.

### Known Issues:

None

ROM Flash Universal Firmware Package - HPE ProLiant DL325 Gen10 Plus (A43) Servers

Version: 1.16\_01-10-2020 (Optional) Filename: A43\_1.16\_01\_10\_2020.fwpkg

# **Important Note!**

# Important Notes:

None

### Deliverable Name:

HPE ProLiant DL325 Gen10 Plus System ROM - A43

## Release Version:

1.16\_01-10-2020

# Last Recommended or Critical Revision:

1.10\_10-29-2019

#### Previous Revision

1.10\_10-29-2019

### Firmware Dependencies:

None

### Enhancements/New Features:

Enhanced the system power consumption when system is in an idle state. When running with iLO fw version 2.12 or later, the system will enter a low power state when the Data Fabric C-State Enable option is configured to Auto and iLO Integrated Remote Console is not open.

Enhanced the system performance when running some benchmarks and workloads.

Added a new BIOS/Platform Configuration (RBSU) for DRAM Controller Power Down to Memory Options. This option can be used to opportunistically power down the memory controller.

Added a new BIOS/Platform Configuration (RBSU) for AMD Fmax Boost Limit to Power and Performance Options. This option can be used to configure the maximum boost frequency when AMD Fmax Boost Limit Control is set to manual.

Added a new BIOS/Platform Configuration (RBSU) for XGMI Max Link Width to Power and Performance Options. This option can be used to manually configure the XGMI link width when XGMI Force Link Width is set to manual.

Updated the system thermal logic to support the latest GPU adapters.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

### Problems Fixed:

Addressed an issue where the system would never enter Data Fabric C-States. Data Fabric C-States can help reduce overall power consumption of a system that is running an idle or low stress workload.

Addressed an issue where the system would report the HPE Memory Type as Unknown. This was only an issue with reporting and did not affect system behavior.

Addressed an issue where RestCli or a Redfish "Get" command could return some invalid configuration settings.

Addressed an issue where systems configured with an UBM backplane may very rarely become unresponsive during post with a red error screen (RSOD) indicating a general protection fault in the PlatformStorageSupportDxe Image.

Addressed an issue where systems configured with an UBM backplane will not honor a customer configured One-Time boot setting.

### Known Issues:

None

### Fixes

### Important Notes:

None

### Firmware Dependencies:

None

# Problems Fixed:

Addressed an issue where the system would never enter Data Fabric C-States. Data Fabric C-States can help reduce overall power consumption of a system that is running an idle or low stress workload.

Addressed an issue where the system would report the HPE Memory Type as Unknown. This was only an issue with reporting and did not affect system behavior.

Addressed an issue where RestCli or a Redfish "Get" command could return some invalid configuration settings.

Addressed an issue where systems configured with an UBM backplane may very rarely become unresponsive during post with a red error screen (RSOD) indicating a general protection fault in the PlatformStorageSupportDxe Image.

Addressed an issue where systems configured with an UBM backplane will not honor a customer configured One-Time boot setting

### Known Issues:

None

### **Enhancements**

Enhanced the system power consumption when system is in an idle state. When running with iLO fw version 2.12 or later, the system will enter a low power state when the Data Fabric C-State Enable option is configured to Auto and iLO Integrated Remote Console is not open.

 $\label{lem:enhanced} \mbox{Enhanced the system performance when running some benchmarks and workloads}.$ 

Added a new BIOS/Platform Configuration (RBSU) for DRAM Controller Power Down to Memory Options. This option can be used to opportunistically power down the memory controller.

Added a new BIOS/Platform Configuration (RBSU) for AMD Fmax Boost Limit to Power and Performance Options. This option can be used to configure the maximum boost frequency when AMD Fmax Boost Limit Control is set to manual.

Added a new BIOS/Platform Configuration (RBSU) for XGMI Max Link Width to Power and Performance Options. This option can be used to manually configure the XGMI link width when XGMI Force Link Width is set to manual.

Updated the system thermal logic to support the latest GPU adapters.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

ROM Flash Universal Firmware Package - HPE ProLiant DL385 Gen10 Plus (A42) Servers Version: 1.18\_01-22-2020 (Optional)

Filename: A42\_1.18\_01\_22\_2020.fwpkq

# Deliverable Name: HPE ProLiant DL385 Gen10 Plus System ROM - A42 Release Version: 1.18\_01-22-2020 Last Recommended or Critical Revision: 1.10 10-29-2019 **Previous Revision:** 1.10 10-29-2019 Firmware Dependencies: None **Enhancements/New Features:** Enhanced the system power consumption when system is in an idle state. When running with iLO fix version 2.12 or later, the system will enter a low power state when the Data Fabric C-State Enable option is configured to Auto and iLO Integrated Remote Console is not open Enhanced the system performance when running some benchmarks and workloads. Added a new BIOS/Platform Configuration (RBSU) for DRAM Controller Power Down to Memory Options. This option can be used to opportunistically power down the memory controller. Added a new BIOS/Platform Configuration (RBSU) for AMD Fmax Boost Limit to Power and Performance Options. This option can be used to configure the maximum boost frequency when AMD Fmax Boost Limit to Power and Performance Options. Added a new BIOS/Platform Configuration (RBSU) for XGMI Max Link Width to Power and Performance Options. This option can be used to manually configure the XGMI link width when XGMI Force Link Width is set to manual. Updated the system thermal logic to support the latest GPU adapters. Updated the language translations (non-English modes) for System Utilities. Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options. Problems Fixed: Addressed an issue where the system would never enter Data Fabric C-States. Data Fabric C-States can help reduce overall power consumption of a system that is running an idle or low stress workload. Addressed an issue where the system would report the HPE Memory Type as Unknown. This was only an issue with reporting and did not affect system behavior. Addressed an issue where RestCli or a Redfish "Get" command could return some invalid configuration settings. Addressed an issue where systems configured with an UBM backplane may very rarely become unresponsive during post with a red error screen (RSOD) indicating a general protection fault in the PlatformStorageSupportDxe Image. Addressed an issue where systems configured with an UBM backplane will not honor a customer configured One-Time boot setting. Known Issues: None **Fixes** Important Notes: None Firmware Dependencies: None Problems Fixed: Addressed an issue where the system would never enter Data Fabric C-States. Data Fabric C-States can help reduce overall power consumption of a system that is running an idle or low stress workload. Addressed an issue where the system would report the HPE Memory Type as Unknown. This was only an issue with reporting and did not affect system behavior. Addressed an issue where RestCli or a Redfish "Get" command could return some invalid configuration settings. Addressed an issue where systems configured with an UBM backplane may very rarely become unresponsive during post with a red error screen (RSOD) indicating a general protection fault in the PlatformStorageSupportDxe Image. Addressed an issue where systems configured with an UBM backplane will not honor a customer configured One-Time boot setting. Known Issues: None **Enhancements**

Enhanced the system power consumption when system is in an idle state. When running with iLO fiv version 2.12 or later, the system will enter a low power state when the Data Fabric C-State Enable option is configured to Auto and iLO Integrated

**Important Note!** 

None

Important Notes:

Remote Console is not open.

Enhanced the system performance when running some benchmarks and workloads.

Added a new BIOS/Platform Configuration (RBSU) for DRAM Controller Power Down to Memory Options. This option can be used to opportunistically power down the memory controller.

Added a new BIOS/Platform Configuration (RBSU) for AMD Fmax Boost Limit to Power and Performance Options. This option can be used to configure the maximum boost frequency when AMD Fmax Boost Limit Control is set to manual.

Added a new BIOS/Platform Configuration (RBSU) for XGMI Max Link Width to Power and Performance Options. This option can be used to manually configure the XGMI link width when XGMI Force Link Width is set to manual.

Updated the system thermal logic to support the latest GPU adapters.

Updated the language translations (non-English modes) for System Utilities.

Updated the RESTful API HPE BIOS Attribute Registry resources to match the latest BIOS/Platform Configuration options.

Driver - Network

Top

Mellanox net-mst Kernel Driver Component for VMware ESXi 6.5 and 6.7

Version: 2019.01.02 (Recommended)
Filename: cp038662.compsig; cp038662.zip

### Important Note!

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

# <u>Fixes</u>

Mellanox NMST Kermel Module Driver Component for VMware ESXi 6.0 includes nmst version 4.12.0.105.

#### **Enhancements**

Mellanox NMST Kermel Module Driver Component for VMware ESXi 6.0 includes nmst version 4.12.0.105.

### Supported Devices and Features

HPE Part Number	Device Name	PSID
764282-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter	HP_1350110023
764283-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter	HP_1360110017
764284-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017
764285-B21	HPE InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HPE InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022
868779-B21	HPE Synergy 6410C 25/50Gb Ethernet Adapter	HPE0000000006
779793-B21	HPE Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023
779799-B21	HPE Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE0000000014

HPE Blade Emulex 10/20GbE Driver for VMware vSphere 6.7

Version: 2020.03.09 (Optional)

Filename: cp042920.compsig; cp042920.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7, version 2019.12.01 or later, for use with this driver.

# <u>Fixes</u>

This product corrects a vmnic flapping issue which impacts network connectivity.

### **Supported Devices and Features**

This driver supports the following network adapters:

- · HPE FlexFabric 20Gb 2-port 650FLB Adapter
- · HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp039935.compsig; cp039935.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 Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7, version 2019.03.01 or later, for use with this driver.

# **Enhancements**

Initial release.

### Supported Devices and Features

This driver supports the following network adapters:

- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter

HPE Blade Intel ixgben Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp039953.compsig; cp039953.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE Blade Intel Online Firmware Upgrade Utility for VMware, version 1.0.7 or later, for use with this driver.

# <u>Fixes</u>

This product corrects a recursion termination condition so that recursion correctly ends in the case of PCIe link down.

This product addresses an issue where the ixgben driver has high CPU overhead when an SFP+ module is absent.

## **Enhancements**

Initial release.

### **Supported Devices and Features**

These drivers support the following network adapters:

- HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp039955.compsig; cp039955.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.hp.com webpages, plus an HPE specific CP0xxxxx.xml file.

HPE recommends the firmware provided in HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware, version 1.0.8 or later, for use with this driver.

# <u>Fixes</u>

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off.

This product addresses a PSOD seen with FCoE.

# **Enhancements**

Initial release.

### **Supported Devices and Features**

These drivers support the following network adapters:

- HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.7

Version: 2020.03.09 (Optional)

Filename: cp041830.compsig; cp041830.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 Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware, version 5.10.1 or later, for use with this driver.

# <u>Fixes</u>

This product corrects an issue Router will discard the IPv4/IPv6 packet (RoCE V2) whose hop limit field is 0 or 1.

### **Enhancements**

This product now supports the following network adapters.

- · HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

### 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 10/25Gb 2-port 631FLR-SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

HPE Emulex 10/20 GbE Driver for VMware vSphere 6.7

Version: 2020.03.09 (Optional)

Filename: cp041842.compsig; cp041842.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7, version 2019.03.01 or later, for use with this driver.

### <u>Fixes</u>

This product corrects an issue vmnic flapping caused the network connectivity to be affected.

### Supported Devices and Features

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Emulex 10/20GbE iSCSI Driver for VMware vSphere 6.7

Version: 2020.03.09 (Optional)

Filename: cp041840.compsig; cp041840.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 Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7, version 2019.03.01 or later, for use with this driver.

# <u>Fixes</u>

This product corrects an issue ESXi lib naming convention in iscsi driver packages caused payload conflict for ESXi 6.7.

### **Supported Devices and Features**

This driver supports the following network adapters:

- HP StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Intel i40en Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp040370.compsig; cp040370.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 3.12.0 or later, for use with this driver.

## Fixes

This product addresses an issue where VLAN tag traffic dropped problem.

### **Enhancements**

This product now remove supports Synergy and Blade Server.

# **Supported Devices and Features**

This product supports the following network adapters:

- · HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HPE Ethernet 1Gb 2-port 368i Adapter • HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE Intel igbn Driver for VMware vSphere 6.7 Version: 2019.12.20 (Optional) Filename: cp040829.compsig; cp040829.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 3.12.0 or later, for use with this driver.

### **Fixes**

This product addresses an issue where race condition during NIC adapter reset.

### **Enhancements**

This product now remove supports Synergy and Blade Server.

### **Supported Devices and Features**

These drivers support the following network adapters:

- HP Ethernet 1Gb 2-port 361i Adapter
- · HP Ethernet 1Gb 2-port 361T Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HP Ethernet 1Gb 4-port 366T Adapter

HPE Intel ixgben Driver for VMware vSphere 6.7 Version: 2019.12.20 (Optional)

Filename: cp040372.compsig; cp040372.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 CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE Intel Online Firmware Upgrade Utility for VMware, version 3.12.0 or later, for use with this driver.

# Fixes

This product corrects a recursion termination condition so that recursion correctly ends in the case of PCIe link down.

This product addresses an issue where the ixgben driver has high CPU overhead when an SFP+ module is absent.

# **Enhancements**

This product no longer supports ProLiant Blade servers and devices. Those servers and devices are now supported by the HPE Blade Intel ixgben Driver for VMware vSphere 6.7.

## Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HP Ethernet 10Gb 2-port 560SFP+ Adapter
- · HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter

Filename: cp039896.compsig; cp039896.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.hp.com webpages, plus an HPE specific CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware, version 4.11.0 or later, for use with this driver.

### **Fixes**

This product addresses a PSOD in ESXi6.7 when running FCoE continuous reboot.

### **Enhancements**

This product now remove supports Synergy and Blade Server.

### **Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 521T Adapter
- · HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- · HPE StoreFabric CN1200R-T Converged Network Adapter
- HPE StoreFabric CN1300R Converged Network Adapter

HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7

Version: 2019.12.20 (Optional)

Filename: cp040827.compsig; cp040827.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.hp.com webpages, plus an HPE specific CPOxxxxx.xml file.

HPE recommends the firmware provided in HPE OLogic NX2 Online Firmware Upgrade Utility for VMware, version 1.26.0 or later, for use with this driver.

# <u>Fixes</u>

This product addresses a VMkernel critical error (PSOD) seen during N-Port ID Virtualization (NPIV) VM power off. This product addresses a PSOD seen with FCoE.

# **Enhancements**

This product no longer supports ProLiant Blade servers and devices. Those servers and devices are now supported by the HPE Blade OLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7.

This product no longer supports Synergy servers and devices. The Synergy-specific product is not yet available. You should continue to use version 2019.08.02 of this product until the new Synergy product is released. This page will be updated with a pointer to the new product when it is available.

# Supported Devices and Features

These drivers support the following network adapters:

- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Dual Port Converged Network Adapter

nmlx5\_en Driver Component for VMware 6.7 Version: 2019.06.19 **(Recommended)** Filename: cp040235.compsig; cp040235.zip

# Important Note!

## Known Issues in version 4.17.15.16:

- ECN tunable parameter initialAlphaValue for the Reaction Point protocol cannot be modified.
- ECN statistic counters accumulatorsPeriod and ecnMarkedRoce-Packets display wrong values and cannot be cleared.
- · The maximum value of RSS must be lower than the number of CPU cores.
- The hardware can offload only up to 256B of headers.
- The "esxcli network sriovnic of stats" command is not supported. When running this command on a vmknic, a failure message is displayed
- There is no traffic between PV and SR-IOV VF connected to different ports on the same HCA.
- Setting the "Allow Guest MTU Change" option in vSphere Client is currently not functional. Although guest MTU changes in SR-IOV are allowed, they do not affect the port's MTU and the guest's MTU remains the same as the PF MTU.
- When a guest is assigned an IB PCI passibru device or an IB VF, VMware Tools networking information for the guest may be incorrect. This affects how the guest networking information, such as interfaces and their IPs, is displayed in vCenter.
- Operations on vmnics which are in passthru mode are not supported.
- The 'esxcli mellanox uplink link info -u <vmnic\_name>' command reports the 'Auto negotiation' capability always as 'true'.
- · SMP MADs (ibnetdiscover, sminfo, iblinkinfo, smpdump, ibqueryerr, ibdiagnet and smpquery) are not supported on the VFs.
- IPv6 as inner packet is not supported.
- Firmware VF configuration must be N+1 (while N is the required VF number). For example: If your configuration requires 10 VFs, the firmware must be set to support 16 VFs (ESXi Limitation).
- Wake-on-LAN does not notify when invalid parameters are provided.

- · Nested ESXi might not function properly.
- Device RSS fails to hash traffic to sufficient RX rings with Broadcast traffic.
- In stress condition 'Watchdog' may appear, leading to uplink going up and down.
- Reloading the driver when the SR-IOV VFs are ON, will result in Purple Screen of Death (PSOD).
- A PSOD may occur during vMotion over ENS(Enhanced Network stack) VMK.
- VGT traffic over VXLAN interfaces is currently not supported.
- · VMs with SR-IOV cannot be powered on when running low on available vectors.
- During ENS uplink detachment from the ENS DVS, the below error message regarding the queue still being allocated or that the requested queue is not in use may appear. "Driver covers for OS issue and the messages are for information and ""
- Although the max\_vfs module parameter range is "0-128", due to firmware limitations, the following are the supported VFs per single port devices:
  - ConnectX-4: up to 127
  - ConnectX-5: up to 63

For further information on the release notes for ESXi 6.7 Driver Version 4.17.15.16 follow the below link: https://www.mellanox.com/page/products\_dyn?product\_family=29&mtag=vmware\_driver

# <u>Fixes</u>

### The following issues have been fixed in version in 4.17.15.16:

• Fixed an issue that prevented ESXi from being discovered via the CDP (Cisco Discovery Protocol) protocol on ConnectX-4 Lx adapter cards.

### **Enhancements**

### Changes and New Features in smart component version 2019.06.19:

- Added support for the following adapters:
  - HPE Ethernet 10/25Gb 2-port 642SFP28 Adapter (HPE Part Number: P13188-B21)
    - HPE Ethernet 10/25Gb 2-port 642SFP28 OCP3 Adapter (HPE Part Number: P10112-B21)
    - HPE Ethernet 10Gb 2-port 548SFP+ OCP3 Adapter (HPE Part Number: P11341-B21)

### New features and changes in version 4.17.15.16:

Enhanced Network Stack (ENS)

# **Supported Devices and Features**

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022
868779-B21	HPE Synergy 6410C 25/50Gb Ethernet Adapter	HPE0000000006
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE0000000014

VMware ESXi 6.5 and 6.7 MST Drivers Offline Bundle for Mellanox Adapters

Version: 4.12.0.105 (Recommended)

Filename: MLNX-NMST-ESX-6.5.0-4.12.0.105.zip

## **Prerequisites**

NA

### **Enhancements**

VM65/67 nmst 4.12.0.105

# Driver - Storage Controller

HPE Dynamic Smart Array B140i Controller Driver for VMware vSphere 6.7 (Driver Component).

Version: 2019.05.01 (Recommended)

Filename: cp039788.compsig; cp039788.zip

### Important Note!

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

# <u>Fixes</u>

Fixes an issue where the driver will not upgrade due to the AHCI driver taking priority.

This issue is only encounter when upgrading to version 2018.09.31 (5.5.0.66-1). All other versions are not affected.

Top

HPE Dynamic Smart Array Controller Driver for VMware vSphere 6.7 (Bundle file).

Version: 5.5.0.68-1 (Recommended)

Filename: hpdsa-5.5.0.68.zip

### **Fixes**

Fixes an issue where the driver will not upgrade due to the AHCI driver taking priority.

This issue is only encounter when upgrading to version 2018.09.31 (5.5.0.66-1). All other versions are not affected.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware ESXi 6.7 (Bundle file)

Version: 1.0.4.3008 (Recommended)

Filename: VMW-ESX-6.7.0-smartpqi-1.0.4.3008-offline\_bundle-14862538.zip

### **Enhancements**

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).

Version: 2019.12.01 (Recommended) Filename: cp040981.compsig; cp040981.zip

### Important Note!

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

### **Enhancements**

Add Timeout support field in pass-through and task management request in order to enable a recover mechanism when a when a pass-through command fails to complete.

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.7 (Bundle file)

Version: 2.0.44-1 (Recommended)

Filename: VMW-ESX-6.7.0-nhpsa-2.0.44-offline\_bundle-14136205.zip

### <u>Fixes</u>

• Fix an issue where data could become inaccessible if a hot plug is performed while using SATA drivers connected to the controller directly without an external storage enclosure.

HPE ProLiant Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).

Version: 2019.09.01 (Recommended) Filename: cp040735.compsig; cp040735.zip

# Important Note!

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

# <u>Fixes</u>

• Fix an issue where data could become inaccessible if a hot plug is performed while using SATA drivers connected to the controller directly without an external storage enclosure.

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.7

Version: 7.706.09.00 (Recommended)

Filename: Release\_Notes\_Isi-mr3-7.706.09.00-10EM.txt; VMW-ESX-6.7.0-lsi\_mr3-7.706.09.00-offline\_bundle-12095481.zip

# <u>Fixes</u>

Addressed a vSAN Fault Tolerance test failure seen in JBOD mode.

HPE Smart Array P824i-p MR controller (64-bit) Driver for vSphere 6.7 (Driver Component)

Version: 2019.12.13 (Recommended) Filename: cp042807.compsig; cp042807.zip

# Important Note!

Firmware - Network

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.

### <u>Fixes</u>

Addressed a vSAN Fault Tolerance test failure seen in JBOD mode.

Version: 1.0.7 (Optional)

Filename: CP040426.compsig; CP040426.zip

### Important Note!

HPE recommends the HPE Blade Intel ixgben Drivers for VMware, versions 2019.12.20, for use with this firmware.

### **Prerequisites**

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

# <u>Fixes</u>

This product addresses an issue where the "Firmware Image Properties," "Device Level Configuration," and "Link Speed Status" options in NIC HII menu disappear when F7 is pressed.

### **Enhancements**

Initial release.

# **Supported Devices and Features**

This package supports the following network adapters:

- · HPE Ethernet 10Gb 2-port 560FLB Adapter
- HPE Ethernet 10Gb 2-port 560M Adapter

HPE Blade QLogic NX2 Online Firmware Upgrade Utility for VMware

Version: 1.0.8 (Optional)

Filename: CP039870.compsig; CP039870.zip

# **Important Note!**

HPE recommends HPE Blade QLogic NX2 10/20GbE Multifunction Drivers for VMware, versions 2019.12.20 or later, for use with this firmware.

### **Prerequisites**

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

# <u>Fixes</u>

This product addresses an incorrect local sequence number in the Link Layer Discovery Protocol (LLDP).

This product addresses an issue where boot mode is not restored to the default value after a factory reset.

This product addresses an issue where the F1 help messages "Number of VFs per PF" and "Legacy Boot Protocol" option display incorrectly in Japanese and Simplified Chinese languages.

# **Enhancements**

Initial release.

# Supported Devices and Features

This product supports the following network adapters:

- HPE FlexFabric 10Gb 2-port 534M Adapter
- HPE FlexFabric 10Gb 2-port 536FLB Adapter
- HPE FlexFabric 20Gb 2-port 630FLB Adapter
- HPE FlexFabric 20Gb 2-port 630M Adapter

HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware

Version: 5.10.1 (Optional)

Filename: CP041782.compsig; CP041782.zip

# **Important Note!**

HPE recommends HPE Broadcom NetXtreme-E Drivers for VMware, versions 2019.08.02 or later, for use with this firmware.

This software package contains NVM Image version 214.0.286015 with the following firmware versions:

NIC	<b>Bootcode Version</b>	NCSI Version	MBA Version	<b>UEFI</b> Version	CCM Version	RoCE Version
HPE Ethernet 10Gb 2-port 535FLR-T Adapter						
HPE Ethernet 10Gb 2-port 535T Adapter						
HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.4.9.7	214.0.253.1	214.0.233.0	214.0.262.6	214.0.221.0	214.0.187.0
HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ Adapter						
HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter						

### **Prerequisites**

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

### **Enhancements**

This product now supports the following network adapters.

- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

### **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 10/25Gb 2-port 631FLR-SFP28 Adapter
- HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ Adapter
- HPE Ethernet 10Gb 2-port 537SFP+ FLR Adapter

HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware

Version: 1.26.1 (Optional)

Filename: CP042268.compsig; CP042268.zip

### Important Note!

HPE recommends HP Broadcom tg3 Ethernet Drivers for VMware, versions 2015.10.01, for use with this firmware.

This software package contains combo image v20.14.62 with the following firmware versions:

NIC	<b>Boot Code Version</b>	PXE Version	NCSI Version	UEFI Version	CCM Version
HPE Ethernet 1Gb 2-port 330i Adapter (22BD)	2.10	20.14.2	1.5.12	20.14.28	214.0.221.0
HPE Ethernet 1Gb 4-port 331i Adapter (22BE) HPE Ethernet 1Gb 4-port 331FLR Adapter HPE Ethernet 1Gb 4-port 331T Adapter	1.46	20.14.2	1.5.12	20.14.28	214.0.221.0
HPE Ethernet 1Gb 2-port 332i Adapter (22E8) HPE Ethernet 1Gb 2-port 332T Adapter	1.40	20.14.2	1.5.12	20.14.28	214.0.221.0

# **Prerequisites**

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

### <u>Fixes</u>

This product addresses an issue where Legacy Boot Protocol(System Utilities -> System Configuration -> NIC HII menu -> BA Configuration Menu) changes from None to PXE. This product addresses an issue where it would be forced to exit System Utilities when select Port 2 & Port 3(System Utilities -> System Configuration -> NIC HII menu).

# **Supported Devices and Features**

This product supports the following network adapters:

- HPE Ethernet 1Gb 2-port 330i Adapter (22BD)
- HPE Ethernet 1Gb 4-port 331i Adapter (22BE)
- HPE Ethernet 1Gb 4-port 331FLR Adapter
- HPE Ethernet 1Gb 4-port 331T Adapter
- HPE Ethernet 1Gb 2-port 332i Adapter (22E8)
- HPE Ethernet 1Gb 2-port 332T Adapter

HPE Firmware Flash for Emulex Converged Network Adapters for VMware vSphere 6.7

Version: 2019.12.01 (Recommended)

Filename: CP039569.compsig; CP039569.zip

## Important Note!

Release Notes:

HPE StoreFabric Emulex Adapter Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

- 1. Go to <a href="http://www.hpe.com/support/manuals">http://www.hpe.com/support/manuals</a>
- 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

# **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:

### UEFI:

- Change Unified Extensible Firmware Interface (UEFI) support version from 2.6 to 2.7
- HPE FlexFabric 20Gb 2-port 650FLB Adapter and HPE FlexFabric 20Gb 2-port 650M Adapter does not complete to create boot source on 2nd port

#### Firmware

- · Light Emitting Diode(LED) is in invalid state when disable the port under Unified Extensible Firmware Interface (UEFI)
- Duplicate Entries found in firmware report under NIC details for few adaptors.
- Full adapter name is not displayed for HPE FlexFabric 20Gb 2-port 650M Adapter in some Rom Based Setup Utility (RBSU)

### **Enhancements**

Updated CNA (XE100 series) firmware

**Firmware** 

Contains:

CNA (XE100 series) firmware 12.0.1280.5

# **Supported Devices and Features**

This component is supported on following Emulex Converged Network Adapters:

#### XE100 Series

- HPE StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

HPE Intel Online Firmware Upgrade Utility for VMware

Version: 3.12.12 (Optional)

Filename: CP040151.compsig; CP040151.zip

### Important Note!

HPE recommends at least one of the following drivers, as appropriate for your device, for use with this firmware:

- HPE Intel igbn Drivers for VMware, versions 2019.12.20
- HPE Intel ixgben Drivers for VMware, versions 2019.12.20
- HPE Intel i40en Drivers for VMware, versions 2019.12.20

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

NIC	EEPROM/NVM Version	OROM Version	Single NVM Version
HP Ethernet 1Gb 2-port 361i Adapter	8000106F	1.2529.0	N/A
HP Ethernet 1Gb 2-port 361T Adapter	80000F91	1.2529.0	N/A
HP Ethernet 1Gb 2-port 363i Adapter	80000D00	1.2529.0	N/A
HPE Ethernet 1Gb 4-port 366i Communication Board	80000EBF	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366i Adapter	8000105E	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366FLR Adapter	80001060	1.2529.0	N/A
HP Ethernet 1Gb 4-port 366T Adapter	8000105F	1.2529.0	N/A
HPE Ethernet 1Gb 2-port 368i Adapter	80001DEA	1.2529.0	N/A
HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 1Gb 4-port 369i Adapter	80001DEC	1.2529.0	N/A
HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	80000838	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 560SFP+ Adapter	80000835	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568i Adapter	80001DEE	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter	80001DE9	1.2529.0	N/A
HPE Ethernet 10Gb 2-port 563i Adapter	800035C0	1.1375.0	N/A
HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	8000641A	1.2529.0	10.51.5

HPE Ethernet 10Gb 2-port 562FLR-T Adapter	80000F56	1.2529.0	10.51.3
HPE Ethernet 10Gb 2-port 562SFP+ Adapter	80006424	1.2529.0	10.51.5
HPE Ethernet 10Gb 2-port 562T Adapter	80000F55	1.2529.0	10.51.3

The combo image v1.2529.0 includes: Boot Agent: 1GbE - v1.5.88, 10GbE - v2.4.34, 40GbE - v1.1.10 & UEFI Drivers: 1GbE - v9.0.03, 10GbE - v7.4.06, 40GbE - v3.9.11

The combo image v1.1375.0 includes: Boot Agent: 1GbE - v1.5.72, 10GbE - v2.3.46, 40GbE - v1.0.21 & UEFI Drivers: 1GbE - v6.9.13, 10GbE - v5.0.20, 40GbE - v1.5.14

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

### **Prerequisites**

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

# <u>Fixes</u>

This product addresses an issue where LLDP are disabled.

This product addresses an issue where "Firmware Image Properties", "Device Level Configuration", and "Link Speed Status" options in NIC HII menu will disappear when F7 is pressed.

This product addresses an issue where POST when ESC Is Pressed to Enter The BIOS Setup Utility with HP Ethernet 1Gb 4-port 366FLR Adapter.

This product addresses an issue where there is no VLAN function under Legacy mode.

### **Enhancements**

This product no longer supports ProLiant Blade servers and devices. Those servers and devices are now supported by the HPE Blade Intel Online Firmware Upgrade Utility for VMware.

This product no longer supports Synergy servers and devices. The Synergy-specific Intel NIC firmware product is not yet available. You should continue to use version 3.11.7 of this product until the new Synergy product is available. This page will be updated with a pointer to the new product when it is available

## Supported Devices and Features

This package supports the following network adapters:

- HP Ethernet 1Gb 4-port 366T Adapter
- HP Ethernet 1Gb 4-port 366FLR Adapter
- HPE Ethernet 1Gb 2-port 368FLR-MMT Adapter
- HP Ethernet 1Gb 2-port 361T Adapter
- HPE Ethernet 10Gb 2-port 568FLR-MMSFP+ Adapter
- HPE Ethernet 10Gb 2-port 562T Adapter
- HPE Ethernet 10Gb 2-port 562SFP+ Adapter
- HPE Ethernet 10Gb 2-port 562FLR-T Adapter
- HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 560SFP+ Adapter
- HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter
- HPE Ethernet 10Gb 2-port 568i Adapter
- HPE Ethernet 1Gb 4-port 369i Adapter
- HPE Ethernet 1Gb 4-port 366i Communication Board
- HPE Ethernet 1Gb 2-port 368i Adapter
- HP Ethernet 1Gb 2-port 363i Adapter
- HP Ethernet 1Gb 4-port 366i Adapter
- HP Ethernet 1Gb 2-port 361i Adapter •
- HPE Ethernet 10Gb 2-port 568FLR-MMT Adapter

HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware

Version: 4.11.9 (Optional)

Filename: CP039777.compsig; CP039777.zip

## Important Note!

HPE recommends HPE QLogic FastLinQ 10/25/50GbE Multifunction Drivers for VMware, versions 2019.12.20 or later, for use with this firmware.

This software package contains combo image v8.50.22. This combo image includes: Boot Code (MFW): 8.50.9.0, UEFI: 4.1.9.2 and PXE: 2.0.19. The users will only see the combo image versions in the interactive mode firmware update or while using HPSUM/SPP to update the firmware on the supported adapters.

# **Prerequisites**

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

### <u>Fixes</u>

This product addresses an issue where 2nd port reports "function type: disabled" with HPE Ethernet 10Gb 2-port 524SFP+ Adapter

# **Enhancements**

This product now remove supports Synergy and Blade Server

## Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10Gb 2-port 524SFP+ Adapter
- HPE Ethernet 10Gb 2-port 521T Adapter

- HPE Ethernet 10/25Gb 2-port 622FLR-SFP28 Converged Network Adapter
- HPE Ethernet 10/25Gb 2-port 621SFP28 Adapter
- HPE StoreFabric CN1300R Converged Network Adapter
- HPE StoreFabric CN1200R-T Converged Network Adapter

HPE QLogic NX2 Online Firmware Upgrade Utility for VMware

Version: 1.26.30 (Optional)

Filename: CP043318.compsig; CP043318.zip

### Important Note!

HPE recommends HPE QLogic NX2 10/20GbE Multifunction Drivers for VMware, versions 2019.12.20 or later, for use with this firmware. This software package contains combo image v7.18.27 with the following firmware versions:

NIC	<b>Boot Code Version</b>	PXE Version	UEFI Version	iSCSI Version	FCoE Version	CCM Version	L2 Version
HP Ethernet 10Gb 2-port 530SFP+ Adapter HP Ethernet 10Gb 2-port 530T Adapter	7.15.77	7.14.13	8.4.3	n/a	n/a	7.14.4	7.12.25
HP Ethernet 10Gb 2-port 533FLR-T Adapter HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter HPE FlexFabric 10Gb 4-port 536FLR-T Adapter HP StoreFabric CN1100R Dual Port Converged Network Adapter HPE StoreFabric CN1100R-T Converged Network Adapter	7.15.77	7.14.13	8.4.3	7.14.0	7.14.3	7.14.4	7.12.25

### **Prerequisites**

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

### <u>Fixes</u>

This product addresses an Overheat issue that system shuts down automatically due to NIC temperature exceeding threshold.

# **Supported Devices and Features**

This product supports the following network adapters:

- HP Ethernet 10Gb 2-port 530SFP+ Adapter
- HP Ethernet 10Gb 2-port 530T Adapter
- HP Ethernet 10Gb 2-port 533FLR-T Adapter
   HP Ethernet 10Gb 2-port 533FLR-T Adapter
- HP FlexFabric 10Gb 2-port 534FLR-SFP+ Adapter
- HPE FlexFabric 10Gb 4-port 536FLR-T Adapter
- HP StoreFabric CN1100R Dual Port Converged Network Adapter
- HPE StoreFabric CN1100R-T Converged Network Adapter

Intel Online Firmware Upgrade Utility for VMware

Version: 3.12.10 (Optional)

Filename: CP041196.compsig; CP041196.zip

# **Important Note!**

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

NIC	EEPROM/NVM Version	OROM Version
HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter	80001099	1.2529.0
HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapter	80001097	1.2529.0
Intel(R) 1350 Gigabit Backplane Connection	8000108E	1.2529.0
Intel(R) 1350 Gigabit Network Connection	8000108F	1.2529.0

The combo image v1.2529.0 includes: Boot Agent: 1GbE - v1.5.88 & UEFI Drivers: 1GbE - v9.0.03.

# **Prerequisites**

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

## **Enhancements**

Initial release.

## **Supported Devices and Features**

This package supports the following network adapters:

- Intel(R) 1350 Gigabit Backplane Connection
- Intel(R) I350 Gigabit Network Connection
- HPE Ethernet 1Gb 4-port BaseT I350-T4 Adapter
- HPE Ethernet 1Gb 4-port BaseT I350-T4 OCP3 Adapte

Marvell FastLinQ Online Firmware Upgrade Utility for VMware

Version: 4.11.14 (Optional)

Filename: CP041147.compsig; CP041147.zip

### **Important Note!**

This software package contains combo image v8.50.78. This combo image includes: Boot Code (MFW): 8.50.9.0 and UEFI: 6.1.6.9.

### **Prerequisites**

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

### **Enhancements**

Initial release.

# Supported Devices and Features

This product supports the following network adapters:

- HPE Ethernet 10/25Gb 2-port SFP28 QL41232HQCU OCP3 Adapter
- HPE Ethernet 10/25Gb 2-port SFP28 QL41232HLCU Adapter
- HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter
- HPE Ethernet 10Gb 2-port BaseT QL41132HLRJ Adapter
- HPE Ethernet 10Gb 2-port BaseT QL41132HQRJ OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter
- HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Ethernet 10Gb 2-port 548SFP+ Adapter

Version: 1.0.1 (Recommended)

Filename: CP040054.compsig; CP040054.zip

### Important Note!

### Known Issues in firmware 14.26.XXXX :

- Hardware arbitration is currently disabled in Open Compute Project (OCP)3.0 cards. It will be supported on future releases for the same hardware.
- Secure state is not updated after firmware burning due to the following behavior.
- By default, mixfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning. **Workaround:** Set the reset level to 3 explicitly in mixfwreset.
- Since Packet Pacing enforce max\_tc value is "1", features that require multiple Traffic Class (TC)s will not be active when this mode is available

## <u>Fixes</u>

### Fixes in version 14.26.XXXX:

- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- Fixed a rare issue that resulted in "destroy mkey" command getting stuck when rebooting the hypervisor.
- . The total firmware reset time is increased by 1 second.

# Enhancements

# Firmware for the following device is updated to 14.26.1040:

P11338-B21 (HPE Ethernet 10Gb 2-port 548SFP+ Adapter)

### **Supported Devices and Features**

HPE Pa	HPE Part Number Mellanox Ethernet Only Adapters		PSID	
P11338-	B21	HPE Ethernet 10Gb 2-port 548SFP+ Adapter	HPE0000000038	

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters

Version: 1.0.2 (Recommended)

Filename: CP040049.compsig; CP040049.zip

### **Important Note!**

The Firmware Upgrade Utility has been split into 2 packages for Mellanox Ethernet Only NIC adapters, one supporting Synergy platforms and the other supporting ProLiant and Apollo platforms. This package supports Mellanox Ethernet Only NIC adapters on ProLiant and Apollo servers.

The latest version of Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only Mezzanine adapters 1.0.0 supported on HPE Synergy Servers is available on HPE support center, <a href="https://support.hpe.com/hpsc/swd/public/detail?swltemId=MTX\_b5a6ed2c31e14450a58981fa02">https://support.hpe.com/hpsc/swd/public/detail?swltemId=MTX\_b5a6ed2c31e14450a58981fa02</a>

### Known Issues for FW version 2.42.5044:

- When using the QSFP module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
- Enabling/disabling cq\_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LES will not be active while the ETH link is in an idle mode.
- In SR-IOV setup, using mlxconfig when the PF is passed through to a VM requires a reboot of the Hypervisor.

- Downgrade to previous GA requires server reboot. Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot. Reboot the server.
- On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/driver utilities that read the GUID via device firmware (e.g., using ibstat). Mixburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the lattervalue should be used.
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX®-3 adapters
- On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed
- RH6.3 Inbox driver causes kernel panic when SR-IOV is enabled on VPI cards due to driver compatibility issue.
- In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.
- MFT tools might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.
- Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module
- Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only).
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV
- · Bloom filter is currently not supported.
- Firmware downgrade message When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3
- RM#DMFS should not be enabled when working with InfiniBand on MLNX\_OFED-2.0.3
- · RM#VPD read-only fields are writable.
- Increasing Symbol Error Counter When working in VPI mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly
- Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.
- CQ and EQ cannot be configured to different stride sizes.
- ConnectX-3 Pro VF device ID is presented the same as ConnectX-3 VF device ID due to driver limitations.
- RSOD while running PXE (legacy) on G9 servers. This occurs only when PXE boot fails and BIOS boots from HDD. Currently it is pending BIOS fix.
- · Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.
- RDP over IPv6 is currently not functional.
- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule"
- · Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
- 56GbE link is not raised when using 100GbE optic cables.
- When working with MLNX\_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx-4\_en\_get\_drvinfo() that is called from asynchronous event handler.
- · 832298: When running ibdump, loopback traffic is mirroring into the kernel driver.
- AHS reports wrong MTU size
- RM#846523: MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer

### Known Issues for FW version 14.26.1040 :

- · Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- Secure state is not updated after firmware burning due to the following behavior.
- Since Packet Pacing enforce max\_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

### Known Issues for FW version 16.26.1040 :

- · Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX\_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX\_RDMA table.
- · Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw\_reset option is not supported when ATS is enabled.
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- DC LAG can function only in case there is a single PF per port without any active VFs.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- Firmware asserts may occur when setting the PF\_BAR2\_SIZE value higher than the maximum supported size.

### Fixes

### Fixes submitted in version 2.42.5044:

• An issue that prevented the firmware from detecting a link\_down event thus preventing the IB bond interface from going to a failover mode.

### Fixes submitted in version 14.26.1040:

- · A function was misbehaving when a PCIe TLP was set with a poisoned indication.
- The "destroy mkey " command was getting stuck when rebooting the hypervisor.
- The total firmware reset time is increased by 1 second.

### Fixes submitted in version 16.26.1040:

- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Unexpected queue pairs transitioned to error in lossy tests.
- · Limited the maximum amount of dumps created on a PF.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- · Large number of packets dropped when running Jumbo frames with TTL rewrite.
- · Limited the number of the elements in the Quality of Service (QoS) tree 2K.
- Note: Creating more than 250 Vport\_tc for every TC is not allowed.
- Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- The nack counters constantly reported as "0".
- In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

# Enhancements

### Firmware for the following devices are updated to 2.42.5044:

779799-B21 (HP Ethernet 10G 2-port 546FLR-SFP+ Adapter) 779793-B21 (HP Ethernet 10G 2-port 546SFP+ Adapter)

# Firmware for the following devices are updated to 14.26.1040:

## Firmware for the following devices are updated to 14.26.1040:

817753-B21 (HPE Ethernet 25Gb 2-port 640SFP28 Adapter)

### Firmware for the following device is updated to 16.26.1040:

874253-B21 (HPE Ethernet 100Gb 1-port 842QSFP28 Adapter)

# New features and changes in version 14.26.1040 and 16.26.1040 :

- · Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif
- The ICMD Query Caps indicate support and expose the list of the supported counters.
- Enabled a new feature User Context Object (DEVX) which is a containerized sandbox per user, to access PRM command securely by using General Object commands. UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions.
- · Support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- Reliability improvements and security hardening enhancements were done.

# New features and changes in version 16.26.1040 :

- · Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the VPD on the VF.
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - · Creating software managed steering tables in eSwitch/FDB.

### **Supported Devices and Features**

HPE Part Number	Mellanox Ethernet Only Adapters	PSID		
779793-B21	HP Ethernet 10Gb 2-port 546SFP+ Adapter	HP_1200111023		
779799-B21	HP Ethernet 10Gb 2-port 546FLR-SFP+ Adapter	HP_2240110004		
817749-B21	HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter	HP_2690110034		
817753-B21	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	HP_2420110034		
874253-B21	HPE Ethernet 100Gb 1-port 842QSFP28 Adapter	HPE0000000014		

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.7

Version: 1.0.1 (Recommended)

Filename: CP039802.compsig; CP039802.zip

# **Important Note!**

### Known Issues in firmware 12.26.1040:

- · Secure state is not updated after firmware burning due to the following behavior.
- By default, mixfwreset takes the lowest supported fwreset level. Changing to/from secure boot keeps the firmware versions the same except for when performing INI changes. As a result, the reset level 0 is set as the default value while resetting after burning.
- Workaround: Set the reset level to 3 explicitly in mlxfwreset.

  Since Packet Pacing enforce max\_tc value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

# Known Issues in firmware 16.26.1040:

- Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX\_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX\_RDMA table.
- Workaround: Use SX\_RDMA with Dual Port GVMI instead.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw\_reset option is not supported when ATS is enabled.
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header. Meaning, using VLAN push/pop may not work properly when using vport context VLAN. The features that may be affected by this and not work properly are:
  - Host chaining
  - Mirroring in FDB
  - TTL modify in FDB
  - VGT+
- · DC LAG can function only in case there is a single PF per port without any active VFs.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- Firmware asserts may occur when setting the PF\_BAR2\_SIZE value higher than the maximum supported size (maximum PF\_BAR2\_SIZE is 4 for
- Workaround: Configure within limits (NIC PF\_BAR\_SIZE <= 4).
- CWDM4 AOM cable is currently not supported

### Fixes

## Fixes submitted in version 12.26.1040:

- IPoIB could not to function when there were Dynamically Connected Transport (DC) CNAK Queue Pairs (QPs) active.
- . On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.

### Fixes submitted in version 16.26.1040:

- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- · Unexpected queue pairs transitioned to error in lossy tests.
- · Limited the maximum amount of dumps created on a PF.
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.

- Stability issues with RDMA over Converged Ethernet (RoCE) retransmissions under stress were affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe Transaction Layer Packet (TLP) was set with a poisoned indication.
- Large number of packets dropped when running Jumbo frames with TTL rewrite.
- Limited the number of the elements in the Quality of Service (QoS) tree 2K.

Note: Creating more than 250 Vport\_tc for every TC is not allowed.

- Queue Pair (QP) flow query was always taking port 1, Firmware will now reply the proper port, 1 or 2, for the dual port RoCE net device.
- The nack counters constantly reported as "0".
- In a rare scenario when the driver is executing the "2err" command and the QP is in Send Queue (SQ) drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error Completion Queue Element (CQEs) on all the Work Queue Entry (WQEs).

### **Enhancements**

#### Firmware for the following devices are updated to 12.26.1040:

825110-B21 (HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter) 825111-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter)

### Firmware for the following devices are updated to 16.26.1040:

879482-B21 (HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter) 872726-B21 (HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter)

### Changes and New features in firmware version 12.26.1040 and 16.26.1040:

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- User Context Object (DEVX) is a containerized sandbox per user, to access PRM command securely by using General Object commands, UMEM and UCTX contexts. The allowed functionalities of this capability depend on the user permissions. The following functionalities are still managed by the Kernel:
  - Resource cleaning
  - UCTX stamping
  - Blocking the physical address and IRQ from these UCTX
- · Added support for reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- This release contains important reliability improvements and security hardening enhancements. Mellanox recommends upgrading your device firmware to this release to improve the device firmware security and reliability.

### Changes and New features in firmware version 16.26.1040:

- · Added support for the following features:
  - Address Translation Service (ATS) support for MKEY and UMEM.
  - Exposing the Vital Product Data (VPD) on Virtual Function (VF).
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - Creating software managed steering tables in eSwitch/Forwarding Table (FDB)

### **Supported Devices and Features**

HPE Part Number	Device Name	PSID
825110-B21	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter	HP_2180110032
825111-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 840QSFP28 Adapter	HP_2190110032
872726-B21	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	HPE0000000009
879482-B21	HPE InfiniBand FDR/Ethernet 40/50Gb 2-port 547FLR-QSFP Adapter	HPE0000000022

Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) devices on VMware ESXi 6.7

Version: 1.0.3 (Recommended)

Filename: CP042533.compsig; CP042533.zip

# Important Note!

### Known Issues in firmware 2.42.5000, 2.42.5056:

- When using the Quad Small Form-factor Pluggable (QSFP) module RTXM320-581, and performing a driver restart for the firmware upgrade/downgrade to take effect, the link does not come up.
   Workaround: Reboot the server.
- Enabling/disabling cq\_timestamp using mlxconfig is not supported.
- In a card with 2 separate LEDs scheme (a Phy LED and a logic LED) only the Phy LED will lit. Meaning, the orange LED will not be active while the ETH link is in an idle mode.
- . In SR-IOV setup, using mixconfig when the Packet Filter (PF) is passed through to a VM requires a reboot of the Hypervisor
- Downgrading from v2.30.8000 or later to an earlier version than 2.30.8000 requires server reboot.

Workaround: Reboot the server.

- On ConnectX-3 Ethernet adapter cards, there is a mismatch between the GUID value returned by firmware management tools and that returned by fabric/ driver utilities that read the GUID via device firmware (e.g., using ibstat).

  MIXBURY (BUILD WHILE THE PROPERTY A VALUE derived from the MAC address. For all driver/firmware/software purposes, the latter value should be used.
- Workaround: Please use the GUID value returned by the fabric/driver utilities (not 0xfffff).
- SBR should be asserted for a minimum of 50 milliseconds for the ConnectX-3 adapters
   On Pilot1 SL230, PCIe link occasionally does not come up at Gen3 speed.
- RHEL6.3 Inbox driver causes kernel panic when SRIOV is enabled on VPI cards due to driver compatibility issue.
- Workaround: Set the "do\_- sense=false" parameter in the [IB\_TAB] i.
- In advanced steering mode, side band management connectivity may be lost when having more than 8 QP per mcg.
- When SR-IOV is disabled in the system BIOS, a PCI issue is noticed in Ubuntu v12.04.3 with Linux kernel v3.8 which affects NICs of several manufacturers including Mellanox's, preventing them from operating.
   Workaround: Enable SR-IOV in the BIOS.
- Mellanox Firmware Tools (MFT) might leave the flash semaphore locked if the tool operation is forced stopped. The locked semaphore prevents the firmware from accessing the flash and causes firmware hang.

  Workaround: Clear the semaphore using MFT command: 'flint -clear\_semaphore'
- Cable Info MAD reports a wrong cable info when using the MC2210411-SR4 module.
- Gen2 failure at temperature sweep up to 10C/min (for MT27518A1-FDIR-BV only)...
- PCIe Gen2 link unstable at temperature sweep of 10C/min for MT27518A1-FDIR-BV.
- Bloom filter is currently not supported.
- When downgrading from firmware v2.11.0000 and using MFT 3.0.0-3, the following message is displayed due to the mlxconfig tool: You are trying to override configurable FW by non-configurable FW. If you continue, old FW configurations

will be cleared, do you want to continue? (y/n) [n]: y You are trying to restore default configuration, do you want to continue? (y/n) [n]: y.

- DMFS should not be enabled when working with InfiniBand on MLNX\_OFED-2.0.3
- ConnectX®-3 Pro VF device ID is presented the same as ConnectX®-3 VF device ID due to driver limitations.

Workaround: Use the physical function device ID to identify the device.

Virtual Product Data (VPD) read-only fields are writable.

Workaround: Do not write to read-only fields if you wish to preserve them.

- . When working in Virtual Path Identifier (VPI) mode with port1 FDR and port2 40G, error counters misbehave and increase rapidly.
- Setting the device to 128Byte CQ/EQ stride will cause misbehavior of sideband management resulting in communication loss.
- · CQ and EQ cannot be configured to different stride sizes.
- Changing port protocol from ETH to IB on port with NCSI/IPMI enabled while the port is connected to ETH switch is not supported.

Workaround: 1. Unplug the cable from the switch 2. Restart driver 3. Change the protocol via the appropriate tools.

- Adapter card MCX349A-XCCN may experience longer linkup times of a few seconds with specific switches.
- Adapter card MCX349A-XCCN does not respond to ethtool "identify" command (ethtool -p/--identify).
- · Remote Desktop Protocol (RDP) over IPv6 is currently not functional.

Workaround: Set the default RoCE mode in the software to RoCE v2 (also when not using RoCE)

- Sniffer QP cannot be removed from the regular rule after adding the QP with insertion scheme equals to "push to that rule"
- Since only a single Boot Entry Vector (BEV) per PCI Physical Function is supported, disabling the first port causes the second port to disappear as well.
- The NIC does not notify the driver of a link-down incident when a cable is unplugged from a NIC port with 56GbE port link.
- 56GbE link is not raised when using 100GbE optic cables.
- When working with MLNX\_OFED v3.3-1.0.0.0, server reboot could get stuck due to a kernel panic in mlx4\_en\_get\_drvinfo() that is called from asynchronous event handler.
- When running ibdump, loopback traffic is mirroring into the kernel driver.
- MAC address that are set from the OS using ifconfig are not reflected in the OCBB buffer.
- The adapter card cannot raise a 10G link vs. a 40GE capable switch port in C7000 enclosure. It can raise a 1G Link and only if the switch port allows it.
- MTUSB communication via I2C header on primary I2C bus is supported only in live-fish mode.

## <u>Fixes</u>

### Fixes in version 2.42.5000:

- · PortRcvPkts counter was prevented from being cleared after resetting it.
- The system Timed Out on the configuration cycle of the Virtual Functions (VFs) when more than 10 Virtual Functions performed FLR and the completion Time Out value was configured to a range of less than 16 msec.
- The server hangs and results in NMI when running "mlxfwtop -d mt4103\_pci\_cr0" while restarting the driver in parallel (from a different thread). In this case, the downstream bridge over the device reported completion timeout error.
- In flow\_steering, BMC could not receive a ping over IPV6 after running bmc\_reboot.
- While closing the HCA, the RX packet caused bad access to resources that did not exist, and consequently caused the QPCGW or the irisc to get stuck.
- The master SMLID and the LID was either 0 or 0xFFFF when the port was neither active nor armed.
- · ibdump could not capture all MADs packets.
- · link did not go up after reboot.
- Fixed a rare issue that cause the PCIe configuration cycle that arrived during the time of sw\_reset to generate 2 completions.
- Network Controller Sideband Interface (NC-SI) did not work when adding the disable\_static\_steering\_ini field in the ini file, due to memory allocation issue for this field in the scratchpad.

### Fixes in version 2.42.5056:

• Fixed an issue that resulted in reading from invalid I/O address on handover from UEFI boot to OS boot, when a port was configured as InfiniBand on a VPI adapter device.

### **Enhancements**

# Firmware for the following devices are updated to 2.42.5000:

764282-B21 764286-B21

### Firmware for the following devices are updated to 2.42.5056:

764283-B21

764284-B21

764285-B21

### New features in firmware version 2.42.5000:

- · Added support for the following features.
  - new TLV: CX3\_GLOBAL\_CONF to enable/disable timestamp on incoming packets through mlxconfig configuration.
  - User MAC configuration.
  - Automatically collecting mstdump before driver reset.
  - A mechanism to detect DEAD\_IRISC (plastic) from TPT (iron) and raise an assert.
  - A new field is added to "set port" command which notifies the firmware what is the user\_mtu size.
- · Improved the debug ability for command timeout cases.

# **Supported Devices and Features**

### Supported Devices:

HP Part Number	Device Name	PSID
764282-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+M Adapter HP	
764283-B21	.4283-B21 HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+M Adapter H	
764284-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	HP_1370110017

764285-B21	HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	HP_1380110017
764286-B21	HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	HP_1390110023

Online Firmware Upgrade Utility (ESXi 6.7) for Mellanox Open Ethernet cards

Version: 1.0.1 (Recommended)

Filename: CP042852.compsig; CP042852.zip

### Important Note!

### Known Issues in firmware 14.26.4012 and 14.26.6000:

- Due to the string DB not being updated after Live-Patch, the tracer cannot function after Live-Patch.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- Since Packet Pacing enforce max, to value is "1", features that require multiple TCs will not be active when this mode is available.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.

### Known Issues in firmware 16.26.4012 and 16.26.6000:

- In rare cases, following a server powerup, a fatal error (device's health compromised) message might appear with ext\_synd 0x8d1d. The error will be accompanied by a failure to use mixconfig and in some cases flash burning tools.
- Due to the string DB not being updated after Live-Patch, the tracer cannot function after Live-Patch.
- · Creating an NVMoF offloaded target while running the LFWP flow may cause the device to become unstable.
- · sw\_reset action fails in case it is initiated during live-patch flow.
- · Occasionally Bluescreen might occur when using mlxfwreset for Socket Direct devices on Windows.
- SX\_RDMA is not supported when Dual Port RoCE feature is enabled. Due to this behavior, packets sent on other port are be processed by the SX\_RDMA table.
- Hardware arbitration is currently disabled in OCP3.0 cards. It will be supported on future releases for the same hardware.
- The sw\_reset option is not supported when ATS is enabled
- When using the hairpin feature, and using VLAN strip or using the "modify esw vport context" command, the packets can have an incorrect VLAN header.
- DC LAG can function only in case there is a single PF per port without any active VFs.
- Due to performance considerations, unicast loopback traffic will go through the NIC SX tables, and multicast loopback traffic will skip the NIC SX tables.
- Firmware asserts may occur when setting the PF\_BAR2\_SIZE value higher than the maaximum supported size (maximum PF\_BAR2\_SIZE is 4).
- · CWDM4 AOM cable is currently not supported
- PF\_BAR2 and ATS cannot be enabled together, i.e. when PF\_BAR2 is enabled, ATS cannot be enabled too.

# <u>Fixes</u>

# Fixes in version 14.26.6000:

• Fixed an issue that cause the firmware to hang when an FLR occurred at the same time as the teardown. As a result, the teardown flow took a lock, and never released it because it was being aborted by an FLR.

### Fixes in version 14.26.4012 :

- · Updated the firmware behavior to report PLDM version 1.1.0 regardless of whether Redfish was enabled or not.
- Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
- Fixed an issue that caused a function to misbehave when a PCIe Traffic Light Protocol(TLP) was set with a poisoned indication.
- · Fixed a rare issue that resulted in "destroy mkey " command getting stuck when rebooting the hypervisor.

# Fixes in version 16.26.6000 :

- · Fixed an issue that prevented PCI link from being established when the firmware was corrupted.
- Fixed an issue that triggered a firmware assert and resulted in a wrong deallocation of a resource when Packet Pacing was enabled, and a QP was being destroyed.
- Fixed an issue that cause the firmware to hang when an FLR occurred at the same time as the teardown. As a result, the teardown flow took a lock, and never released it because it was being aborted by an FLR.

# Fixes in version 16.26.4012:

- Updated the firmware behavior to report PLDM version 1.1.0 regardless of whether Redfish was enabled or not.
- Enabled the option to prevent clock and capture CPLD GPIOs glitch upon firmware reset.
- Fixed an issue that slowed the firmware flows when executing many destroy XRQ commands on an XRQ that supported DC transport service.
- Fixed an issue that caused performance degradation when working in dual-port devices under bidirectional traffic stress.
- On rare occasions, when firmware coalesce Host stuck events occur, a async event might be delayed to be reported, and not be triggered until the next time the PCIe hangs on one of the hosts.
- Fixed an issue that resulted in unexpected queue pairs transitioned to error in lossy tests.
- Limited the maximum amount of dumps created on a Physical Function(PF).
- Renamed the GMP Mellanox Vendor Specific External Capability mask enum from IsDiagnosticCountersSupported to IsDiagnosticDataSupported.
- Fixed a stability issue in RoCE retransmissions under stress affecting Zero-Touch-RoCE.
- Fixed an issue that caused a function to misbehave when a PCIe TLP was set with a poisoned indication.
- Fixed an issue that caused large number of packet to drop when running Jumbo frames with Time to live (TTL) rewrite
- Limited the number of the elements in the QoS tree 2K. Creating more than 250 Vport\_tc for every TC was not allowed
- Fixed the query QP flow. Instead of always taking port 1, FW will now reply the proper port, 1 or 2, for the dual port RDMA over Converged Ethernet (RoCE) net device.
- . Fixed an issue that caused the nack counters to constantly be reported as "0".
- In a rare scenario when the driver was executing the "2err" command and th Queue pair(QP) was in SQ drain state, the firmware might post event of broken Work Queue (WQ) instead of sending error CQEs on all the WQEs.

### Enhancements

# Firmware for the following devices is updated to 14.26.4012:

P21930-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCAT Adapter)

## Firmware for the following devices is updated to 14.26.6000:

P11341-B21 (HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter)

# Firmware for the following devices is updated to 16.26.4012:

P13188-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACAT Adapter ) P21927-B21 (HPE Ethernet 100Gb 2-Port QSFP28 MCX516A-CCAT Adapter)

### Firmware for the following devices is updated to 16.26.6000:

P10112-B21 (HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter)

# New features and changes in version 14.26.4012 and 16.26.4012 :

- Enabled the firmware by using the ICMD commands to deal with diagnostic counters similar to cmdif. They can be called via the vsec space. The counters' values are returned only via the tracer. The ICMD Query Caps indicate support and expose the list of the supported counters.
- Zero-Touch-RoCE counters are now available to the user for debuggability purposes when using the Zero-Touch-RoCE feature.
- · Added Address Translation Service (ATS) support for MKEY and UMEM VPD Added support for exposing the VPD on the VF.
- · Added support for the following
  - Reporting the supported affiliated and unaffiliated asynchronous events to DEVX users through the command interface.
  - Hairpin Drop Counter.
  - Hairpin and TM RNDV QPs to work with DevX.
  - creating software managed steering tables in eSwitch/FD

# New features and changes in version 14.26.6000 and 16.26.6000 :

- Explicit Congestion Notification (ECN) is now automatically copied from the inner header to the outer header, unless defined otherwise in the SW steering. To disable this feature, need to write to the NV\_SW\_OFFLOAD\_CONFIG file.
- The eth\_link\_down\_counter now counts logical link downs as well

# **Supported Devices and Features**

HPE Part Number	Mellanox Ethernet Only Adapters	PSID		
P21930-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter	MT_0000000414		
P11341-B21	HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter	MT_0000000238		
P13188-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter	MT_0000000416		
P10112-B21	HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter	MT_0000000241		
P21927-B21	HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter	MT_0000000417		

# Firmware - NVDIMM

Top

Firmware Package - 16GB NVDIMM-N DDR4-2666 Version: 1.04 (A) (Recommended)

Filename: nvdimm-16gb\_1.04.fwpkg

# **Fixes**

Initial relaese.

## **Enhancements**

Initial release.

Firmware package for HPE Persistent Memory featuring Intel Optane DC Persistent Memory on HPE Gen10 Servers

Version: 01.02.00.5375 (Recommended) Filename: dcpmm\_01.02.00.5375.fwpkg

### **Enhancements**

Initial release of Firmware for HPE Persistent Memory for Gen10 Servers.

Firmware - Storage Controller

Top

HPE D6020 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)

Version: 2.74 (E) (Recommended)

Filename: CP042003.compsig; CP042003.md5; CP042003.zip

IMPORTANT: Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D6020(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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

NOTE: All firmware flash progress messages are logged to /var/cpq/D6020.log and flash summary is logged to /var/cpq/Component.log.

### **Prerequisites**

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

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

NOTE: All firmware flash progress messages are logged to /var/cpg/D6020.log and flash summary is logged to /var/cpg/Component.log.

### Fixes

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

- Temperature sensors logic inside gSEP model and SES database
- When an IOM is pulled the surviving IOM reports false critical temperatures

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

### **Supported Devices and Features**

The D6020 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters:

- HP Smart Array P841 Controller
- HP Smart Array P441 Controller
- HP Smart HBA H241
- HP Smart Array P741m Controller
- · HPE Smart Array P408e-p Controller
- HPE Smart Array E208e-p Controller
- HPE Smart Array P408e-m Controller

HPE D8000 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)

Version: 0105 (Recommended)

Filename: CP041301.compsig; CP041301.md5; CP041301.zip

### Important Note!

**IMPORTANT:** Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D8000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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

NOTE: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /var/cpq/Component.log.

# **Prerequisites**

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

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

NOTE: All firmware flash progress messages are logged to /var/cpq/D8000.log and flash summary is logged to /var/cpq/Component.log.

### **Fixes**

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

- · SAS drive LED behavior was corrected to align with the Smart Array specification, specifically:
  - The Activity LED of a sanitize erase drive now turns ON when connected
  - The Array present LED now turns ON for the SAS drive.
  - The Activity LED now blinks on all drives during a SAS drive rebuild.
- The Serial Output Buffer (SOB) has a fixed sized for stored entries. Now, when the buffer is full, the oldest entries are cleared or committed to persistent storage (if available). For this reason, subsequent requests to read the SOB only retrieves new entries that have been logged since the last successful request to read the SOB.
- The drive activity LED has been changed to a function as described in the installation and maintenance guide.
- The reboot flag was changed to issue a hard reset, which enables the service delivery subsystem (ZPSDS) information be shared across (expanded across) the internal expanders to all devices attached
- The drive activity LED on the SAS disk drives was changed to support the ACTIVE\_LOW signal state. The ACTIVE\_LOW signal state is the default operation state for most drives.
- The SCSI WRITE BUFFER MODE was changed from activate to soft reset. This change improves the host ability to detect and report whether the enclosure is going to perform a disruptive or non-disruptive activation after a firmware upgrade.
- With I/O module firmware v0105 and PQI firmware 2.02, the slot power cycle issue has been resolved by changing the power cycle SES request to return a failure when a partner slot is not connected.

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

The D8000 Enclosure can be attached to any of the following HPE Storage Controllers and Host Bus Adapters :

- HPE Smart Array P408e-p Controller
- · HPE Smart Array E208e-p Controller

Online ROM Flash Component for ESXi (x86) - HPE Smart Array P824i-p MR Gen10

Version: 24.23.0-0042 (Optional)

Filename: CP036878.compsig; CP036878.zip

### **Enhancements**

· Added support for the Apollo 4510 system

Online ROM Flash Component for VMware ESXi - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 4.22 (Recommended)

Filename: CP040617.compsig; CP040617.zip

# **Important Note!**

• Power cycle / cold reboot is required if firmware is upgraded from version 1.31 or earlier.

### <u>Fixes</u>

· Fixes an issue where false Smart Carrier authenication errors may happen.

Online ROM Flash Component for VMware ESXi - HPE Apollo 2000 Gen10 Backplane Expander Firmware

Version: 1.00 (C) (Optional)

Filename: CP037611.compsig; CP037611.zip

## Important Note!

Customers who already installed firmware version 1.00 do not need to update to 1.00 (C).

### **Enhancements**

· Added support for VMware vSphere 6.7 OS

Online ROM Flash Component for VMware ESXi – HPE Apollo 2000 System - SAS Expander

Version: 1.52 (Recommended)

Filename: CP042554.compsig; CP042554.zip

### <u>Fixes</u>

Fixed an issue in the HPE Apollo 2000 System SAS Expander FW where the HDD Zoning Table would be set to default after upgrading to 1.51

Please reference Customer Advisory a00095304en us.

Online ROM Flash Component for VMware ESXi - HPE Apollo 4200 Backplane Expander Firmware

Version: 1.78 (A) (Optional)

Filename: CP038813.compsig; CP038813.zip

### Important Note!

Power cycle / cold reboot is required if firmware is upgraded from version 1.03 or earlier.

# **Enhancements**

Added HPE Smart Array P824i-p controller support

Online ROM Flash Component for VMware ESXi - HPE Apollo 45xx Gen10 Backplane Expander Firmware

Version: 1.56 (D) (Recommended) Filename: CP038103.compsig; CP038103.zip

### **Enhancements**

· Added HPE Smart Array P824i-p controller support

Online ROM Flash Component for VMware ESXi - HPE Apollo 45xx Gen9 Backplane Expander Firmware

Version: 2.50 (Optional)

Filename: CP038042.compsig; CP038042.zip

### Important Note!

• Please un-plug and re-plug the power cord to the server for firmware upgrade from version 1.03 or earlier to take effect.

### **Fixes**

- · Expander may reset during heavy SSACLI polling
- SATA drives may take longer to spin up, not be initially detected, and then hot add later. This can prevent system boot or affect the logical drive status.

Online ROM Flash component for VMware ESXi - HPE Dual 8GB microSD USB

Version: 1.3.2.215 (B) (Recommended)
Filename: CP037940.compsig; CP037940.zip

### **Fixes**

• To show corresponding HPE Dual 8GB Micron SD part number in Agentless Management Service version 11.2.0 or later.

Online ROM Flash Component for VMware ESXi - HPE Express Bay Enablement Switch Card

Version: 1.78 (B) **(Optional)** Filename: CP035193.zip

# **Important Note!**

Customers who already have firmware version 1.78 installed do not need to update to 1.78(B).

· Power cycle / cold reboot is required after installation for updates to take effect.

# **Prerequisites**

• The HP ProLiant iLO firmware version must be v2.20 or later. If the HP ProLiant iLO firmware is older than v2.20 you will receive the following error message:

Check dependency failed.

Current version: iLOx x.xx

Minimum version required: iLO4 2.20

The software will not be installed on this system because the required hardware is not present in the system or the software/firmware doesn't apply to this system

## **Enhancements**

· Added VMware vSphere 6.7 OS support

Online ROM Flash Component for VMware ESXi - HPE SAS Expander Firmware for HPE D2500sb Storage Blade

Version: 2.02 (Recommended)

Filename: CP041629.compsig; CP041629.zip

### **Important Note!**

• When using ESXi6.0 you must be at upgrade 3 or newer. The required SmartPQI driver is not present in earlier versions of the OS

## **Prerequisites**

When using ESXi6.0 you must be at upgrade 3 or newer. The required SmartPQI driver is not present in earlier versions of the OS

### Fixes

Hard drives may not show up after a power cycle or hot plug when in bays 1 through 10

Online ROM Flash Component for VMware ESXi - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P408i-sb, P408e-m, P204i-c, P204i-b, P816i-a and P416ie-m SR Gen10 Version: 2.65 (Critical)

Filename: CP043368.compsig; CP043368.zip

# <u>Fixes</u>

- Prevents a potential data inconsistency from occurring after experiencing an Unrecoverable Read Error (URE) on a drive configured in RAID 1/10/ADM Fault Tolerant Mode.
- Prevents a potential data inconsistency from occurring during initial configuration and operation of a volume configured in RAID 5/6/50/60 Fault Tolerant Mode.
  - o For additional information regarding Compute and Storage platforms, reference <u>Customer Bulletin a00097210en\_us</u>.
- HPE does NOT recommend independently updating to Firmware Versions Newer than 1.99 for HPE Smart Array SR Gen10 Controllers on HPE SimpliVity Gen10 systems. For additional information regarding SimpliVity platforms, reference <u>Customer Bulletin a00097566en\_us</u>

IMPORTANT: RAID 0 and drives in HBA Mode are not affected.

Online ROM Flash Component for VMware ESXi - Smart Array and Smart HBA H240ar, H240nr, H240nr, H244br, P244br, P244br, P246br, P440ar, P440, P441, P542D, P741m, P840, P840ar, and P841

Version: 7.00 (Recommended)

Filename: CP039996.compsig; CP039996.zip

- . Occasionally the drive will not accept any IO's after running Sanitize command for a period of time due to the FW being out of sync with the drive during that time
- . Non-HPE drives could report "Task Set Full" due to the drives reaching the gdepth limit during heavy workload
- Raid volume is not discovered due to a bad drive consuming two slots during hotplug
- Data could become inaccessible when upgrading from firmware versions prior to 4.5x
- The controller could stop responding when executing a SCSI verify command due to a CPU exception The system could stop communicating due to an I/O command timeout
- While on HBA mode, a drive could stop responding due to an early allocated buffer release
- · A SAS drive WWN is reported inaccuratelyy due to an incorrect report causing the driver to be out of sync with the device
- . If using a 4G module, the controller could stop responding due to the SSD Cache metadata exceeding its limits during a Backup SSD Smart Cache module become disabled due to a reduction in usable cache space

# **Enhancements**

Add optimization for the iLO communication interface in order to have a more effective mechanism to check for ownership of the communication buffer

Online ROM Flash Component for VMware ESXi - Smart Array P220i, P222, P420i, P420, P421, P721m, and P822

Version: 8.32 (C) (Recommended)

Filename: CP039258.compsig; CP039258.zip

## **Enhancements**

• Improved integration with Smart Update Manager. If target device was previously updated to firmware v 8.32, it is not necessary to update to v8.32(C).

Online ROM Flash Component for VMware ESXi - Smart Array P230i, P430, P431, P731m, P830i, and P830

Version: 5.02 (Recommended)

Filename: CP039414.compsig; CP039414.zip

# <u>Fixes</u>

- The firmware updates could fail while SmartCache is enabled due to active I/O in the Smart Cache.
- The serial output of the expander could fail to be populated in the controller logs due to the buffer not being handled appropriately by the controller

### Firmware - Storage Fibre Channel

HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2019.12.02 (Recommended) Filename: CP042605.compsig; CP042605.zip

### Important Note!

### Release Notes:

HPE StoreFabric Emulex Adapters Release Notes

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

- 1. Go to http://www.hpe.com/support/manuals
- 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

This Firmware package contains following firmware versions:

Adapter	- · · · · J. · [ · · · ·	Universal Boot Image	Firmware	UEFI	Boot Bios
HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter		12.40a6	2.10X6	12.4.153.0	12.4.262.0

HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	Gen4 /LPE12000/8Gb	12.40a6	2.10X6	12.4.153.0	12.4.262.0
HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class	Gen4 /LPE12000/8Gb	12.40a6	2.10X6	12.4.153.0	12.4.262.0
HP StoreFabric 84E 4- Port Fibre Channel Host Bus Adapter	Gen4 /LPE12000/8Gb	12.40a6	2.10X6	12.4.153.0	12.4.262.0
HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HP Fibre Channel 16Gb LPe1605 Mezz	Gen5/LPE16000/16Gb	N/A	12.4.270.10	N/A	N/A
HPE StoreFabric SN1200E 16Gb 2P FC HBA	Gen6/LPE31000/16Gb	N/A	12.4.270.14	N/A	N/A
HPE StoreFabric SN1200E 16Gb 1P FC HBA	Gen6/LPE31000/16Gb	N/A	12.4.270.14	N/A	N/A
HPE StoreFabric SN1600E 32Gb 2p FC HBA	Gen6/LPE32000/32Gb	N/A	12.4.270.14	N/A	N/A
HPE StoreFabric SN1600E 32Gb 1p FC HBA	Gen6/LPE32000/32Gb	N/A	12.4.270.14	N/A	N/A

# **Prerequisites**

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

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

# <u>Fixes</u>

Fix the following:

Where Host Bus Adapters reporting address NACKs (No Acknowledgements) from external temperature sensors.

# **Enhancements**

We have separate components to update fibre channel and converged network adapters. This is a fibre channel update component.

# Contains:

16/32 Gb HBA/Mezz universal boot 12.4.270.14 16 Gb HBA/Mezz universal boot 12.4.270.10

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.40a6 (12.4.262.0 BIOS, 12.4.153.0 UEFI)

# **Supported Devices and Features**

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

# 8Gb FC:

- HPE 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
   HPE 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HPE StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

# LPe16000 (16Gb) FC:

■ HPE SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter

- HPE SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HPE Fibre Channel 16Gb LPe1605 Mezz

### LPe31000/32000 (16Gb/32Gb) FC:

■ HPE StoreFabric SN1200E 16Gb 2P FC HBA

■ HPE StoreFabric SN1200E 16Gb 1P FC HBA

HPE StoreFabric SN1600E 32Gb 2p FC HBA
 HPE StoreFabric SN1600E 32Gb 1p FC HBA

HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7

Version: 2019.12.03 (Recommended) Filename: CP042996.compsig; CP042996.zip

# **Important Note!**

Refer release notes available at:

HPE StoreFabric OLogic Adapter Release Notes

This Firmware package contains following firmware versions:

Adapter	Gen/Speed	мві	Firmware	UEFI	Boot Bios
HPE 81Q PCIe Fibre Channel Host Bus Adapter	Gen4/8Gb	3.81.05	8.08.206	7.00	3.56
HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter	Gen4/8Gb	3.81.05	8.08.206	7.00	3.56
HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA	Gen4/8Gb	3.81.05	8.08.206	7.00	3.56
HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	Gen4/8Gb	3.81.05	8.08.206	7.00	3.56
HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem	Gen5/16Gb	6.02.01	8.08.230	7.02	3.43
HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter	Gen5/16Gb	6.02.01	8.08.230	7.02	3.43
HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter	Gen5/16Gb	6.02.01	8.08.230	7.02	3.43
HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter	Gen6/16Gb	1.73.08	8.08.230	7.02	3.64
HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter	Gen6/16Gb	1.73.08	8.08.230	7.02	3.64
HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	Gen6/32Gb	1.73.08	8.08.230	7.02	3.64
HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	Gen6/32Gb	1.73.08	8.08.230	7.02	3.64
HPE SN1610Q 32Gb 2P FC HBA	Gen7/32Gb	02.02.18	09.02.20	7.08	0.0
HPE SN1610Q 32Gb 1P FC HBA	Gen7/32Gb	02.02.18	09.02.20	7.08	0.0

### **Prerequisites**

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

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

The HPE supplied Qlogic driver must be installed prior to this firmware component being identified by SUM for deployment. The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at <a href="http://www.hpe.com/servers/spp/download/">http://www.hpe.com/servers/spp/download/</a>

### <u>Fixes</u>

# Fixed the following:

In extremely rare cases, the following QLogic Fibre Channel (FC) Host Bus Adapters (HBAs), SN1100Q, SN1600Q and SN1610Q may cause the host Operating System (OS) to stop. Subsequent OS reboot may reveal some filesystem data is unavailable or inconsistent. Out of an abundance of caution, HPE updated the Firmware/BIOS/UEFI (Boot Image) packages for these adapters to eliminate possible exposure to this extremely rare but critical issue.

For more details please go through the document titled "HPE ProLiant, Synergy and Superdome Flex Host Bus Adapters (HBA) - Certain Fibre Channel HBA Firmware May Cause the Operating System to Halt and Potentially Compromise Filesystem Data Integrity" at the following link:

https://support.hpe.com/hpesc/public/docDisplay?docLocale=en\_US&docId=a00094722en\_us.

# Enhancements

Updated the Firmware/BIOS/UEFI packages for following:

- · Gen4 Fibre Channel Host Bus Adapter:
  - Package 3.81.05
  - Firmware 8.08.206
  - UEFI 7.00
  - BIOS 3.56
- Gen5 Fibre Channel Host Bus Adapter:
  - Package 6.02.01
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
  - Package 1.73.08
  - Firmware 8.08.230
  - UEFI 7.02
  - BIOS 3.64
- Gen7 Fibre Channel Host Bus Adapter:
  - Package 02.02.18
  - Firmware 09.02.20
  - UEFI 7.08
  - BIOS 0.0

### Supported Devices and Features

This firmware supports the following HPE adapters:

# Gen 4 Fibre Channel Host Bus Adapter:

- · HPE 81Q PCIe Fibre Channel Host Bus Adapter
- · HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

### Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- · HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

# Gen 6 Fibre Channel Host Bus Adapter:

- · HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- · HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

# Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

# Firmware (Entitlement Required) - Storage Controller

HPE D3600/D3700/D3610/D3710 12Gb SAS Disk Enclosure ROM Flash Component for VMware (ESXi)

Version: 4.12 (Recommended)

Filename: CP036702.compsig; CP036702.md5; CP036702.zip

## **Important Note!**

**IMPORTANT:** Firmware updates must be performed during a system maintenance window, with all I/O to the system halted. In single domain configuration, if user hosts an OS in D3000(or any storage box) and flash the SEPs, it will hang/crash everytime as SmartComponent will reset the SEPs after flash/codeload.

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

NOTE: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /var/cpq/Component.log.

# **Prerequisites**

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

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

NOTE: All firmware flash progress messages are logged to /var/cpq/D3000.log and flash summary is logged to /var/cpq/Component.log.

# <u>Fixes</u>

# The following fix is incorporated in this version:

• The Enabled-ClusterS2D command now completes successfully when executed on a SATA drive within a D3610 disk enclosure.

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

# Enhancements

The following enhancement has been added in this version:

Top

· Added support of VMware vsphere 6.7

### Supported Devices and Features

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

- HP Smart Array P841 Controller
- HP Smart Array P441 Controller
- HP Smart HBA H241
- HP Smart Array P741m Controller
- HPE Smart Array P408e-p Controller
- · HPE Smart Array E208e-p Controller
- HPE Smart Array P408e-m Controller
- HPE Smart Array P416ie-m Controller

# Software - Management

HPE Management Bundle Smart Component for ESXi 6.7 Version: 2019.12.01 (Recommended)

Filename: cp040138.compsig; cp040138.zip

# <u>Fixes</u>

### **WBEM Providers**

- Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller
- Fix memory leak issues causing ESXi host to become unresponsive or crash

### **Agentless Management Service**

- Fix buffer overrun when acquiring vib summary from ESXi host database
- Fix cpqSePciSlotBoardName for empty slots with no CPU
- Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
- Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO
- Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

### Software - Storage Controller

Top

HPE MegaRAID Storage Administrator StorCLI for VMware6.7 Version: 2019.09.00 (Optional)

Filename: cp040119.compsig; cp040119.zip

### **Enhancements**

Updated Product Name with the OS version

# Software - Storage Fibre Channel

Top

Emulex Fibre Channel driver component for VMware vSphere 6.7

Version: 2019.12.02 (Recommended) Filename: cp041714.compsig; cp041714.zip

# Important Note!

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

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

- 1. Go to http://www.hpe.com/support/manuals
- 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

# **Prerequisites**

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

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

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

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This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

### **Enhancements**

Updated to Driver version 12.4.270.6

### **Supported Devices and Features**

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

### 8Gb FC:

- HP 81E 8Gb Single Port PCIe Fibre Channel Host Bus Adapter
- HP 82E 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HP LPe1205A 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class
- HP StoreFabric 84E 4-Port Fibre Channel Host Bus Adapter

### LPe16000 (16Gb) FC:

- HP SN1000E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1000E 16Gb Single Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HP SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100E 4P 16Gb Fibre Channel Host Bus Adapter
- HP Fibre Channel 16Gb LPe1605 Mezz

### LPe31000/32000 (16Gb/32Gb) FC:

- HPE StoreFabric SN1200E 16Gb 2P FC HBA
- HPE StoreFabric SN1200E 16Gb 1P FC HBA
- HPE StoreFabric SN1600E 32Gb 2p FC HBA
- HPE StoreFabric SN1600E 32Gb 1p FC HBA

Emulex(BRCM) Fibre Channel over Ethernet driver for VMware vSphere 6.7

Version: 2019.12.01 (Recommended) Filename: cp039586.compsig; cp039586.zip

### Important Note!

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

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

- 1. Go to http://www.hpe.com/support/manuals
- 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

If the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command:

#esxcli software vib remove lpfc

# **Prerequisites**

 $\label{thm:please consult SPOCK for a list of supported configurations available at the following link: \\$ 

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

Beginning with software release 11.2, Fibre Channel (LightPulse) adapters and Converged Network adapters (OneConnect) have independent software kits.

It is highly recommended that you review the Broadcom Software Kit Migration User Guide for more detailed information regarding this change.

To obtain the guide:

- Go to http://www.hpe.com/support/manuals
- 2. Using the HPE model number as your guide, enter the adapter model number in the Search products box, and then click >>.

This document provides special instructions and considerations for using the driver kits for FC and CNA adapters.

Special cases include those in which pre-11.2 (original) drivers and applications are replaced by the new 11.2 drivers and applications, and cases in which inbox drivers are replaced by the new 11.2 out-of-box (OOB) drivers.

If the server contains only CNA adapters and lpfc driver is already been installed, post the new driver update, please remove the lpfc driver using the following command:

#esxcli software vib remove lpfc

# **Eixe**s

### Fixed the following:

- Purple Screen of Death(PSOD) at random intervals on HPE FlexFabric 20Gb 2-port 650FLB Adapter
- Link down after 1000 times port down and up iterations on switch.
- Detaching is not completing because lpfc\_do\_work\_event can't exit.
- Slab memory use after free causing memory leak.
- · Small Computer Sytem Interface(SCSI) command is used after done call.
- · Target reset does not report original status

### **Enhancements**

Updated to Driver version 12.0.1278.0

# **Supported Devices and Features**

This component is supported on following Emulex Converged Network Adapters:

### XE100 Series:

- HPE StoreFabric CN1200E Dual Port Converged Network Adapter
- HPE FlexFabric 20Gb 2-port 650FLB Adapter
- HPE FlexFabric 20Gb 2-port 650M Adapter
- HPE StoreFabric CN1200E-T Adapter

QLogic Fibre Channel driver component for VMware vSphere 6.7

Version: 2019.12.02 (Recommended) Filename: cp042819.compsig; cp042819.zip

# Important Note!

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

# **Prerequisites**

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

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

# <u>Fixes</u>

Fixed the following:

Driver run into a Purple Screen of Death (PSOD) after Invalid entry, prints in the vmkernel log;

"WARNING: glnativefc: vmhba2(12:0.0); Invalid ISP SCSI completion handle(281) reg=1

WARNING: qlnativefc: vmhba2(12:0.0): Invalid ISP SCSI completion handle(282) reg=1"

# **Enhancements**

Driver version 3.1.31.0

## Supported Devices and Features

This driver supports the following HPE adapters:

# Gen 4 Fibre Channel Host Bus Adapter:

- · HPE 81Q PCIe Fibre Channel Host Bus Adapter
- HPE 82Q 8Gb Dual Port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric 84Q 4P 8Gb Fibre Channel HBA
- HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem

### Gen 5 Fibre Channel Host Bus Adapter:

- HPE QMH2672 16Gb Fibre Channel Host Bus Adapter for c-Class BladeSystem
- HPE StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter

# Gen 6 Fibre Channel Host Bus Adapter:

- HPE StoreFabric SN1100Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
   HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter

# Gen 7 Fibre Channel Host Bus Adapter:

- HPE SN1610Q 32Gb 2P FC HBA
- HPE SN1610Q 32Gb 1P FC HBA

Software - System Management

HPE MegaRAID Storage Administrator StorCLI for VMware

Version: 1.25.12 (Optional)

Filename: vmware-esx-storcli-1.25.12.vib; VMWARE\_MN\_NDS\_Readme.txt

# **Enhancements**

· Added support for the Apollo 4510 system

HPE MegaRAID Storage Administrator StorCLI for VMware

Version: 1.25.12 (Recommended)

Filename: storcli-esxi6.7-bundle-1.25.12.zip

### **Enhancements**

Added ProLiant features support (Megacell status, AHS, Spade, Sanitize & Expander)

HPE Offline Bundle for ESXi 6.7 Version: 3.5.0 (Recommended)

Filename: esxi6.7uX-mgmt-bundle-3.5.0-12.zip

### **Fixes**

### WRFM Providers

- Fix incorrect CacheOperationalStatus data for Smart Array B140i Controller
- · Fix memory leak issues causing ESXi host to become unresponsive or crash

# **Agentless Management Service**

- Fix buffer overrun when acquiring vib summary from ESXi host database
- Fix cpqSePciSlotBoardName for empty slots with no CPU
- Fix cpqSePciSlotBoardName for FC Adapters with specific Device IDs
- Disable multiple IPv6 support in Gen9 to fix Host discovery issues due to missing support in iLO
- Fix AMS hang when total IPv6 address string sizes exceed 256 bytes

HPE Smart Storage Administrator (HPE SSA) CLI for VMware 6.7

Version: 4.17.6.0 (Optional) Filename: ssacli-4.17.6.0-6.7.0.vib

# <u>Fixes</u>

Split Mirror Primary Array's Acceleration Mode displays an invalid message that indicates caching can be enabled or disabled for each individual logical drive even if the array does not contain a logical drive that can have caching enabled.

HPE Utilities Offline Bundle for ESXi 6.7

Version: 3.5.5 (Recommended)

Filename: esxi6.7-util-bundle-3.5.5-3.zip; relnotes.txt

### **Important Note!**

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.7 U3 which is located at HPE Information Library.

# **Enhancements**

Updated the Smart Storage Administrator CLI (SSACLI)

Get connected hpe.com/info/getconnected

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

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