

**HA8000V シリーズ**

**Service Pack for HA8000V (SPH)**

**Version 5.50 13**

**Readme**

2020年4月

## 1. はじめに

このたびは、日立アドバンスサーバ HA8000V シリーズをご利用いただき誠にありがとうございます。  
ご使用になる前に、必ず本内容をご確認ください。

### 1.1 他社所有名称に対する表示

Microsoft および Windows Server は、米国 Microsoft Corporation の米国およびその他の国における登録商標または商標です。

Intel、インテル、Xeon は、アメリカ合衆国およびその他の国における Intel Corporation の商標です。

Linux は、Linus Torvalds 氏の日本およびその他の国における登録商標または商標です。

Red Hat は、米国およびその他の国で Red Hat, Inc. の登録商標もしくは商標です。

iLO は、Hewlett Packard Enterprise Development LP の商標です。

VMware は、米国およびその他の地域における VMware, Inc. の登録商標または商標です。

### 1.2 注意事項

- (1) 本書は改良のため、予告なしに変更することがあります。
- (2) Service Pack for HA8000V のご使用に当たっては、<CD ドライブ>¥EULA に格納された「エンドユーザー使用許諾契約書」をお読みください。
- (3) Service Pack for HA8000V に瑕疵が無いことを保証するものではありません。
- (4) Service Pack for HA8000V は、「3 適用機種及びOS」記載のプラットフォームでご使用いただけます。
- (5) 天災、人災、事故等で Service Pack for HA8000V 使用中に電源が切れまるとシステム装置が正常に動作しなくなることがありますので十分に気を付けてください。
- (6) お客様は、Service Pack for HA8000V 並びに本書の全部又は一部を単独で又は他の情報等と組み合わせ、直接又は間接に以下に該当する取扱いをする場合、「外国為替及び外交貿易」の規制及び米国輸出管理規制等外国の輸出関連法規を確認し、適正な手続きを行う必要があります。
  - 輸出するとき。
  - 海外へ持ち出すとき。
  - 非居住者へ提供し、又は使用させるとき。
  - 上記に定めるほか、「外国為替及び外国貿易法」又は外国の輸出関連法規に定めがあるとき。
- (7) マニュアル『HA8000V シリーズ 重要事項および読替ガイド』には、各種マニュアルをご覧いただく際、事前にご理解いただくべき内容を記載しています。こちらも含めてご参照ください。マニュアルは『ドキュメントポータル』の「マニュアル > サーバ」-「HA8000V シリーズ」より参照いただけます。

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本ファイルに含まれている、いかなるファイルの内容の全部またはその一部を、無断で掲載またはコピーすることを固く禁じます。

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### 1.3 変更履歴

発行日	変更内容
2019年10月	初版
2019年11月	5.4, 6.2.13, 6.2.15, 6.2.16 更新, 5.5 追加
2020年4月	5.3 (2), 5.8.6 追記

## 2. Service Pack for HA8000V (SPH)について

Service Pack for HA8000V(以降 SPH と呼びます)は、1 台または複数台の HA8000V サーバのファームウェア/システムソフトウェアの更新を簡素化するソリューションです。

SPH には、サーバ/コントローラ/ストレージのファームウェア/ドライバ/ユーティリティパッケージが含まれます。また、SPH に収録されている Smart Update Manager(以降 SUM と呼びます)は、更新されたファームウェアおよびシステムソフトウェアをデプロイする推奨ツールです。

SPH/SUM を使うことで、ファームウェアおよびシステムソフトウェアのオンラインアップデートが可能となります。アップデート操作を SUM に統合することにより、個々の HA8000V サーバのアップデートが迅速になり、システム全体のアップデート時間を短縮することができます。

SPH は定期的にリリースされます。最新版の SPH を使用して更新することを推奨します。

## 3. 適用機種及びOS

### 3.1 適用機種

- HA8000V/DL20 Gen10
- HA8000V/DL360 Gen10
- HA8000V/DL380 Gen10
- HA8000V/DL580 Gen10
- HA8000V/ML30 Gen10
- HA8000V/ML350 Gen10

### 3.2 適用 OS

- Microsoft® Windows Server® 2019
- Microsoft® Windows Server® 2016
- Microsoft® Windows Server® 2012 R2
- Red Hat® Enterprise Linux® Server 7.6
- Red Hat® Enterprise Linux® Server 7.5
- Red Hat® Enterprise Linux® Server 6.10
- Red Hat® Enterprise Linux® Server 6.9
- VMware vSphere® ESXi™ 6.7
- VMware vSphere® ESXi™ 6.5
- VMware vSphere® ESXi™ 6.0

## 4. 変更内容

本章では、今回のリリースの変更内容を記載しています。

### 4.1 新規サポート内容

(1) 追加サポート機種及びOS

- 追加サポート機種

なし

- 追加サポートOS

なし

(2) 追加サポートデバイス

なし

### 4.2 更新内容

『6.3 パッケージの変更内容』を参照ください。

## 5. 注意事項

本章では、SPH をご使用になる上で、注意頂く内容を記載しています。

### 5.1 ドライバ・ユーティリティなどの適用について

最新のドライバ・ファームウェア・ユーティリティなどを、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」で提供しております。

各アップデートプログラムの適用についてはお客様責任にて実施していただきますが、システム装置を安定してご使用いただくためにも、ホームページの[ サポート ]-[ ダウンロード ] に定期的にアクセスして、最新のドライバ・ファームウェア・ユーティリティへ更新していただくことをお勧めします。

### 5.2 OS の新規・再セットアップの場合の注意事項

OS の新規・再セットアップの際、初回の SPH 適用では、ファームウェアコンポーネントを除外し、ドライバ/ユーティリティコンポーネントのインストールを先に実施してください。これにより、デバイスの検出及びファームウェアの書き込みに適切なドライバ/ユーティリティがインストールされます。ドライバ/ユーティリティのインストール後は、OS を再起動し、再度 SUM を実行してファームウェアの更新を行ってください。

SUM でファームウェアコンポーネントを除外し、ドライバ/ユーティリティコンポーネントのみのインストールを指定するには、次の手順により行います。

GUI の場合：

SUM を起動し、「展開サマリー(Deployment summary)」画面右上の[ アクション(Actions) ]-[ アドバンスドオプション(Advanced Options) ]から「アドバンスドオプション(Advanced Options)」画面を開き、「インストールオプション(Installation Options)」の項目で「ソフトウェアのアップグレード(Upgrade Software)」を選択し、「OK」ボタンを押してください。

CLI の場合：

“setattributes”で firmware=false を設定してください。

例) # ./smartupdate setattributes --nodes localhost firmware=false

### 5.3 SUM によるアップデート時の注意事項

(1) ファームウェア/ドライバの依存関係について

アップデート対象のファームウェア/ドライバには依存関係を持つ場合があります。一度の SUM の実行では全て更新できない場合があります。このため、SUM アップデート後、全ての更新対象がアップデートされているかを確認してください。もし、アップデートされていないパッケージがある場合、再度 SUM を実行してください。全てアップデートされたかは、次の手順により確認できます。

GUI の場合：

SUM を起動し、「展開サマリー(Deployment summary)」画面にて、「推奨されたコンポーネント」数表示が、“0”となっていることを確認してください。

CLI の場合：

“Inventory”までの手順を実行後“getneededupdates”を実行し、“Component”セクションが表示されないことを確認してください。

(2) 適用バージョンについて

SUM を使用して更新作業を行う場合、適用対象として自動選択されるものは、新規にインストールされるもの、および SPH 収録バージョンが適用済みバージョンより新しいものとなります。

ネットワークアダプタ及びファイバーチャネルホストバスアダプタは、SPH 収録のドライバ/ファームウェアの組み合わせでご使用いただくことを推奨しています。適用済みバージョンが SPH 収録済みバージョンより新しい場合、該当コンポーネントが適用対象として自動選択されません。その場合、以下の手順で対象コンポーネントを手動で選択し、適用してください。

#### 【手動適用方法】

SUM を起動し、「展開サマリー(Deployment summary)」画面で、「コンポーネントの選択状態」が「選択」表示(※)となっているコンポーネントを確認し、ネットワークアダプタファームウェアまたは、ファイバーチャネルホストバスアダプタのファームウェアの場合は、当該コンポーネントを選択(※)して、“展開(Deploy)”ボタンを押してください。

※：コンポーネントが選択されると、「コンポーネントの選択状態」が、「選択済み」もしくは「強制」と表示されます。

#### 【注意】

デバイスによっては、適用バージョンに関して、個別にアドバイザリが発行されている場合があります。本ファームウェアの適用に当たっては、アドバイザリを参照してください。

## 5.4 SUMでのランゲージパックバージョン表示と適用について

SUM(Smart Update Manager)で表示される、適用中のランゲージパックのバージョンが正しく表示されない場合があります。正しいバージョンを確認するためには、iLO WEB インタフェースの[管理]>[言語]ページより現在適用中の言語パックのバージョンをご確認下さい。

また、この結果、SUM でランゲージパックが適用対象として正しく選択されない可能性があります。

目的のバージョンのランゲージパックが適用されていないのに、SUM 実行後の「展開サマリー」画面で、ランゲージパックが適用対象として選択されない場合があります。この場合は、ランゲージパックを手動で選択し展開を実施してください。

目的のバージョンのランゲージパックが適用済みであっても、SUM 実行後の「展開サマリー」画面で、ランゲージパックが適用対象として自動的に選択されている場合があります。この場合は、ランゲージパックの適用は不要ですので、選択を解除してから展開を実施してください。

## 5.5 SUMでのiLOを使用したランゲージパック適用に関する制限事項

SUMで対象ノードとして、システム装置のiLOを追加(ノードのIPアドレスにiLOのIPアドレスを指定、ノードタイプにiLOを選択)した場合、ランゲージパックが対象に含まれず更新されません。ランゲージパックは別途下記方法にて更新ください。

- SUMをローカルホスト上で実行(※)
- SUMで対象ノードとしてシステム装置のOSのIPアドレスを指定して実行(※)
- iLO WEB インターフェースを使用して実行

※：対象ノードがVmwareの場合は使用不可

### 【iLO WEB インタフェースからの更新手順】

- (1) 以下の手順で、事前にSPH package ファイルからランゲージパックファイルを取り出してください。  
Windows上で、SPHのpackagesディレクトリ下にあるSPH package ファイルを実行してください。  
パッケージセットアップが起動するので「解凍」を選択し、任意のディレクトリにパッケージを展開してください。展開したディレクトリから、下表記載のランゲージパックファイルを取り出してください。

SPH package ファイル名	ランゲージパックファイル名
cp041310.exe	lang_ja_143.lpk

- (2) 装置のシャットダウンを行ってください。
- (3) iLO WEB インタフェースの「ファームウェア & OS ソフトウェア」タブを開いてください。
- (4) 「ファームウェアアップデート」をクリックし、「ローカルバイナリファイル」に先ほど取り出したランゲージパックファイルを指定し、「フラッシュ」を選択してください。
- (5) 2~3分後に完了のメッセージが表示されます。その後iLOが自動的に再起動します。

## 5.6 ASR(Automatic Server Recovery)について

ASR(Automatic Server Recovery)はブルースクリーン等の致命的なOSのエラーが発生したときに自動的にシステムの復旧をするべくサーバーの再起動をおこなう機能です。IP(version 3.10以降)を使ったOSのインストール又はSPH(version 3.00以降)の適用、その他の方法によるASRドライバーのインストールによりASR

が自動的に有効になります。ASR が不要な場合や Alive Monitor、IPMI WDT 等の他の OS 死活監視を使う場合は ASR を無効化してください。

### 5.6.1 ASR 操作の PowerShell スクリプトの入手について

ASR の有効/無効の確認並びに切り替えは ASR ドライバーのパッケージに同梱されている PowerShell スクリプトを使って行います。下記を参照して PowerShell スクリプトを入手してください。

#### (1) ASR ドライバーのパッケージを展開します

SPH の packages ディレクトリ下にあるファイル群の中から、下表記載の各 OS に対応した Filename のファイルを実行してください。パッケージセットアップが起動するので解凍を選択し、任意のディレクトリにパッケージを展開してください。

Description	Version	Filename
iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2	4.4.0.0	cp035137.exe
iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019	4.4.0.0 (B)	cp035140.exe

#### (2) PowerShell スクリプトを確認してください

展開したパッケージの中の scripts ディレクトリ下に下記の 3 つの PowerShell スクリプトが含まれている事を確認してください。必要に応じて任意のディレクトリにコピーしてください。

Get-AsrSettings.ps1

Set-AsrPreTimeoutNMI.ps1

Set-AsrTimeout.ps1

### 5.6.2 ASR の確認方法

Windows の PowerShell より Get-AsrSettings.ps1 を実行してください。TimeoutInMinutes が 0 又は、コマンドの実行がエラーとなった場合 ASR は無効になっています。



### 実行例その 1(TimeoutInMinutes が 0 の場合)

```
PS C:\Users\Administrator\Desktop> .\Get-AsrSettings.ps1
```

```
Active : True
```

```
EnablePreTimeoutNMI : True
```

```
InstanceName : PCI\VEN_103C&DEV_3306&SUBSYS_00E41590&REV_07#4&154b2d14&0&00E4_0
```

```
TimeoutInMinutes : 0
```

```
PSComputerName :
```

### 実行例その 2(コマンドの実行がエラーとなる場合)

```
PS C:\Users\Administrator\Desktop> .\Get-AsrSettings.ps1
```

```
Get-CimInstance : 無効なクラスです
```

```
発生場所 C:\Users\Administrator\Desktop\Get-AsrTimeout.ps1:25 文字:1
```

```
+ Get-CimInstance -Namespace "root\wmi" -ClassName "HP_iLO_ASR_Settings ...
```

```
+ ~~~~~
```

```
+ CategoryInfo : MetadataError: (root\wmi:HP_iLO_ASR_Settings:String) [Get-CimInstance], CimException
```

```
+ FullyQualifiedErrorId : HRESULT 0x80041010,Microsoft.Management.Infrastructure.CimCmdlets.GetCimInstanc
```

```
eCommand
```

## 5.6.3 ASR の無効化方法

Windows の PowerShell より下記のオプションで Set-AsrTimeout.ps1 を実行してください。

```
Set-AsrTimeout.ps1 -Disable
```

### 実行例

```
PS C:\Users\Administrator\Desktop> .\Set-AsrTimeout.ps1 -Disable
```

## 5.6.4 ASR の有効化方法

Windows の PowerShell より下記のオプションで Set-AsrTimeout.ps1 を実行してください。

```
Set-AsrTimeout.ps1 -Default
```

### 実行例

```
PS C:\Users\Administrator\Desktop> .\Set-AsrTimeout.ps1 -Default
```

## 5.7 ドライバアップデート時の注意事項

ネットワークアダプタドライバをアップデートした場合、ドライバアップデート後、設定値が初期化される場合があります。ドライバアップデート前に設定値を控え、アップデート後に再設定してください。

## 5.8 VMware をご使用にあたっての注意事項

### 5.8.1 ファームウェアの適用について

システム装置を安定してご使用いただくためには、ご使用の VMware バージョンに合わせたファームウェアを適用頂く必要があります。

VMware 環境でのファームウェアの適用にあたっては、SUM のリモートオンライン 展開モード及びオフラ

イン 展開モードが利用できます。(VMware バージョンと利用可能な SPH 及び展開モードについては、[「Service Pack for HA8000V 補足資料\(Readme\)」](#)の『サポートモデル/OS 一覧』を参照ください。)

#### 【リモートオンライン 展開モードを使用する場合】

本モードでは、ファームウェアに加えてドライバのアップデートも可能です。

事前に「iSUT」のインストール及び ESXi ホストに対する設定が必要です。

「iSUT」が未インストールの場合、『5.8.2 iSUT のインストール』記載の手順に従ってインストールしてください。ESXi ホストに対しては、下記設定をアップデート作業前に実施して下さい。

- (1) ファームウェア/ドライバのアップデート作業を行う間は、ESXi ホストをメンテナンスモードに設定してください。
- (2) ESXi ホストをノードとして追加する場合、対象ノードとしてシステム装置の iLO を追加(ノードの IP アドレスに iLO の IP アドレスを指定、ノードタイプに iLO を選択)してください。
- (3) ファームウェア/ドライバのアップデートを有効化するためには VMware ESXi の再起動が必要です。アップデート後自動的に再起動させる場合は、再起動オプションを使用してください。

#### 【オフライン 展開モードを使用する場合】

SPH の iso イメージを格納した媒体をサーバに取り付け、媒体よりサーバをブートします。

なお、各 VMware バージョンと SPH サポート情報の詳細は、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」の[製品]-[OS、ISV 情報]にある『VMware』に掲載している注意事項をご参照の上、推奨ドライババージョンをご確認ください。

### 5.8.2 iSUT のインストール

VMware システムに対して、SPH/SUM を使用しファームウェア/ドライバのアップデートを行うには、ESXi ホストに iSUT をインストールする必要があります。iSUT インストール後は、リモート PC から SUM の『リモートオンライン』展開モードを使用して ESXi ホストのファームウェア/ドライバのアップデートを行うことができます。

ESXi ホストに iSUT をインストールする手順を次に示します。次のインストール手順では、データストア名を「datastore1」としています。使用環境にあわせて読み換えてください。

- (1) iSUT は SPH の packages ディレクトリに収録されています。下表に示す zip ファイルを展開し、iSUT のオフラインバンドル(sut-esxi\*.\*-bundle-\*.\*.\*-\*.zip)を取り出してください。

No.	VMware バージョン	SPH package ファイル名	オフラインバンドルファイル名
1	VMware vSphere® ESXi™ 6.0	cp039133.zip	sut-esxi6.0-offline-bundle-2.4.5.0-16.zip
2	VMware vSphere® ESXi™ 6.5	cp039134.zip	sut-esxi6.5-offline-bundle-2.4.5.0-17.zip
3	VMware vSphere® ESXi™ 6.7	cp039135.zip	sut-esxi6.7-offline-bundle-2.4.5.0-16.zip

- (2) 取り出した iSUT のオフラインバンドルを VMware ESXi の「datastore1」直下へに転送してください。

- (3) VMware ESXi のコンソール画面で「F2」キーを押すと Login 画面が表示されるので、root ユーザーでログインします。
- (4) 「System Customization」画面が表示されるので、「Troubleshooting Options」を選択し、「Enter」キーを押下します。
- (5) 「Enable ESXi Shell」を選択し、「Enter」キーを押下して ESXi Shell を "Enable" に変更します。
- (6) 「Alt」 + 「F1」キーを押下し、VMware ESXi の Shell 画面を開き、root ユーザーでログインします。
- (7) 下記コマンドを実行しインストールします。  

```
esxcli software vib install -d /vmfs/volumes/datastore1/<転送したバンドルファイル名>
```
- (8) VMware ESXi を再起動してください。
- (9) 再起動後、再度 VMware ESXi の Shell 画面を開き、root ユーザーでログインします。
- (10) 下記コマンドを実行し、iSUT を AutoDeployReboot モードに設定します。  

```
sut -set mode=autodeployreboot
```

5.8.3 Management Bundle, Utilities Bundle 収録モジュールのバージョンについて  
Management Bundle, Utilities Bundle には、複数の VIB モジュールが含まれています。  
各コンポーネントに含まれる VIB のバージョンは次の通りです。

【HPE Management Bundle Smart Component に含まれる VIB モジュール及びバージョン】

OS バージョン		VMware6.0	VMware6.5	VMware6.7	
ファイル名		cp039173.zip	cp039175.zip	cp039176.zip	
VIB モ ジ ュ ー ル	amsd	Agentless Management Service	600.11.4.5 -18.2494585	650.11.4.5 -18.4240417	670.11.4.5 -18.7535516
	fc-enablement	Fiber Channel Enablement Package	600.3.4.0.10 -2494585	650.3.4.0.10 -4240417	670.3.40.10 -7535516
	smx-provider	WBEM Providers	600.03.15.00.2 -2768847	650.03.15.00.4 -4240417	670.03.15.00.3 -7535516

【HPE Utilities Bundle Smart Component に含まれる VIB モジュール及びバージョン】

OS バージョン		VMware6.0	VMware6.5	VMware6.7	
ファイル名		cp039409.zip	cp039410.zip	cp039411.zip	
VIB モ ジ ュ ー ル	conrep	Conrep Utility	6.0.0.03 -03.00.10.2494585	6.0.0.03 -03.00.10.2494585	6.7.0.03 -03.00.10.7535516
	testevent	Test Event Utility	6.0.0.02 -00.00.8.2494585	6.5.0.02 -00.00.16.4240417	6.7.0.02 -00.01.12.7535516
	ssacli	Smart Storage Administrator CLI	3.47.6.0 -6.0.0.2768847	3.47.6.0 -6.5.0.4240417	3.47.6.0 -6.7.0.7535516
	bootcfg	Boot Configuration Utility	6.0.0.02 -05.00.10.2494585	6.0.0.02 -05.00.10.2494585	6.7.0.02 -05.00.4.7535516
	hponcfg	Lights-Out Configuration Utility	6.0.0.5.4 -0.3.2494585	6.0.0.5.4- 0.3.2494585	6.7.0.5.4 -0.3.7535516

5.8.4 iLO セキュリティ設定を“高セキュリティ”にした装置で iSUT を使用する場合について  
 iLO を“高セキュリティ”設定にした状態で iSUT を使うためには、以下のいずれかの設定が必要です。

- ① iSUT への認証情報設定
- ② iLO のセキュリティ条件の変更(iLO FW v1.4.0 以降のみ設定可能)

① iSUT への認証情報設定

iSUT に iLO の認証情報を設定します。設定方法は、VM ホスト上で以下を実行します。

```
sut -set ilouusername=<username>
Please provide the iLO password: <*****>
```

② iLO のセキュリティ条件の変更

iLO で“ホスト認証が必要”を「無効」に設定します。

iLO の Web 画面で[セキュリティ]-[アクセス設定]と画面遷移し、iLO の項目にある「ホスト認証が必要」の設定を「無効」に設定してください。

5.8.5 ドライバパラメータ再設定について

本 SPH を使用して VMware ドライバをアップデートした場合、ネイティブ ドライバが適用されます。ご使用の VMware 環境で VMKLinux ドライバをご使用の場合、ドライバが変更され、設定されているドライバパラメータが初期化されます。この問題を回避するために、ドライバアップデート後、ドライバパラメータを再設定してください。

【対象製品及びドライバ種】

下表に記載している対象製品並びにアップデート前のドライバ種をご使用の場合が対象となります。

対象製品		ドライバ種	
形名(*1)	製品名	アップデート前 (VMKLinux)	アップデート後 (ネイティブ)
TQ-N□□-817745-B21	Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター	net-ixgbe	ixgben
TQ-N□□-817738-B21	Ethernet 10Gb 2 ポート 562T ネットワークアダプター		
TQ-N□□-665240-B21	Ethernet 1Gb 4 ポート 366FLR ネットワークアダプター	igb	igbn
TQ-N□□-652497-B21	Ethernet 1Gb 2 ポート 361T ネットワークアダプター		
TQ-N□□-811546-B21	Ethernet 1Gb 4 ポート 366T ネットワークアダプター		

TQ-N□□-727054-B21	Ethernet 10Gb 2 ポート 562FLR-SFP+ ネットワークアダプター	i40e	i40en
TQ-N□□-727055-B21	Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター		

(\*1)：□には製品構成などにより異なった英数字が入ります。

### 【再設定手順】

#### (1) ドライバパラメータの確認及び記録

ドライバのアップデート前に、以下コマンドを実行し、ドライバパラメータ値を控えてください。

```
esxcfg-module -g <driver name>
```

<driver name>：アップデート前ドライバ種

以下実行例の「option = 'yyyy」の「yyyy」に設定値が表示されますので、値を控えてください。値が表示されない場合は、ドライバパラメータは未設定ですので、以降の作業は不要です。

(実行例) net-ixgbe の場合

```
# esxcfg-module -g net-ixgbe
net-ixgbe enabled = 1 options = 'yyyy'
```

また、下記の表示となる場合、net-ixgbe ドライバは未使用ですので、以降の作業は不要です。

(実行例) net-ixgbe の場合

```
# esxcfg-module -g net-ixgbe
Unknown module name net-ixgbe
```

#### (2) ドライバパラメータの再設定

ドライバのアップデート前に、以下コマンドを実行し、控えたドライバパラメータを再設定して下さい。

```
esxcfg-module -s "yyyy" <driver name>
```

yyyy：控えたドライバパラメータ

<driver name>：アップデート前ドライバ種

以下実行例の「option = 'yyyy」に控えたドライバパラメータを指定します。

(実行例) ixgben の場合

```
# esxcfg-module -s "yyyy" ixgben
```

#### (3) VMware ESXi の再起動

変更を有効にするため、VMware ESXi を再起動してください。

### 5.8.6 QLogic 製ファイバーチャネルホストバスアダプターご使用にあたっての注意事項

VMware 環境において、QLogic 製ファイバーチャネルホストバスアダプターの特定のドライバパラメータを設定している状態で SPH に収録されているドライバにアップデートすると、アダプターが認識できなくなります。

特に、SAN ブートパスに使用しているアダプターで本現象が発生した場合、OS が起動できなくなり、回復

にはバックアップからのリストアが必要となります。本 SPH を用いたドライバのアップデート前に、予めパラメータ変更を行ってからドライバをアップデートしてください。

なお、デフォルトではパラメータは設定されておらず、本現象は発生しません。

パラメータ変更方法等、詳細は「日立アドバンスサーバ HA8000V シリーズ」の「製品に関する重要なお知らせ」掲載の「VMware 環境において QLogic 製ファイバーチャネルホストバスアダプターのドライバをアップデート後アダプターが認識できなくなる現象について(管理番号：CRI-2020-0005)」を参照してください。

## 5.9 SUM オフライン展開モードご使用時の注意事項

SPH の ISO イメージを、iLO 仮想メディアデバイスにマウントして SUM のオフライン展開モードご使用の場合、iLO の『ネットワークインターフェイス設定』が『共有ネットワークポート』構成となっていると、SUM の起動途中でエラーになることがあります。

iLO の『ネットワークインターフェイス設定』を『共有ネットワークポート』構成でご使用の場合、ISO イメージを書き込んだ媒体をご用意いただき、内蔵もしくは USB 接続の DVD ドライブを使用して SUM のオフライン展開モードを起動してください。

### 【注意】

DL20/ML30 では、iLO の『ネットワークインターフェイス設定』のデフォルト設定が『共有ネットワークポート』となっています。SUM オフライン展開モードご使用時は、SPH ISO イメージを書き込んだ媒体から起動してください。

## 5.10 RHEL 環境における QLogic 製ファイバーチャネルホストバスアダプターのドライバとファームウェアについて

QLogic 製ファイバーチャネルホストバスアダプターを RHEL7.5、RHEL6.9/6.10 上でご使用になる場合、SPH に収録されているドライバとファームウェアの組合せで、リンクダウンが発生した場合にパス冗長化ソフトウェアによるパス交替が出来ない等の問題が発生する可能性があります。

詳細は「[日立アドバンスサーバ HA8000V シリーズ](#)」の「製品に関する重要なお知らせ」を参照してください。

RHEL7.5、RHEL6.9/6.10 をご使用になる場合は、下表のドライバとファームウェアを「[日立アドバンスサーバ HA8000V シリーズ](#)」の「ドライバ・ファームウェア・ユーティリティ」のページからダウンロードしてご使用願います。

形名(*1)	製品名	ドライババージョン	ファームウェアバージョン
TQ-C□□-P9D93A	SN1100Q 16Gb Single Port ファイバーチャネル ホスト バス アダプター	RHEL7.5 : 8.08.00.08.07.5_k1	01.70.85
TQ-C□□-P9D94A	SN1100Q 16Gb Dual Port ファイバーチャネル ホスト バス アダプター	RHEL6.9/6.10 :	

	チャンネル ホスト バス アダプター	8.08.00.08.06.0_k1	
TQ-C□□-P9M75A	SN1600Q 32Gb 1port ファイバーチャンネル ホスト バス アダプター	RHEL7.5 : 8.08.00.08.07.5_k1	01.70.85
TQ-C□□-P9M76A	SN1600Q 32Gb 2port ファイバーチャンネル ホスト バス アダプター	RHEL6.9/6.10 : 8.08.00.08.06.0_k1	

(\*1) : □には製品構成などにより異なった英数字が入ります。

### 5.11 Intel 製ネットワークアダプタご使用について

Intel 製ネットワークアダプタをご使用になる場合、下表の SPH に収録されているファームウェアバージョンは、ダウングレードには対応しておりません。

形名(*1) or 搭載システム装置	製品名	ファームウェアバージョン
TQ-N□□-817745-B21	Ethernet 10Gb 2 ポート 562FLR-T ネットワークアダプター	10.4.4
TQ-N□□-817738-B21	Ethernet 10Gb 2 ポート 562T ネットワークアダプター	
TQ-N□□-727054-B21	Ethernet 10Gb 2 ポート 562FLR-SFP+ ネットワークアダプター	10.4.3
TQ-N□□-727055-B21	Ethernet 10Gb 2 ポート 562SFP+ ネットワークアダプター	
HA8000V / ML350 Gen10 オンボード NIC	Ethernet 1Gb 4-port 369i ネットワークアダプター	1.2028.0

(\*1) : □には製品構成などにより異なった英数字が入ります。

## 6. SPH収録コンテンツ一覧

SPH の iso イメージに含まれるドライバ、ファームウェア、ユーティリティ(ソフトウェア)を示します。SPH には、適用方法により下記の2種のコンテンツを含んでいます。

- OS セットアップ後、お客様自身で個別に適用頂くもの
- Smart Update Manager(SUM)を使って適用可能なもの

以降、それぞれのコンテンツについて説明します。

### 6.1 お客様により適用が必要なコンテンツ

次表に示すファイルは、SPH に含まれる SUM ツールでの適用対象ではありません。Windows Server OS の新規・再セットアップ(プレインストールセット除く)の場合は、SPH 適用後に各ツールを実行してください。

No.	ツール	説明	iso 内格納場所	備考
1	IT Report Utility (ITRU)	サーバの構成情報、および障害の情報を採取します	¥software¥Hitachi¥ITRU	
2	2PRxDur settings	(レジストリ設定)ネットワークアダプタに関する設定を実施します	¥software¥Hitachi¥RegTool	Broadcom 製 1Gb LAN アダプタ搭載構成のみ対象
3	LargeRxRing settings	(レジストリ設定)ネットワークアダプタに関する設定を実施します	¥software¥Hitachi¥RegTool	

#### 【Broadcom 製 1Gb LAN アダプタ】

- オンボード LAN(Ethernet 1Gb 4-port 331i Adapter)
- HP Ethernet 1Gb 4-port 331FLR Adapter
- HP Ethernet 1Gb 4-port 331T Adapter
- HP Ethernet 1Gb 2-port 332T Adapter



(1) ITRU のインストール

ITRU をインストールするには、Administrator 権限にて DOS プロンプトより下記のバッチファイルを実行してください。

```
<CD ドライブ>:¥software¥Hitachi¥ITRU¥setup.bat
```

なお、ITRU のインストールに関する詳細情報は次の WEB ページ

[https://www.hitachi.co.jp/cgi-bin/soft/sjst/select\\_open.cgi](https://www.hitachi.co.jp/cgi-bin/soft/sjst/select_open.cgi)

に掲載されている Windows 版 ITRU 取扱説明書の 3 章をご確認願います。

(2) ネットワークアダプタ レジストリ設定の適用

ネットワークアダプタ レジストリ設定を適用するためには、Administrator 権限にて DOS プロンプトより下記のバッチファイルを実行してください。

```
<CD ドライブ>:¥software¥Hitachi¥RegTool¥2PRxDur.bat
```

```
<CD ドライブ>:¥software¥Hitachi¥RegTool¥LargeRxRing.bat
```

ツール実行後、OS を再起動してください。

## 6.2 SUM ツールで適用可能なファイル

次に示すドライバ/ファームウェア/ユーティリティ(ソフトウェア)は、SUM ツールにより適用可能なファイルです。SUM の GUI モードで使用する場合、OS 別の実行するコマンドを下記に示します。(管理者権限で実行してください。)

Windows 環境：

```
.\%launch_sum.bat
```

Linux 環境：

```
./launch_sum.sh
```

なお、SUM の詳細な操作方法は、<https://www.hitachi.co.jp/ha8000v/>に掲載されている『Smart Update Manager ユーザーガイド』を参照ください。

### Category 一覧

- [Application - System Management](#)
- [BIOS - System ROM](#)
- [Driver – Chipset](#)
- [Driver – Network](#)
- [Driver – Storage](#)
- [Driver - Storage Controller](#)
- [Driver - Storage Fibre Channel and Fibre Channel over Ethernet](#)
- [Driver - System](#)
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- [Firmware – Network](#)
- [Firmware - PCIe NVMe Storage Disk](#)
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- [Firmware - SAS Storage Disk](#)
- [Firmware - SATA Storage Disk](#)
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- [Software - Storage Controller](#)
- [Software - Storage Fibre Channel](#)
- [Software - Storage Fibre Channel HBA](#)
- [Software - System Management](#)
- [Utility - Tools](#)

## 6.2.1 Application - System Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
1	Integrated Smart Update Tools 2.4.5 for ESXi 6.0	cp039133.zip	-	2019.09.09	6.0.0.2.4.5.0-55	更新
2	Integrated Smart Update Tools 2.4.5 for ESXi 6.5	cp039134.zip	-	2019.09.09	6.5.0.2.4.5.0-42	更新
3	Integrated Smart Update Tools 2.4.5 for ESXi 6.7	cp039135.zip	-	2019.09.09	6.7.0.2.4.5.0-33	更新
4	Integrated Smart Update Tools for Linux x64	sut-2.4.5-15.linux.x86_64.rpm	-	2.4.5.0	2.4.5-15.linux	更新
5	Integrated Smart Update Tools for Windows x64	cp039132.exe	-	2.4.5.0	2.4.5.0	更新

## 6.2.2 BIOS - System ROM

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
6	Online ROM Flash Component for Linux - OEM System ROM U34	firmware-system-oem-u34-2.10_2019_05_21-1.1.x86_64.rpm	System BIOS - U34	2.10_05-21-2019	v2.10 (05/21/2019)	更新
7	Online ROM Flash Component for Linux - System ROM U30	firmware-system-oem-u30-2.10_2019_05_21-1.1.x86_64.rpm	System BIOS - U30	2.10_05-21-2019	v2.10 (05/21/2019)	更新
8	Online ROM Flash Component for Linux - System ROM U32	firmware-system-oem-u32-2.10_2019_05_21-1.1.x86_64.rpm	System BIOS - U32	2.10_05-21-2019	v2.10 (05/21/2019)	更新
9	Online ROM Flash Component for Linux - System ROM U41	firmware-system-oem-u41-2.10_2019_05_21-1.1.x86_64.rpm	System BIOS - U41	2.10_05-21-2019	v2.10 (05/21/2019)	更新
10	Online ROM Flash Component for Linux - System ROM U43	firmware-system-oem-u43-1.22_2019_04_04-1.1.x86_64.rpm	System BIOS - U43	1.22_04-04-2019	v1.22 (04/04/2019)	
11	Online ROM Flash Component for Linux - System ROM U44	firmware-system-oem-u44-1.22_2019_04_04-1.1.x86_64.rpm	System BIOS - U44	1.22_04-04-2019	v1.22 (04/04/2019)	
12	Online ROM Flash Component for Windows x64 - OEM System ROM U34	cp038593.exe	System BIOS - U34	2.10_05-21-2019	v2.10 (05/21/2019)	更新
13	Online ROM Flash Component for Windows x64 - System ROM U30	cp038667.exe	System BIOS - U30	2.10_05-21-2019	v2.10 (05/21/2019)	更新
14	Online ROM Flash Component for Windows x64 - System ROM U32	cp038686.exe	System BIOS - U32	2.10_05-21-2019	v2.10 (05/21/2019)	更新
15	Online ROM Flash Component for Windows x64 - System ROM U41	cp038689.exe	System BIOS - U41	2.10_05-21-2019	v2.10 (05/21/2019)	更新
16	Online ROM Flash Component for Windows x64 - System ROM U43	cp039485.exe	System BIOS - U43	1.22_04-04-2019	v1.22 (04/04/2019)	
17	Online ROM Flash Component for Windows x64 - System ROM U44	cp039482.exe	System BIOS - U44	1.22_04-04-2019	v1.22 (04/04/2019)	
18	ROM Flash Firmware Package - System ROM U30	OEM.U30_2.10_05_21_2019.fwpkg	System BIOS - U30	2.10_05-21-2019	v2.10 (05/21/2019)	更新
19	ROM Flash Firmware Package - System ROM U32	OEM.U32_2.10_05_21_2019.fwpkg	System BIOS - U32	2.10_05-21-2019	v2.10 (05/21/2019)	更新
20	ROM Flash Firmware Package - System ROM U34	OEM.U34_2.10_05_21_2019.fwpkg	System BIOS - U34	2.10_05-21-2019	v2.10 (05/21/2019)	更新
21	ROM Flash Firmware Package - System ROM U41	OEM.U41_2.10_05_21_2019.fwpkg	System BIOS - U41	2.10_05-21-2019	v2.10 (05/21/2019)	更新
22	ROM Flash Firmware Package - System ROM U43	OEM.U43_1.22_04_04_2019.fwpkg	System BIOS - U43	1.22_04-04-2019	v1.22 (04/04/2019)	

23	ROM Flash Firmware Package - System ROM U44	OEM.U44_1.22_04_04_2019.fwpkg	System BIOS - U44	1.22_04-04-2019	v1.22 (04/04/2019)	
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### 6.2.3 Driver – Chipset

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
24	Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 to Server 2019	cp038754.exe	-	10.1.17861.8101 (B)	10.1.17861.8101 (B)	更新

### 6.2.4 Driver – Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
25	HPE Broadcom NetXtreme-E Driver for VMware vSphere 6.0	cp035284.zip	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	2018.09.00	212.0.93.0-10 EM.600.0.0.2 768847	
26	HPE Broadcom NetXtreme-E Driver for VMware vSphere 6.0	cp035284.zip	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	2018.09.00	212.0.93.0-10 EM.600.0.0.2 768847	
27	HPE Broadcom NetXtreme-E Driver for Windows Server 2012 R2	cp035576.exe	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.177.0	214.0.177.0	
28	HPE Broadcom NetXtreme-E Driver for Windows Server 2012 R2	cp035576.exe	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.177.0	214.0.177.0	
29	HPE Broadcom NetXtreme-E Driver for Windows Server 2016	cp035577.exe	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.177.0	214.0.177.0	
30	HPE Broadcom NetXtreme-E Driver for Windows Server 2016	cp035577.exe	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.177.0	214.0.177.0	
31	HPE Broadcom NetXtreme-E Driver for Windows Server 2019	cp037790.exe	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.177.0	214.0.177.0	
32	HPE Broadcom NetXtreme-E Driver for Windows Server 2019	cp037790.exe	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.177.0	214.0.177.0	
33	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 6	kmod-bnxt_en-1.9.2-214.0.182.0.rhel6u10.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel6u10	
34	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 6	kmod-bnxt_en-1.9.2-214.0.182.0.rhel6u10.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel6u10	
35	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 6	kmod-bnxt_en-1.9.2-214.0.182.0.rhel6u9.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel6u9	
36	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 6	kmod-bnxt_en-1.9.2-214.0.182.0.rhel6u9.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel6u9	

37	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7	kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u5.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel7u5	
38	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7	kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u5.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel7u5	
39	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7	kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u6.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel7u6	
40	HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 7	kmod-bnxt_en-1.9.2-214.0.182.0.rhel7u6.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	1.9.2-214.0.182.0	1.9.2-214.0.182.0.rhel7u6	
41	HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.5	cp035285.zip	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	2018.09.00	212.0.93.0-10EM.650.0.0.4598673	
42	HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.5	cp035285.zip	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	2018.09.00	212.0.93.0-10EM.650.0.0.4598673	
43	HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.7	cp035286.zip	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	2018.11.13	212.0.119.0-1OEM.670.0.0.8169922	
44	HPE Broadcom NetXtreme-E Drivers for VMware vSphere 6.7	cp035286.zip	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	2018.11.13	212.0.119.0-1OEM.670.0.0.8169922	
45	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 6 Update 10	libbnxtre-214.0.181.0-rhel6u10.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.181.0	214.0.181.0	
46	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 6 Update 10	libbnxtre-214.0.181.0-rhel6u10.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.181.0	214.0.181.0	
47	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 6 Update 9	libbnxtre-214.0.181.0-rhel6u9.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.181.0	214.0.181.0	
48	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 6 Update 9	libbnxtre-214.0.181.0-rhel6u9.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.181.0	214.0.181.0	
49	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 5	libbnxt_re-214.0.181.0-rhel7u5.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.181.0	214.0.181.0	
50	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 5	libbnxt_re-214.0.181.0-rhel7u5.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.181.0	214.0.181.0	
51	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 6	libbnxt_re-214.0.181.0-rhel7u6.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	214.0.181.0	214.0.181.0	
52	HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 7 Update 6	libbnxt_re-214.0.181.0-rhel7u6.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	214.0.181.0	214.0.181.0	

53	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	214.0.0.0 (B)	214.0.0.0 (B)	
54	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 2-port 332T Adapter	214.0.0.0 (B)	214.0.0.0 (B)	
55	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331FLR Adapter	214.0.0.0 (B)	214.0.0.0 (B)	
56	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	214.0.0.0 (B)	214.0.0.0 (B)	
57	HPE Broadcom NX1 1Gb Driver for Windows Server x64 Editions	cp036186.exe	HP Ethernet 1Gb 4-port 331T Adapter	214.0.0.0 (B)	214.0.0.0 (B)	
58	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel 6u10	
59	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel 6u10	
60	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel 6u10	
61	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel 6u10	
62	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel 6u10	
63	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel 6u9	
64	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel 6u9	
65	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel 6u9	
66	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel 6u9	
67	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-tg3-3.137y-1.rhel 6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel 6u9	
68	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel 7u5	
69	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel 7u5	
70	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel 7u5	
71	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel 7u5	
72	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel 7u5	
73	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	3.137y-1	3.137y-1.rhel 7u6	
74	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel 7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	3.137y-1	3.137y-1.rhel 7u6	

75	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	3.137y-1	3.137y-1.rhel7u6	
76	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	3.137y-1	3.137y-1.rhel7u6	
77	HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-tg3-3.137y-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	3.137y-1	3.137y-1.rhel7u6	
78	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 2-port 332T Adapter	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
79	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 4-port 331T Adapter	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
80	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 4-port 331FLR Adapter	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
81	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
82	HPE Broadcom tg3 Ethernet Drivers for VMware vSphere 6.0	cp035307.zip	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	2018.09.00	3.137l.v60.1-1 OEM.600.0.0.2494585	
83	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.14.8.0 (B)	12.14.8.0 (B)	
84	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.14.8.0 (B)	12.14.8.0 (B)	
85	HPE Intel E1R Driver for Windows Server 2012 R2	cp037767.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.14.8.0 (B)	12.14.8.0 (B)	
86	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
87	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
88	HPE Intel E1R Driver for Windows Server 2016	cp037389.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.15.184.0 (C)	12.15.184.0 (C)	
89	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 2-port 361T Adapter	12.15.184.1	12.15.184.1	
90	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	12.15.184.1	12.15.184.1	
91	HPE Intel E1R Driver for Windows Server 2019	cp037757.exe	HP Ethernet 1Gb 4-port 366T Adapter	12.15.184.1	12.15.184.1	
92	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel6u10	
93	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u10	
94	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u10	
95	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel6u9	

96	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u9	
97	HPE Intel i40e Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40e-2.7.12-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel6u9	
98	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel7u5	
99	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u5	
100	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u5	
101	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	2.7.12-1	2.7.12-1.rhel7u6	
102	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u6	
103	HPE Intel i40e Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40e-2.7.12-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2.7.12-1	2.7.12-1.rhel7u6	
104	HPE Intel i40ea Driver for Windows Server 2012 R2	cp036337.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.221.0	1.9.221.0	
105	HPE Intel i40ea Driver for Windows Server 2012 R2	cp036337.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.221.0	1.9.221.0	
106	HPE Intel i40ea Driver for Windows Server 2016	cp036338.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.221.0	1.9.221.0	
107	HPE Intel i40ea Driver for Windows Server 2016	cp036338.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.221.0	1.9.221.0	
108	HPE Intel i40ea Driver for Windows Server 2019	cp037752.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.9.230.0	1.9.230.0	
109	HPE Intel i40ea Driver for Windows Server 2019	cp037752.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.9.230.0	1.9.230.0	
110	HPE Intel i40eb Driver for Windows Server 2012 R2	cp036339.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.221.0	1.9.221.0	
111	HPE Intel i40eb Driver for Windows Server 2016	cp036340.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.221.0	1.9.221.0	
112	HPE Intel i40eb Driver for Windows Server 2019	cp037753.exe	HPE Ethernet 1Gb 4-port 369i Adapter	1.9.230.0	1.9.230.0	
113	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	
114	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	



115	HPE Intel i40en Driver for VMware vSphere 6.0	cp037484.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.600.0.0.2768847	
116	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	
117	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	
118	HPE Intel i40en Driver for VMware vSphere 6.5	cp036872.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.650.0.0.4598673	
119	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 1Gb 4-port 369i Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	
120	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	
121	HPE Intel i40en Driver for VMware vSphere 6.7	cp036700.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2019.03.11	1.7.11-10EM.670.0.0.8169922	
122	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel6u10	
123	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u10	
124	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u10	
125	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel6u9	
126	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u9	
127	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-i40evf-3.6.15-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel6u9	
128	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel7u5	
129	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u5	
130	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u5	
131	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	3.6.15-1	3.6.15-1.rhel7u6	
132	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u6	
133	HPE Intel i40evf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-i40evf-3.6.15-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.6.15-1	3.6.15-1.rhel7u6	
134	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	

135	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	
136	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u10.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u10	
137	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	
138	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	
139	HPE Intel igb Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-igb-5.3.5.22-1.rhel6u9.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel6u9	
140	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	
141	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	
142	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u5.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u5	
143	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	
144	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	
145	HPE Intel igb Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-igb-5.3.5.22-1.rhel7u6.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	5.3.5.22-1	5.3.5.22-1.rhel7u6	
146	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
147	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
148	HPE Intel igbn Driver for VMware vSphere 6.0	cp038023.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
149	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
150	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
151	HPE Intel igbn Driver for VMware vSphere 6.5	cp038024.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.600.0.0.2768847	
152	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 2-port 361T Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	
153	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	
154	HPE Intel igbn Driver for VMware vSphere 6.7	cp038025.zip	HP Ethernet 1Gb 4-port 366T Adapter	2019.03.11	1.4.7-1OEM.670.0.0.8169922	
155	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel6u10	
156	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel6u10	

157	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel6u9	
158	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel6u9	
159	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel7u5	
160	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel7u5	
161	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.5.2-1	5.5.2-1.rhel7u6	
162	HPE Intel ixgbe Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbe-5.5.2-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	5.5.2-1	5.5.2-1.rhel7u6	
163	HPE Intel ixgben Driver for VMware vSphere 6.0	cp037707.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-10EM.600.0.0.2768847	
164	HPE Intel ixgben Driver for VMware vSphere 6.0	cp037707.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-10EM.600.0.0.2768847	
165	HPE Intel ixgben Driver for VMware vSphere 6.5	cp037708.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-10EM.600.0.0.2768847	
166	HPE Intel ixgben Driver for VMware vSphere 6.5	cp037708.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-10EM.600.0.0.2768847	
167	HPE Intel ixgben Driver for VMware vSphere 6.7	cp037709.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	2019.03.11	1.7.10-10EM.670.0.0.8169922	
168	HPE Intel ixgben Driver for VMware vSphere 6.7	cp037709.zip	HPE Ethernet 10Gb 2-port 562T Adapter	2019.03.11	1.7.10-10EM.670.0.0.8169922	
169	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel6u10	
170	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel6u10	
171	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel6u9	
172	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel6u9	
173	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel7u5	
174	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel7u5	
175	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.5.1-1	4.5.1-1.rhel7u6	
176	HPE Intel ixgbevf Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-hp-ixgbevf-4.5.1-1.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	4.5.1-1	4.5.1-1.rhel7u6	
177	HPE Intel ixs Driver for Windows Server 2012 R2	cp037943.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	3.14.132.0	3.14.132.0	
178	HPE Intel ixs Driver for Windows Server 2012 R2	cp037943.exe	HPE Ethernet 10Gb 2-port 562T Adapter	3.14.132.0	3.14.132.0	

179	HPE Intel ixs Driver for Windows Server 2016	cp037945.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.1.131.0	4.1.131.0	
180	HPE Intel ixs Driver for Windows Server 2016	cp037945.exe	HPE Ethernet 10Gb 2-port 562T Adapter	4.1.131.0	4.1.131.0	
181	HPE Intel ixs Driver for Windows Server 2019	cp037755.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	4.1.143.0	4.1.143.0	
182	HPE Intel ixs Driver for Windows Server 2019	cp037755.exe	HPE Ethernet 10Gb 2-port 562T Adapter	4.1.143.0	4.1.143.0	
183	HPE Intel v40e Driver for Windows Server 2012 R2	cp036342.exe	-	1.5.86.2	1.5.86.2	
184	HPE Intel v40e Driver for Windows Server 2016	cp036343.exe	-	1.5.86.2	1.5.86.2	
185	HPE Intel v40e Driver for Windows Server 2019	cp037756.exe	-	1.6.215.0	1.6.215.0	
186	HPE Intel vxn Driver for Windows Server 2012 R2	cp032568.exe	-	1.0.16.1	1.0.16.1	
187	HPE Intel vxn Driver for Windows Server 2016	cp037390.exe	-	2.0.210.0 (C)	2.0.210.0 (C)	
188	HPE Intel vxn Driver for Windows Server 2019	cp037758.exe	-	2.1.138.0	2.1.138.0	
189	HPE Intel vxs Driver for Windows Server 2012 R2	cp037942.exe	-	1.2.131.0	1.2.131.0	
190	HPE Intel vxs Driver for Windows Server 2016	cp037941.exe	-	2.1.133.0	2.1.133.0	
191	HPE Intel vxs Driver for Windows Server 2019	cp037944.exe	-	2.1.138.0	2.1.138.0	
192	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	
193	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	
194	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2012 R2	cp036711.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	
195	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	
196	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	
197	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2016	cp036712.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	
198	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2.0.19824.0	2.0.19824.0	
199	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2.0.19824.0	2.0.19824.0	

200	HPE Mellanox CX4LX and CX5 Driver for Windows Server 2019	cp037704.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2.0.19824.0	2.0.19824.0	
201	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
202	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	
203	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
204	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
205	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	
206	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 10 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u10.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
207	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
208	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	
209	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
210	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
211	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	
212	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 6 Update 9 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel6u9.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
213	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
214	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	

215	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	kmod-mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
216	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.4	4.4	
217	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.4	4.4	
218	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 5 (x86_64)	mlnx-ofa_kernel-4.4-OFED.4.4.2.0.8.1.gee7aa0e.1.rhel7u5.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.4	4.4	
219	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.5	4.5	
220	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.5	4.5	
221	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	kmod-mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.5	4.5	
222	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	4.5	4.5	
223	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	4.5	4.5	
224	HPE Mellanox RoCE (RDMA over Converged Ethernet) Driver for Red Hat Enterprise Linux 7 Update 6 (x86_64)	mlnx-ofa_kernel-4.5-OFED.4.5.1.0.1.1.gb4dfac.rhel7u6.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	4.5	4.5	
225	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel6u10	
226	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel6u9	
227	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel7u5.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel7u5	
228	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-qlgc-fastlinq-8.37.31.0-2.rhel7u6.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.31.0-2	8.37.31.0-2.rhel7u6	
229	HPE QLogic FastLinQ 10/25/50 GbE Drivers for Windows Server x64 Editions	cp035071.exe	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.37.0	8.37.37.0	
230	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.0	cp035084.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-1OEM.600.0.0.2768847	
231	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.5	cp035085.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-1OEM.650.0.0.4598673	

232	HPE QLogic FastLinQ 10/25/50 GbE Multifunction Driver for VMware vSphere 6.7	cp036789.zip	HPE Ethernet 10Gb 2-port 521T Adapter	2019.03.11	3.10.23.1-10E M.670.0.0.81 69922	
233	HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 10	qlgc-libqedr-8.37.0.0-1.rhel6u10.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.0.0-1	8.37.0.0-1.rhe l6u10	
234	HPE QLogic FastLinQ RoCE Library for Red Hat Enterprise Linux 6 Update 9	qlgc-libqedr-8.37.0.0-1.rhel6u9.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	8.37.0.0-1	8.37.0.0-1.rhe l6u9	
235	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	2.713.70.v60. 6-10EM.600.0 .0.2494585	
236	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	2.713.70.v60. 6-10EM.600.0 .0.2494585	
237	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.0	cp036344.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	2.713.70.v60. 6-10EM.600.0 .0.2494585	
238	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	
239	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	
240	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.5	cp036345.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	1.0.77.2-10E M.650.0.0.45 98673	
241	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	
242	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HP Ethernet 10Gb 2-port 530T Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	
243	HPE QLogic NX2 10/20 GbE Multifunction Driver for VMware vSphere 6.7	cp036346.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2019.03.11	1.0.77.2-10E M.670.0.0.81 69922	
244	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel 6u10	
245	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel 6u10	
246	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u10.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel 6u10	
247	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel 6u9	
248	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel 6u9	
249	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 6 x86_64	kmod-netxtreme2-7.14.54-1.rhel6u9.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel 6u9	
250	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel 7u5	
251	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel 7u5	
252	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u5.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel 7u5	
253	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.14.54-1	7.14.54-1.rhel 7u6	

254	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	7.14.54-1	7.14.54-1.rhel7u6	
255	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Red Hat Enterprise Linux 7 x86_64	kmod-netxtreme2-7.14.54-1.rhel7u6.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.14.54-1	7.14.54-1.rhel7u6	
256	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HP Ethernet 10Gb 2-port 530SFP+ Adapter	7.13.161.0	7.13.161.0	
257	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HP Ethernet 10Gb 2-port 530T Adapter	7.13.161.0	7.13.161.0	
258	HPE QLogic NX2 10/20 GbE Multifunction Drivers for Windows Server x64 Editions	cp036669.exe	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	7.13.161.0	7.13.161.0	
259	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	
260	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	
261	net-mst kernel module driver component for VMware 6.0	cp036991.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.10.0.302-10EM.600.0.0.2768847	
262	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	
263	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	
264	net-mst kernel module driver component for VMware ESXi 6.5 and 6.7	cp036992.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.10.0.302-10EM.650.0.0.4598673	
265	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	
266	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	
267	nmlx5_en driver component for VMware ESXi 6.0	cp038033.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.10.30	4.15.13.2-10EM.600.0.0.2768847	
268	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.07.06	4.16.13.5-10EM.650.0.0.4598673	
269	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.07.06	4.16.13.5-10EM.650.0.0.4598673	



270	nmlx5_en driver component for VMware ESXi 6.5	cp036946.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.07.06	4.16.13.5-10E M.650.0.0.45 98673	
271	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	
272	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	
273	nmlx5_en driver component for VMware ESXi 6.7	cp035113.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	2018.06.07	4.17.13.8-10E M.670.0.0.81 69922	

### 6.2.5 Driver – Storage

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
274	HPE Smart Array S100i SR Gen10 SW RAID Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp036435.exe	-	106.12.4.0	106.12.4.0	

### 6.2.6 Driver – Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
275	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
276	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
277	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
278	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
279	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
280	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u10.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u10	更新
281	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新
282	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新

283	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新
284	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新
285	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新
286	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)	kmod-smartpqi-1.2.8-015.rhel6u9.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.2.8-015	1.2.8-015.rhel6u9	更新
287	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
288	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
289	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
290	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
291	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
292	HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)	kmod-smartpqi-1.2.8-026.rhel7u6.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.2.8-026	1.2.8-026.rhel7u6	更新
293	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新
294	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新
295	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新
296	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新
297	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新
298	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).	cp039888.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.600.0.0.2 768847	更新

299	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
300	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
301	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
302	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
303	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
304	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).	cp039887.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.650.0.0.4 598673	更新
305	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array P408i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
306	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array P408i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
307	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array P816i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
308	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array E208e-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
309	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array E208i-a SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
310	HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.7 (Driver Component).	cp039886.zip	HPE Smart Array E208i-p SR Gen10 Controller	2019.06.01	1.0.3.2309-10 EM.670.0.0.8 169922	更新
311	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array P408i-a SR Gen10 Controller	106.100.0.1 014	106.100.0.101 4	更新
312	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array P408i-p SR Gen10 Controller	106.100.0.1 014	106.100.0.101 4	更新
313	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array P816i-a SR Gen10 Controller	106.100.0.1 014	106.100.0.101 4	更新

314	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array E208e-p SR Gen10 Controller	106.100.0.1014	106.100.0.1014	更新
315	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array E208i-a SR Gen10 Controller	106.100.0.1014	106.100.0.1014	更新
316	HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019	cp040553.exe	HPE Smart Array E208i-p SR Gen10 Controller	106.100.0.1014	106.100.0.1014	更新

## 6.2.7 Driver - Storage Fibre Channel and Fibre Channel over Ethernet

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
317	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
318	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
319	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
320	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2012, Windows 2012R2 and Windows 2016	cp035756.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
321	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
322	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
323	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
324	HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Windows 2019	cp037437.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.318.0	12.0.318.0	
325	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	

326	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
327	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
328	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2012 and 2012 R2	cp035775.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
329	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
330	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
331	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
332	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2016	cp035776.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
333	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
334	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
335	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
336	HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Windows Server 2019	cp037397.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	9.2.9.22	9.2.9.22	
337	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u10	
338	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u10	

339	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u10	
340	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u10	
341	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u9	
342	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u9	
343	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u9	
344	Red Hat Enterprise Linux 6 Server (x86-64) FC Driver Kit for HPE Qlogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.06.0_k10-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	8.08.00.08.06.0-k10	8.08.00.08.06.0_k10-1.rhel6u9	
345	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	
346	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	
347	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	
348	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u10.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u10	
349	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	
350	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	
351	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	

352	Red Hat Enterprise Linux 6 Server (x86-64) Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel6u9.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel6u9	
353	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	
354	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	
355	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	
356	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-10.0.1.00.33.07.6_k2-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	10.01.00.33.07.6_k2-1.rhel7u6	
357	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.07.5_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	
358	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.07.5_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	
359	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.07.5_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	
360	Red Hat Enterprise Linux 7 Server FC Driver Kit for HPE QLogic and mezzanine Host Bus Adapters	kmod-qlgc-qla2xxx-8.08.00.08.07.5_k10-2.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	10.01.00.33.07.6-k2	8.08.00.08.07.5_k10-2.rhel7u5	
361	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	
362	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	
363	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	
364	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u5.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u5	

365	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	
366	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	
367	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	
368	Red Hat Enterprise Linux 7 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapters and mezzanine Host Bus Adapters	kmod-elx-lpfc-12.0.346.15-1.rhel7u6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.15	12.0.346.15-1.rhel7u6	

## 6.2.8 Driver - System

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
369	HPE Non-Volatile Memory Drivers for Microsoft Windows Server 2012 R2 and 2016	cp038534.exe	-	3.0.1.2	3.0.1.2	新規追加

## 6.2.9 Driver - System Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
370	iLO 5 Automatic Server Recovery Driver for Windows Server 2012 R2	cp035137.exe	-	4.4.0.0	4.4.0.0	
371	iLO 5 Automatic Server Recovery Driver for Windows Server 2016 and Server 2019	cp035140.exe	-	4.4.0.0 (B)	4.4.0.0 (B)	
372	iLO 5 Channel Interface Driver for Windows Server 2012 R2	cp039986.exe	-	4.5.0.0	4.5.0.0	更新
373	iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019	cp039987.exe	-	4.5.0.0	4.5.0.0	更新

## 6.2.10 Driver - Video

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
374	Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2	cp038693.exe	-	9.15.1.224	9.15.1.224	更新
375	Matrox G200eH3 Video Controller Driver for Windows Server 2016 and Server 2019	cp038694.exe	-	9.15.1.224	9.15.1.224	更新

## 6.2.11 Firmware - Lights-Out Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
376	Language Pack - Japanese	cp041310.exe	Japanese Language Pack	1.43 (a)	1.43.08	更新
377	Language Pack - Japanese	firmware-ilo5-lpk-ja-ri1-1-1.43-2.1.x86_64.rpm	Japanese Language Pack	1.43 (B)	1.43.08	更新



378	Online ROM Flash Component for Linux - iLO 5	firmware-ilo5-1.45-1.1.x86_64.rpm	iLO 5	1.45	1.45	更新
379	Online ROM Flash Component for Windows x64 - iLO 5	cp040593.exe	iLO 5	1.45	1.45	更新
380	Online ROM Flash Firmware Package - iLO 5	ilo5_145.fwpkg	iLO 5	1.45	1.45	更新

## 6.2.12 Firmware – Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
381	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-bcm-nxe-1.5.11-1.1.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	1.5.11	214.0.203000	
382	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-bcm-nxe-1.5.11-1.1.x86_64.rpm	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	1.5.11	214.0.203000	
383	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware	CP035581.zip	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	5.7.10	214.0.203000	
384	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for VMware	CP035581.zip	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	5.7.10	214.0.203000	
385	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035575.exe	HPE Ethernet 10/25Gb 2-port 631FLR-SFP28 Adapter	5.1.4.0	214.0.203000	
386	HPE Broadcom NetXtreme-E Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035575.exe	HPE Ethernet 10/25Gb 2-port 631SFP28 Adapter	5.1.4.0	214.0.203000	
387	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	2.23.10	20.14.54	
388	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 2-port 332T Adapter	2.23.10	20.14.54	
389	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331FLR Adapter	2.23.10	20.14.54	
390	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331T Adapter	2.23.10	20.14.54	
391	HPE Broadcom NX1 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-broadcom-2.23.10-1.1.x86_64.rpm	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	2.23.10	20.14.54	
392	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	1.24.8	20.14.54	
393	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 2-port 332T Adapter	1.24.8	20.14.54	
394	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331FLR Adapter	1.24.8	20.14.54	
395	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331T Adapter	1.24.8	20.14.54	
396	HPE Broadcom NX1 Online Firmware Upgrade Utility for VMware	CP036110.zip	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	1.24.8	20.14.54	

397	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 2-port 332i Adapter (22E8)	5.1.4.0	20.14.54	
398	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 2-port 332T Adapter	5.1.4.0	20.14.54	
399	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331FLR Adapter	5.1.4.0	20.14.54	
400	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331T Adapter	5.1.4.0	20.14.54	
401	HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036111.exe	HP Ethernet 1Gb 4-port 331i Adapter (22BE)	5.1.4.0	20.14.54	
402	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 1Gb 4-port 369i Adapter	1.17.17 (B)	1.2028.0	
403	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 2-port 361T Adapter	1.17.17 (B)	1.2028.0	
404	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 4-port 366FLR Adapter	1.17.17 (B)	1.2028.0	
405	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HP Ethernet 1Gb 4-port 366T Adapter	1.17.17 (B)	1.2028.0	
406	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	1.17.17 (B)	10.4.3	
407	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	1.17.17 (B)	10.4.4	
408	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	1.17.17 (B)	10.4.3	
409	HPE Intel Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-intel-1.17.17-2.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 562T Adapter	1.17.17 (B)	10.4.4	
410	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 1Gb 4-port 369i Adapter	3.10.16	1.2028.0	
411	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 2-port 361T Adapter	3.10.16	1.2028.0	
412	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	3.10.16	1.2028.0	
413	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HP Ethernet 1Gb 4-port 366T Adapter	3.10.16	1.2028.0	
414	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	3.10.16	10.4.3	
415	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	3.10.16	10.4.4	
416	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	3.10.16	10.4.3	
417	HPE Intel Online Firmware Upgrade Utility for VMware	CP035127.zip	HPE Ethernet 10Gb 2-port 562T Adapter	3.10.16	10.4.4	

418	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 1Gb 4-port 369i Adapter	5.1.4.0	1.2028.0	
419	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 2-port 361T Adapter	5.1.4.0	1.2028.0	
420	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 4-port 366FLR Adapter	5.1.4.0	1.2028.0	
421	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HP Ethernet 1Gb 4-port 366T Adapter	5.1.4.0	1.2028.0	
422	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	5.1.4.0	10.4.3	
423	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562FLR-T Adapter	5.1.4.0	10.4.4	
424	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	5.1.4.0	10.4.3	
425	HPE Intel Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035128.exe	HPE Ethernet 10Gb 2-port 562T Adapter	5.1.4.0	10.4.4	
426	HPE QLogic FastLinQ Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-flq-1.6.27-1.1.x86_64.rpm	HPE Ethernet 10Gb 2-port 521T Adapter	1.6.27	8.37.29	
427	HPE QLogic FastLinQ Online Firmware Upgrade Utility for VMware	CP035082.zip	HPE Ethernet 10Gb 2-port 521T Adapter	4.9.27	8.37.29	
428	HPE QLogic FastLinQ Online Firmware Upgrade Utility for Windows Server x64 Editions	cp035083.exe	HPE Ethernet 10Gb 2-port 521T Adapter	5.1.4.0	8.37.29	
429	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HP Ethernet 10Gb 2-port 530SFP+ Adapter	2.24.15	7.17.71	
430	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HP Ethernet 10Gb 2-port 530T Adapter	2.24.15	7.17.71	
431	HPE QLogic NX2 Online Firmware Upgrade Utility for Linux x86_64	firmware-nic-qlogic-nx2-2.24.15-1.1.x86_64.rpm	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	2.24.15	7.17.71	
432	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HP Ethernet 10Gb 2-port 530SFP+ Adapter	1.24.16	7.17.71	
433	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HP Ethernet 10Gb 2-port 530T Adapter	1.24.16	7.17.71	
434	HPE QLogic NX2 Online Firmware Upgrade Utility for VMware	CP035912.zip	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	1.24.16	7.17.71	
435	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HP Ethernet 10Gb 2-port 530SFP+ Adapter	5.1.4.0	7.17.71	
436	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HP Ethernet 10Gb 2-port 530T Adapter	5.1.4.0	7.17.71	
437	HPE QLogic NX2 Online Firmware Upgrade Utility for Windows Server x64 Editions	cp036015.exe	HPE FlexFabric 10Gb 2-port 533FLR-T Adapter	5.1.4.0	7.17.71	
438	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox Ethernet only adapters	CP038535.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.10	14.24.9006	更新

439	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox Ethernet only adapters	CP038535.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.10	14.24.9000	更新
440	Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.0	CP036745.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.5	16.24.1000	
441	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters	CP038536.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.5	14.24.9006	更新
442	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters	CP038536.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.5	14.24.9000	更新
443	Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.5	CP036746.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.4	16.24.1000	
444	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters	CP038537.zip	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.1	14.24.9006	更新
445	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox Ethernet only adapters	CP038537.zip	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.1	14.24.9000	更新
446	Online Firmware Upgrade Utility (ESXi 6.7) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on VMware ESXi 6.7	CP035249.zip	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.0	16.24.1000	
447	Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters	firmware-nic-mellanox-ethernet-only-1.0.10-1.1.x86_64.rpm	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.10	14.24.9006	更新
448	Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox Ethernet only adapters	firmware-nic-mellanox-ethernet-only-1.0.10-1.1.x86_64.rpm	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.10	14.24.9000	更新
449	Online Firmware Upgrade Utility (Linux x86_64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Linux x86_64 platform	firmware-hca-mellanox-vpi-connectx4-1.0.5-1.1.x86_64.rpm	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.5	16.24.1000	
450	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters	cp038538.exe	HPE Ethernet 25Gb 2-port 640 FLR-SFP28 Adapter	1.0.0.10	14.24.9006	更新
451	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters	cp038538.exe	HPE Ethernet 25Gb 2-port 640SFP28 Adapter	1.0.0.10	14.24.9000	更新
452	Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox VPI (Ethernet and Infiniband mode) ConnectX4 and ConnectX5 devices on Windows x86_64 platform	cp036747.exe	HPE InfiniBand EDR/Ethernet 100Gb 2-port 841QSFP28 Adapter	1.0.0.5	16.24.1000	

### 6.2.13 Firmware - PCIe NVMe Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
453	Supplemental Update / Online ROM Flash Component for Linux (x64) - LO0400KEFJQ, LO0800KEFJR, LO1600KEFJT, LO2000KEFJU, LT0800KEXVA, LT1600KEXVB and LT2000KEXVC Drives	firmware-hdd-d64642c780-HPK4-3.1.x86_64.rpm	LO0400KEFJQ	HPK4 (C)	HPK4	更新
454	Supplemental Update / Online ROM Flash Component for Linux (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives	firmware-hdd-8e8ddc5265-HPS1-2.1.x86_64.rpm	MT006400KWHAE	HPS1 (B)	HPS1	更新
455	Supplemental Update / Online ROM Flash Component for Linux (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives	firmware-hdd-1656c1b14a-HPK1-3.1.x86_64.rpm	VO004000KWJSH	HPK1 (C)	HPK1	更新
456	Supplemental Update / Online ROM Flash Component for Linux (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives	firmware-hdd-1656c1b14a-HPK1-3.1.x86_64.rpm	VT004000KWJSU	HPK1 (C)	HPK1	更新
457	Supplemental Update / Online ROM Flash Component for Linux (x64) - VO001000KWJSE, VO002000KWJSF, VO004000KWJSH, VT004000KWJSU, MO001600KWJSN and MO003200KWJSQ Drives	firmware-hdd-1656c1b14a-HPK1-3.1.x86_64.rpm	MO003200KWJSQ	HPK1 (C)	HPK1	更新

### 6.2.14 Firmware - Power Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
458	Online Flash for Windows x64 - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	cp039815.exe	Innovation Engine (IE) Firmware	0.2.1.2	0.2.1.2	更新
459	Online ROM Flash for Linux - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors	firmware-powerpic-1.0.4-1.1.x86_64.rpm	Advanced Power Capping Microcontroller Firmware	1.0.4	1.0.4	

460	Online ROM Flash for Windows x64 - Advanced Power Capping Microcontroller Firmware for servers using Intel Xeon Scalable 3100/4100/5100/6100/8100 series Processors	cp033359.exe	Advanced Power Capping Microcontroller Firmware	1.0.4	1.0.4	
461	ROM Flash Firmware Package - Advanced Power Capping Microcontroller Firmware for HPE Gen10 Servers	PICGen10_1.0.4s.fwpkg	Gen10 Power Management Controller Firmware	1.0.4	1.0.4	

## 6.2.15 Firmware - SAS Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
462	Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives	CP037949.zip	EG000600JWEBH	HPD4	HPD4	
463	Online ROM Flash Component for VMware ESXi - EG000600JWEBH and EG000300JWEBF Drives	CP037949.zip	EG000300JWEBF	HPD4	HPD4	
464	Online ROM Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives	CP039880.zip	EG002400JWJNT	HPD4	HPD4	更新
465	Online ROM Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	CP037048.zip	EG0300JEHLV	HPD5 (E)	HPD5	更新
466	Online ROM Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	CP037048.zip	EG0600JEHMA	HPD5 (E)	HPD5	更新
467	Online ROM Flash Component for VMware ESXi - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	CP037048.zip	EG1200JEHMC	HPD5 (E)	HPD5	更新
468	Online ROM Flash Component for VMware ESXi - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	CP037049.zip	EG1200JEMDA	HPD6 (D)	HPD6	
469	Online ROM Flash Component for VMware ESXi - EG1800JEHMD Drive	CP037051.zip	EG1800JEHMD	HPD6 (E)	HPD6	更新
470	Online ROM Flash Component for VMware ESXi - EG1800JEMDB Drives	CP040505.zip	EG1800JEMDB	HPD5 (D)	HPD5	更新
471	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP039521.zip	EH000300JWCPK	HPD5	HPD5	更新
472	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP039521.zip	EH000600JWCPL	HPD5	HPD5	更新

473	Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	CP039521.zip	EH000900JWCPN	HPD5	HPD5	更新
474	Online ROM Flash Component for VMware ESXi - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	CP037057.zip	EH0300JDYTH	HPD6 (E)	HPD6	更新
475	Online ROM Flash Component for VMware ESXi - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	CP037057.zip	EH0450JDYTK	HPD6 (E)	HPD6	更新
476	Online ROM Flash Component for VMware ESXi - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives	CP037058.zip	EH0600JEDHE	HPD4 (E)	HPD4	更新
477	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	EO000400JWDKP	HPD2	HPD2	更新
478	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	EO000800JWDKQ	HPD2	HPD2	更新
479	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	EO001600JWDKR	HPD2	HPD2	更新
480	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	MO000400JWDK U	HPD2	HPD2	更新
481	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	MO000800JWDK V	HPD2	HPD2	更新

482	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	MO001600JWDLA	HPD2	HPD2	更新
483	Online ROM Flash Component for VMware ESXi - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	CP038747.zip	MO003200JWDLB	HPD2	HPD2	更新
484	Online ROM Flash Component for VMware ESXi - MB012000JWDFD Drives	CP037064.zip	MB012000JWDFD	HPD2 (B)	HPD2	
485	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB1000JVYZL	HPD3	HPD3	
486	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB2000JVYZN	HPD3	HPD3	
487	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB3000JVYZP	HPD3	HPD3	
488	Online ROM Flash Component for VMware ESXi - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	CP037954.zip	MB4000JVYZQ	HPD3	HPD3	
489	Online ROM Flash Component for VMware ESXi - MB2000JFEML and MB4000JFEMN Drives	CP037067.zip	MB2000JFEML	HPD6 (D)	HPD6	更新
490	Online ROM Flash Component for VMware ESXi - MB2000JFEPB and MB4000JFEPB Drives	CP037068.zip	MB4000JFEPB	HPD5 (D)	HPD5	更新
491	Online ROM Flash Component for VMware ESXi - MB6000JEQUV and MB8000JEQVA Drives	CP037071.zip	MB6000JEQUV	HPDB (D)	HPDB	更新
492	Online ROM Flash Component for VMware ESXi - MB6000JVYYV Drives	CP037072.zip	MB6000JVYYV	HPD2 (D)	HPD2	更新
493	Online ROM Flash Component for VMware ESXi - MB8000JFECQ Drives	CP037073.zip	MB8000JFECQ	HPD7 (C)	HPD7	
494	Online ROM Flash Component for VMware ESXi - MM1000JEFRB and MM2000JEFRC Drives	CP037074.zip	MM2000JEFRC	HPD8 (C)	HPD8	
495	Online ROM Flash Component for VMware ESXi - MM1000JFJTH Drives	CP037075.zip	MM1000JFJTH	HPD3 (C)	HPD3	



496	Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives	cp037953.exe	EG000600JWEBH	HPD4	HPD4	
497	Online ROM Flash Component for Windows (x64) - EG000600JWEBH and EG000300JWEBF Drives	cp037953.exe	EG000300JWEBF	HPD4	HPD4	
498	Online ROM Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives	cp039881.exe	EG002400JWJNT	HPD4	HPD4	更新
499	Online ROM Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	cp037253.exe	EG0300JEHLV	HPD5 (D)	HPD5	更新
500	Online ROM Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	cp037253.exe	EG0600JEHMA	HPD5 (D)	HPD5	更新
501	Online ROM Flash Component for Windows (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	cp037253.exe	EG1200JEHMC	HPD5 (D)	HPD5	更新
502	Online ROM Flash Component for Windows (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	cp037254.exe	EG1200JEMDA	HPD6 (C)	HPD6	
503	Online ROM Flash Component for Windows (x64) - EG1800JEHMD Drive	cp037255.exe	EG1800JEHMD	HPD6 (D)	HPD6	更新
504	Online ROM Flash Component for Windows (x64) - EG1800JEMDB Drives	cp040402.exe	EG1800JEMDB	HPD5 (C)	HPD5	更新
505	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp039527.exe	EH000300JWCPK	HPD5	HPD5	更新
506	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp039527.exe	EH000600JWCPL	HPD5	HPD5	更新
507	Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	cp039527.exe	EH000900JWCPN	HPD5	HPD5	更新
508	Online ROM Flash Component for Windows (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	cp037261.exe	EH0300JDYTH	HPD6 (D)	HPD6	更新
509	Online ROM Flash Component for Windows (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	cp037261.exe	EH0450JDYTK	HPD6 (D)	HPD6	更新
510	Online ROM Flash Component for Windows (x64) - EH0300JEDHC, EH0450JEDHD, and EH0600JEDHE Drives	cp037262.exe	EH0600JEDHE	HPD4 (E)	HPD4	更新

511	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	EO000400JWDKP	HPD2	HPD2	更新
512	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	EO000800JWDKQ	HPD2	HPD2	更新
513	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	EO001600JWDKR	HPD2	HPD2	更新
514	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	MO000400JWDK U	HPD2	HPD2	更新
515	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	MO000800JWDK V	HPD2	HPD2	更新
516	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	MO001600JWDLA	HPD2	HPD2	更新
517	Online ROM Flash Component for Windows (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	cp038748.exe	MO003200JWDLB	HPD2	HPD2	更新
518	Online ROM Flash Component for Windows (x64) - MB012000JWDFD Drives	cp037309.exe	MB012000JWDFD	HPD2 (B)	HPD2	

519	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB1000JVYZL	HPD3	HPD3	
520	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB2000JVYZN	HPD3	HPD3	
521	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB3000JVYZP	HPD3	HPD3	
522	Online ROM Flash Component for Windows (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	cp037956.exe	MB4000JVYZQ	HPD3	HPD3	
523	Online ROM Flash Component for Windows (x64) - MB2000JFEML and MB4000JFEMN Drives	cp037279.exe	MB2000JFEML	HPD6 (C)	HPD6	更新
524	Online ROM Flash Component for Windows (x64) - MB2000JFEPA and MB4000JFEPB Drives	cp037280.exe	MB4000JFEPB	HPD5 (C)	HPD5	更新
525	Online ROM Flash Component for Windows (x64) - MB6000JEQUV and MB8000JEQVA Drives	cp037289.exe	MB6000JEQUV	HPDB (C)	HPDB	更新
526	Online ROM Flash Component for Windows (x64) - MB6000JVYYV Drives	cp037290.exe	MB6000JVYYV	HPD2 (C)	HPD2	更新
527	Online ROM Flash Component for Windows (x64) - MB8000JFECQ Drives	cp037291.exe	MB8000JFECQ	HPD7 (B)	HPD7	
528	Online ROM Flash Component for Windows (x64) - MM1000JEFRB and MM2000JEFRC Drives	cp037295.exe	MM2000JEFRC	HPD8 (B)	HPD8	
529	Online ROM Flash Component for Windows (x64) - MM1000JFJTH Drives	cp037296.exe	MM1000JFJTH	HPD3 (B)	HPD3	
530	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives	firmware-hdd-aa9e289524-HPD4-2.1.x86_64.rpm	EG000600JWEBH	HPD4 (B)	HPD4	更新
531	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives	firmware-hdd-aa9e289524-HPD4-2.1.x86_64.rpm	EG000300JWEBF	HPD4 (B)	HPD4	更新
532	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives	firmware-hdd-b1c9eaf74c-HPD4-2.1.x86_64.rpm	EG002400JWJNT	HPD4 (B)	HPD4	更新
533	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	firmware-hdd-31f91b8622-HPD5-5.1.x86_64.rpm	EG0300JEHLV	HPD5 (E)	HPD5	更新

534	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	firmware-hdd-31f91b8622-HPD5-5.1.x86_64.rpm	EG0600JEHMA	HPD5 (E)	HPD5	更新
535	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JEHLV, EG0600JEHMA, EG0900JEHMB, and EG1200JEHMC Drives	firmware-hdd-31f91b8622-HPD5-5.1.x86_64.rpm	EG1200JEHMC	HPD5 (E)	HPD5	更新
536	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives	firmware-hdd-ac3fda26eb-HPD6-5.1.x86_64.rpm	EG1200JEMDA	HPD6 (E)	HPD6	更新
537	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEHMD Drive	firmware-hdd-8a2c06af48-HPD6-5.1.x86_64.rpm	EG1800JEHMD	HPD6 (E)	HPD6	更新
538	Supplemental Update / Online ROM Flash Component for Linux (x64) - EG1800JEMDB Drives	firmware-hdd-0a38b25661-HPD5-4.1.x86_64.rpm	EG1800JEMDB	HPD5 (D)	HPD5	更新
539	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD5-2.1.x86_64.rpm	EH000900JWCPN	HPD5 (B)	HPD5	更新
540	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD5-2.1.x86_64.rpm	EH000600JWCPL	HPD5 (B)	HPD5	更新
541	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives	firmware-hdd-3d97759111-HPD5-2.1.x86_64.rpm	EH000300JWCPK	HPD5 (B)	HPD5	更新
542	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	firmware-hdd-b9340d29be-HPD6-5.1.x86_64.rpm	EH0300JDYTH	HPD6 (E)	HPD6	更新
543	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JDYTH, EH0450JDYTK, and EH0600JDYTL Drives	firmware-hdd-b9340d29be-HPD6-5.1.x86_64.rpm	EH0450JDYTK	HPD6 (E)	HPD6	更新
544	Supplemental Update / Online ROM Flash Component for Linux (x64) - EH0300JEDHC, EH0450JEDHD and EH0600JEDHE Drives	firmware-hdd-8c4a212ff9-HPD4-5.1.x86_64.rpm	EH0600JEDHE	HPD4 (E)	HPD4	更新
545	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	EO000400JWDKP	HPD2 (B)	HPD2	更新

546	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	EO000800JWDKQ	HPD2 (B)	HPD2	更新
547	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	EO001600JWDKR	HPD2 (B)	HPD2	更新
548	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	MO000400JWDKU	HPD2 (B)	HPD2	更新
549	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	MO000800JWDKV	HPD2 (B)	HPD2	更新
550	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	MO001600JWDLA	HPD2 (B)	HPD2	更新
551	Supplemental Update / Online ROM Flash Component for Linux (x64) - EO000400JWDKP, EO000800JWDKQ, EO001600JWDKR, MO000400JWDKU, MO000800JWDKV, MO001600JWDLA and MO003200JWDLB Drives	firmware-hdd-5dcf26fa42-HPD2-2.1.x86_64.rpm	MO003200JWDLB	HPD2 (B)	HPD2	更新
552	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000JWDFD Drives	firmware-hdd-aaf1014ede-HPD2-3.1.x86_64.rpm	MB012000JWDFD	HPD2 (C)	HPD2	更新
553	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-2.1.x86_64.rpm	MB1000JVYZL	HPD3 (B)	HPD3	更新

554	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-2.1.x86_64.rpm	MB2000JVYZN	HPD3 (B)	HPD3	更新
555	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-2.1.x86_64.rpm	MB3000JVYZP	HPD3 (B)	HPD3	更新
556	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives	firmware-hdd-b85516c7d2-HPD3-2.1.x86_64.rpm	MB4000JVYZQ	HPD3 (B)	HPD3	更新
557	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000JFEML and MB4000JFEMN Drives	firmware-hdd-624b75c7e2-HPD6-4.1.x86_64.rpm	MB2000JFEML	HPD6 (D)	HPD6	更新
558	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000JFEPA and MB4000JFEPB Drives	firmware-hdd-326de7c0f2-HPD5-4.1.x86_64.rpm	MB4000JFEPB	HPD5 (D)	HPD5	更新
559	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JEQUV and MB8000JEQVA Drives	firmware-hdd-df22f7effd-HPDB-4.1.x86_64.rpm	MB6000JEQUV	HPDB (D)	HPDB	更新
560	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000JVYYV Drives	firmware-hdd-0595c2a887-HPD2-4.1.x86_64.rpm	MB6000JVYYV	HPD2 (D)	HPD2	更新
561	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives	firmware-hdd-252770cdda-HPD7-3.1.x86_64.rpm	MB8000JFECQ	HPD7 (C)	HPD7	更新
562	Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives	firmware-hdd-b04257b77b-HPD8-3.1.x86_64.rpm	MM2000JEFRC	HPD8 (C)	HPD8	更新
563	Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives	firmware-hdd-fa46c607d6-HPD3-3.1.x86_64.rpm	MM1000JFJTH	HPD3 (C)	HPD3	更新

## 6.2.16 Firmware - SATA Storage Disk

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
564	Online HDD/SDD Flash Component for ESXi - MB001000GWCBC and MB002000GWCBD Drives	CP040563.zip	MB001000GWCBC	HPG6	HPG6	更新
565	Online ROM Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives	firmware-hdd-68b12e54d2-HPG6-2.1.x86_64.rpm	MB001000GWCBC	HPG6 (B)	HPG6	更新
566	Online ROM Flash Component for VMware ESXi - MB002000GWFGH and MB001000GWFGF Drives	CP036234.zip	MB001000GWFGF	HPG3 (C)	HPG3	
567	Online ROM Flash Component for VMware ESXi - MB006000GWBXQ and MB008000GWBXL Drives	CP039380.zip	MB006000GWBXQ	HPG8	HPG8	新規追加

568	Online ROM Flash Component for VMware ESXi - MB012000GWDFE Drives	CP037063.zip	MB012000GWDFE	HPG2 (B)	HPG2	
569	Online ROM Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	CP036240.zip	MB3000GVYZH	HPG4 (D)	HPG4	
570	Online ROM Flash Component for VMware ESXi - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	CP036240.zip	MB4000GVYZK	HPG4 (D)	HPG4	
571	Online ROM Flash Component for VMware ESXi - MB2000GFEMH and MB4000GFEMK Drives	CP036243.zip	MB4000GFEMK	HPG6 (D)	HPG6	更新
572	Online ROM Flash Component for VMware ESXi - MB6000GEQUT and MB8000GEQUU Drives	CP036246.zip	MB6000GEQUT	HPGB (D)	HPGB	更新
573	Online ROM Flash Component for VMware ESXi - MB6000GVYYU Drives	CP036248.zip	MB6000GVYYU	HPG2 (D)	HPG2	更新
574	Online ROM Flash Component for VMware ESXi - MM1000GEFQV and MM2000GEFRA Drives	CP038002.zip	MM2000GEFRA	HPG8 (C)	HPG8	
575	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000240GWFLU	HPGB (B)	HPGB	
576	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000480GWFLV	HPGB (B)	HPGB	
577	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	VR000480GWFMD	HPGB (B)	HPGB	
578	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	MR000960GWFMA	HPGB (B)	HPGB	

579	Online ROM Flash Component for VMware ESXi - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	CP037863.zip	VR000960GWFME	HPGB (B)	HPGB	
580	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	VK000240GWEZB	HPGB (B)	HPGB	
581	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	VK000480GWEZC	HPGB (B)	HPGB	
582	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	VK000960GWEZD	HPGB (B)	HPGB	
583	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	MK000240GWEZF	HPGB (B)	HPGB	
584	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	MK000480GWEZH	HPGB (B)	HPGB	



585	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	MK000960GWEZK	HPGB (B)	HPGB	
586	Online ROM Flash Component for VMware ESXi - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	CP037861.zip	MK001920GWHRU	HPGB (B)	HPGB	
587	Online ROM Flash Component for VMware ESXi - VR000150GWEPP and VR000480GWEPR Drives	CP038003.zip	VR000150GWEPP	HPG1 (B)	HPG1	更新
588	Online ROM Flash Component for VMware ESXi - VR000150GWEPP and VR000480GWEPR Drives	CP038003.zip	VR000480GWEPR	HPG1 (B)	HPG1	更新
589	Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives	cp040569.exe	MB001000GWCBC	HPG6	HPG6	更新
590	Online ROM Flash Component for Windows (x64) - MB001000GWFVK and MB002000GWFVL Drives	cp038751.exe	MB002000GWFVL	HPG5	HPG5	更新
591	Online ROM Flash Component for Windows (x64) - MB002000GWFGH and MB001000GWFGF Drives	cp037266.exe	MB001000GWFGF	HPG3 (C)	HPG3	
592	Online ROM Flash Component for Windows (x64) - MB006000GWBXQ and MB008000GWBXL Drives	cp039382.exe	MB006000GWBXQ	HPG8	HPG8	新規追加
593	Online ROM Flash Component for Windows (x64) - MB012000GWDFE Drives	cp037310.exe	MB012000GWDFE	HPG2 (B)	HPG2	
594	Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	cp037273.exe	MB3000GVYZH	HPG4 (E)	HPG4	
595	Online ROM Flash Component for Windows (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	cp037273.exe	MB4000GVYZK	HPG4 (E)	HPG4	
596	Online ROM Flash Component for Windows (x64) - MB2000GFEMH and MB4000GFEMK Drives	cp037277.exe	MB4000GFEMK	HPG6 (D)	HPG6	更新
597	Online ROM Flash Component for Windows (x64) - MB6000GEQUT and MB8000GEQUU Drives	cp037286.exe	MB6000GEQUT	HPGB (D)	HPGB	更新

598	Online ROM Flash Component for Windows (x64) - MB6000GVYYU Drives	cp037288.exe	MB6000GVYYU	HPG2 (D)	HPG2	更新
599	Online ROM Flash Component for Windows (x64) - MB8000GFECR Drives	cp036957.exe	MB8000GFECR	HPG6	HPG6	
600	Online ROM Flash Component for Windows (x64) - MM1000GEFQV and MM2000GEFRA Drives	cp037293.exe	MM2000GEFRA	HPG8 (C)	HPG8	
601	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000240GWFLU	HPGB (B)	HPGB	
602	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000480GWFLV	HPGB (B)	HPGB	
603	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	VR000480GWFMD	HPGB (B)	HPGB	
604	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	MR000960GWFMA	HPGB (B)	HPGB	
605	Online ROM Flash Component for Windows (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	cp037314.exe	VR000960GWFME	HPGB (B)	HPGB	
606	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	VK000240GWEZB	HPGB (B)	HPGB	

607	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	VK000480GWEZC	HPGB (B)	HPGB	
608	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	VK000960GWEZD	HPGB (B)	HPGB	
609	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	MK000240GWEZF	HPGB (B)	HPGB	
610	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	MK000480GWEZH	HPGB (B)	HPGB	
611	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	MK000960GWEZK	HPGB (B)	HPGB	
612	Online ROM Flash Component for Windows (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	cp037315.exe	MK001920GWHRU	HPGB (B)	HPGB	

613	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	MK000240GWKVK	HPG5	HPG5	更新
614	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	MK000480GWJPN	HPG5	HPG5	更新
615	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	MK000960GWJPP	HPG5	HPG5	更新
616	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	MK001920GWJPPQ	HPG5	HPG5	更新
617	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	VK000240GWJPD	HPG5	HPG5	更新
618	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	VK000480GWJPE	HPG5	HPG5	更新

619	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	VK000960GWJPF	HPG5	HPG5	更新
620	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	VK001920GWJPH	HPG5	HPG5	更新
621	Online ROM Flash Component for Windows (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	cp039742.exe	VK003840GWJPK	HPG5	HPG5	更新
622	Online ROM Flash Component for Windows (x64) - VR000150GWEPP and VR000480GWEPR Drives	cp038004.exe	VR000150GWEPP	HPG1 (B)	HPG1	更新
623	Online ROM Flash Component for Windows (x64) - VR000150GWEPP and VR000480GWEPR Drives	cp038004.exe	VR000480GWEPR	HPG1 (B)	HPG1	更新
624	Supplemental Update / Online ROM Flash Component for ESXi - MB001000GFWFK and MB002000GFWFL Drives	CP038749.zip	MB002000GFWFL	HPG5	HPG5	更新
625	Supplemental Update / Online ROM Flash Component for ESXi - MB8000GFECR Drives	CP036956.zip	MB8000GFECR	HPG6	HPG6	
626	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	MK000240GWKVK	HPG5	HPG5	更新

627	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	MK000480GWJPN	HPG5	HPG5	更新
628	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	MK000960GWJPP	HPG5	HPG5	更新
629	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	MK001920GWJPPQ	HPG5	HPG5	更新
630	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	VK000240GWJPD	HPG5	HPG5	更新
631	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	VK000480GWJPE	HPG5	HPG5	更新
632	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	VK000960GWJPF	HPG5	HPG5	更新

633	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	VK001920GWJPH	HPG5	HPG5	更新
634	Supplemental Update / Online ROM Flash Component for ESXi - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	CP039740.zip	VK003840GWJPK	HPG5	HPG5	更新
635	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GWFVK and MB002000GWFVL Drives	firmware-hdd-bfc4af697b-HPG5-2.1.x86_64.rpm	MB002000GWFVL	HPG5 (B)	HPG5	更新
636	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFVGH and MB001000GWFVGF Drives	firmware-hdd-0b575b5895-HPG3-4.1.x86_64.rpm	MB001000GWFVGF	HPG3 (D)	HPG3	更新
637	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB006000GWBXQ and MB008000GWBXQ Drives	firmware-hdd-a1fd19f9ca-HPG8-2.1.x86_64.rpm	MB006000GWBXQ	HPG8 (B)	HPG8	新規追加
638	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000GWDFE Drives	firmware-hdd-059b8654a6-HPG2-3.1.x86_64.rpm	MB012000GWDFE	HPG2 (C)	HPG2	更新
639	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	firmware-hdd-0a7010918e-HPG4-6.1.x86_64.rpm	MB3000GVYZH	HPG4 (F)	HPG4	更新
640	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives	firmware-hdd-0a7010918e-HPG4-6.1.x86_64.rpm	MB4000GVYZK	HPG4 (F)	HPG4	更新
641	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB2000GFEMH and MB4000GFEMK Drives	firmware-hdd-70e3962f98-HPG6-5.1.x86_64.rpm	MB4000GFEMK	HPG6 (E)	HPG6	更新
642	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000GEQUT and MB8000GEQUU Drives	firmware-hdd-1d7f19120b-HPGB-5.1.x86_64.rpm	MB6000GEQUT	HPGB (E)	HPGB	更新
643	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB6000GVYYU Drives	firmware-hdd-bdc37cb37f-HPG2-5.1.x86_64.rpm	MB6000GVYYU	HPG2 (E)	HPG2	更新
644	Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives	firmware-hdd-6d922fc9a8-HPG6-2.1.x86_64.rpm	MB8000GFECR	HPG6 (B)	HPG6	更新

645	Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives	firmware-hdd-ec908c3650-HPG8-4.1.x86_64.rpm	MM2000GEFRA	HPG8 (D)	HPG8	更新
646	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-3.1.x86_64.rpm	MR000240GWFLU	HPGB (C)	HPGB	更新
647	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-3.1.x86_64.rpm	MR000480GWFLV	HPGB (C)	HPGB	更新
648	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-3.1.x86_64.rpm	VR000480GWFMD	HPGB (C)	HPGB	更新
649	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-3.1.x86_64.rpm	MR000960GWFMA	HPGB (C)	HPGB	更新
650	Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives	firmware-hdd-9196d4f720-HPGB-3.1.x86_64.rpm	VR000960GWFME	HPGB (C)	HPGB	更新
651	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	VK000240GWEZB	HPGB (C)	HPGB	更新



652	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	VK000480GWEZC	HPGB (C)	HPGB	更新
653	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	VK000960GWEZD	HPGB (C)	HPGB	更新
654	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	MK000240GWEZF	HPGB (C)	HPGB	更新
655	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	MK000480GWEZH	HPGB (C)	HPGB	更新
656	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	MK000960GWEZK	HPGB (C)	HPGB	更新
657	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives	firmware-hdd-3db7640485-HPGB-3.1.x86_64.rpm	MK001920GWHRU	HPGB (C)	HPGB	更新

658	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	MK000240GWKVK	HPG5 (B)	HPG5	更新
659	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	MK000480GWJPN	HPG5 (B)	HPG5	更新
660	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	MK000960GWJPP	HPG5 (B)	HPG5	更新
661	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	MK001920GWJPPQ	HPG5 (B)	HPG5	更新
662	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	VK000240GWJPD	HPG5 (B)	HPG5	更新
663	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	VK000480GWJPE	HPG5 (B)	HPG5	更新

664	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	VK000960GWJPF	HPG5 (B)	HPG5	更新
665	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	VK001920GWJPH	HPG5 (B)	HPG5	更新
666	Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWJPD, VK000480GWJPE, VK000960GWJPF, VK001920GWJPH, VK003840GWJPK, MK000240GWKVK, MK000480GWJPN, MK000960GWJPP and MK001920GWJPPQ Drives	firmware-hdd-aef2a690c9-HPG5-2.1.x86_64.rpm	VK003840GWJPK	HPG5 (B)	HPG5	更新
667	Supplemental Update / Online ROM Flash Component for Linux (x64) - VR000150GWEPP and VR000480GWEPR Drives	firmware-hdd-b7eb905efe-HPG1-3.1.x86_64.rpm	VR000150GWEPP	HPG1 (C)	HPG1	更新
668	Supplemental Update / Online ROM Flash Component for Linux (x64) - VR000150GWEPP and VR000480GWEPR Drives	firmware-hdd-b7eb905efe-HPG1-3.1.x86_64.rpm	VR000480GWEPR	HPG1 (C)	HPG1	更新

### 6.2.17 Firmware - Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
669	Online ROM Flash Component for VMware ESXi – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	CP040617.zip	HPE 12Gb SAS Expander Card	4.22	4.22	更新
670	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	CP039067.zip	HPE Smart Array P816i-a SR Gen10 Controller	1.99	1.99	更新

671	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	CP039067.zip	HPE Smart Array P408i-a SR Gen10 Controller	1.99	1.99	更新
672	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	CP039067.zip	HPE Smart Array P408i-p SR Gen10 Controller	1.99	1.99	更新
673	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	CP039067.zip	HPE Smart Array E208e-p SR Gen10 Controller	1.99	1.99	更新
674	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	CP039067.zip	HPE Smart Array E208i-p SR Gen10 Controller	1.99	1.99	更新
675	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	CP039067.zip	HPE Smart Array E208i-a SR Gen10 Controller	1.99	1.99	更新
676	Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	cp040619.exe	HPE 12Gb SAS Expander Card	4.22	4.22	更新
677	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array P816i-a SR Gen10 Controller	1.99	1.99	更新
678	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array P408i-a SR Gen10 Controller	1.99	1.99	更新

679	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array P408i-p SR Gen10 Controller	1.99	1.99	更新
680	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array E208e-p SR Gen10 Controller	1.99	1.99	更新
681	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array E208i-p SR Gen10 Controller	1.99	1.99	更新
682	Online ROM Flash Component for Windows (x64) - 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	cp039215.exe	HPE Smart Array E208i-a SR Gen10 Controller	1.99	1.99	更新
683	Supplemental Update / Online ROM Flash Component for Linux (x64) – HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers	firmware-smartarray-2de15b6882-4.22-1.1.x86_64.rpm	HPE 12Gb SAS Expander Card	4.22	4.22	更新
684	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array P816i-a SR Gen10 Controller	1.99	1.99	更新
685	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array P408i-a SR Gen10 Controller	1.99	1.99	更新
686	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array P408i-p SR Gen10 Controller	1.99	1.99	更新

687	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array E208e-p SR Gen10 Controller	1.99	1.99	更新
688	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array E208i-p SR Gen10 Controller	1.99	1.99	更新
689	Supplemental Update / Online ROM Flash Component for Linux (x64) - 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	firmware-smartarray-f7c07bdbbd-1.99-1.1.x86_64.rpm	HPE Smart Array E208i-a SR Gen10 Controller	1.99	1.99	更新

## 6.2.18 Firmware - Storage Fibre Channel

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
690	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.02-1.1.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	12.0.346.9	更新
691	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.02-1.1.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	12.0.346.9	更新
692	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.02-1.1.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	12.0.346.9	更新
693	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)	firmware-fc-emulex-2019.03.02-1.1.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	12.0.346.9	更新
694	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
695	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	

696	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
697	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP035750.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
698	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
699	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
700	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
701	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP035751.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
702	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
703	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
704	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
705	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP035752.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
706	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
707	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
708	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	

709	HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Windows 2012/2012 R2/2016/2019 x64	cp035754.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.346.9	
710	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.03-1.2.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
711	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.03-1.2.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
712	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.03-1.2.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
713	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86_64)	firmware-fc-qlogic-2019.03.03-1.2.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
714	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP040757.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
715	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP040757.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
716	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP040757.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
717	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0	CP040757.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
718	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP040756.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
719	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP040756.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
720	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP040756.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
721	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5	CP040756.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新



722	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP040755.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
723	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP040755.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
724	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP040755.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
725	HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.7	CP040755.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.03	01.72.02	更新
726	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp040753.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
727	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp040753.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
728	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp040753.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新
729	HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86_64)	cp040753.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.02	01.72.02	更新

## 6.2.19 Firmware – System

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
730	Firmware Package - Gen10 NVMe Backplane PIC Firmware	ISS_NVMe_BP_PIC_flashV1B20.fwpkg	NVMe Backplane PIC	1.20	1.20	
731	Online Flash Component for Linux - Gen10 NVMe Backplane PIC Firmware	firmware-nvmebackplane-gen10-1.20-5.1.x86_64.rpm	NVMe Backplane PIC	1.20 (E)	1.20	
732	Online Flash Component for Windows x64 - Gen10 NVMe Backplane PIC Firmware	cp037722.exe	NVMe Backplane PIC	1.20 (D)	1.20	
733	Online Flash for Linux - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	firmware-ie-0.2.1.2-1.1.x86_64.rpm	Innovation Engine (IE) Firmware	0.2.1.2	0.2.1.2	更新

734	Online Flash for Linux - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	firmware-sps-04.01.04.296-1.1.x86_64.rpm	Server Platform Services (SPS) Firmware	04.01.04.296	04.01.04.296	更新
735	Online Flash for Windows x64 - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	cp039730.exe	Server Platform Services (SPS) Firmware	04.01.04.296	04.01.04.296	更新
736	Online ROM Flash Component for Windows x64 - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	cp039785.exe	Server Platform Services (SPS) Firmware for Intel C242 and C...	05.01.03.078	05.01.03.078	更新
737	Online ROM Flash for Linux - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	firmware-u43u44sps-05.01.03.078-1.1.x86_64.rpm	Server Platform Services (SPS) Firmware for Intel C242 and C...	05.01.03.078	05.01.03.078	更新
738	ROM Flash Firmware Package - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	OEM.IEGen10_0.2.1.2.fwpkg	Innovation Engine (IE) Universal Image	0.2.1.2	0.2.1.2	更新
739	ROM Flash Firmware Package - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors	OEM.SPSGen10_04.01.04.296.fwpkg	Server Platform Services (SPS) Firmware	04.01.04.296	4.1.4.296	更新
740	ROM Flash Firmware Package - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems	OEM.U43U44SPS_05.01.03.078.fwpkg	Server Platform Services (SPS) Firmware	05.01.03.078	05.01.03.078.0	更新

## 6.2.20 Software - Lights-Out Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
741	HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)	hponcfg-5.5.0-0.x86_64.rpm	-	5.5.0-0	5.5.0-0	更新
742	HP Lights-Out Online Configuration Utility for Windows x64 Editions	cp037416.exe	-	5.3.0.0	5.3.0.0	

## 6.2.21 Software - Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
743	HPE Management Bundle Smart Component for ESXi 6.0	cp039173.zip	-	2019.09.01	2019.09.01	更新
744	HPE Management Bundle Smart Component for ESXi 6.5	cp039175.zip	-	2019.09.01	2019.09.01	更新

745	HPE Management Bundle Smart Component for ESXi 6.7	cp039176.zip	-	2019.09.01	2019.09.01	更新
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### 6.2.22 Software - Network

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
746	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 2-port 361T Adapter	2018.09.00	0.6-4.3	
747	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 4-port 366FLR Adapter	2018.09.00	0.6-4.3	
748	HPE Intel esx-provider for VMware	cp035296.zip	HP Ethernet 1Gb 4-port 366T Adapter	2018.09.00	0.6-4.3	
749	HPE Intel esx-provider for VMware	cp035296.zip	HPE Ethernet 10Gb 2-port 562FLR-SFP+ Adapter	2018.09.00	0.6-4.3	
750	HPE Intel esx-provider for VMware	cp035296.zip	HPE Ethernet 10Gb 2-port 562SFP+ Adapter	2018.09.00	0.6-4.3	

### 6.2.23 Software - Storage Controller

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
751	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array P408i-a SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新
752	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array P408i-p SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新
753	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array P816i-a SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新
754	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array E208e-p SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新
755	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array E208i-p SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新
756	HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions	cp039146.exe	HPE Smart Array E208i-a SR Gen10 Controller	1.2.1.64 (A)	1.2.1.64 (A)	更新

### 6.2.24 Software - Storage Fibre Channel

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
757	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	
758	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	

759	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	
760	Emulex Fibre Channel driver component for VMware vSphere 6.0	cp035757.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	11.4.329.0-10 EM.600.0.0.2 768847	
761	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2019.03.01	
762	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2019.03.01	
763	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2019.03.01	
764	Emulex Fibre Channel driver component for VMware vSphere 6.5	cp035758.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2019.03.01	
765	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	
766	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	
767	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	
768	Emulex Fibre Channel driver component for VMware vSphere 6.7	cp035759.zip	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	12.0.257.5-10 EM.670.0.0.8 169922	
769	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
770	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
771	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	

772	QLogic Fibre Channel driver component for VMware vSphere 6.0	cp035767.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
773	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
774	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
775	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
776	QLogic Fibre Channel driver component for VMware vSphere 6.5	cp035768.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	2.1.81.0-10E M.600.0.0.27 68847	
777	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	
778	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	
779	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	
780	QLogic Fibre Channel driver component for VMware vSphere 6.7	cp035769.zip	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	2019.03.01	3.1.16.0-10E M.670.0.0.81 69922	

### 6.2.25 Software - Storage Fibre Channel HBA

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
781	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
782	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
783	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新

784	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
785	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
786	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
787	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
788	Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)	fibreutils-3.3-6_rhel.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	3.3-6 (b)	3.3-6_rhel	更新
789	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	
790	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	
791	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	
792	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 6 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel6.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel6	
793	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	
794	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	
795	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	
796	HPE Emulex Fibre Channel Enablement Kit for Red Hat Enterprise Linux 7 Server	HP-CNA-FC-Emulex-Enablement-Kit-12.0.346.16-1.rhel7.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	12.0.346.16	12.0.346.16-1.rhel7	

797	HPE Emulex Smart SAN Enablement Kit for Linux	hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.0-4 (c)	1.0.0.0-4	
798	HPE Emulex Smart SAN Enablement Kit for Linux	hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.0-4 (c)	1.0.0.0-4	
799	HPE Emulex Smart SAN Enablement Kit for Linux	hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.0-4 (c)	1.0.0.0-4	
800	HPE Emulex Smart SAN Enablement Kit for Linux	hpe-emulex-smartsan-enablement-kit-1.0.0.0-4.x86_64.rpm	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.0-4 (c)	1.0.0.0-4	
801	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	
802	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	
803	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	
804	HPE Emulex Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037970.exe	HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (h)	1.0.0.1 (h)	
805	HPE QLogic Fibre Channel Enablement Kit for Linux	HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	6.0.0.0-4 (e)	6.0.0.0-4	
806	HPE QLogic Fibre Channel Enablement Kit for Linux	HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	6.0.0.0-4 (e)	6.0.0.0-4	
807	HPE QLogic Fibre Channel Enablement Kit for Linux	HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	6.0.0.0-4 (e)	6.0.0.0-4	
808	HPE QLogic Fibre Channel Enablement Kit for Linux	HP-CNA-FC-hpqlgc-Enablement-Kit-6.0.0.0-4.noarch.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	6.0.0.0-4 (e)	6.0.0.0-4	
809	HPE QLogic Smart SAN enablement kit for Linux	hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	3.3-3 (d)	3.3-3	

810	HPE QLogic Smart SAN enablement kit for Linux	hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	3.3-3 (d)	3.3-3	
811	HPE QLogic Smart SAN enablement kit for Linux	hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	3.3-3 (d)	3.3-3	
812	HPE QLogic Smart SAN enablement kit for Linux	hpe-qlogic-smartsan-enablement-kit-3.3-3.x86_64.rpm	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	3.3-3 (d)	3.3-3	
813	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	
814	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	
815	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	
816	HPE QLogic Smart SAN Enablement Kit for Windows 64 bit operating systems	cp037804.exe	HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter	1.0.0.1 (g)	1.0.0.1 (g)	

## 6.2.26 Software – System Management

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
817	Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server	amsd-1.4.2-1166.3.rhel6.x86_64.rpm	-	1.4.2	1.4.2-1166.3.rhel6	更新
818	Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server	amsd-1.4.2-1166.3.rhel7.x86_64.rpm	-	1.4.2	1.4.2-1166.3.rhel7	更新
819	Agentless Management Service for Windows X64	cp039663.exe	-	1.44.0.0	1.44.0.0	更新
820	NVMe Drive Eject NMI Fix for Intel Xeon Processor Scalable Family for Windows	cp034635.exe	-	1.1.0.0 (C)	1.1.0.0 (C)	
821	Smart Storage Administrator (SSA) CLI for Linux 64-bit	ssacli-3.47-6.0.x86_64.rpm	-	3.47.6.0	3.47-6.0	更新
822	Smart Storage Administrator (SSA) CLI for Windows 64-bit	cp038948.exe	-	3.47.6.0	3.47.6.0	更新
823	Smart Storage Administrator (SSA) for Linux 64-bit	ssa-3.47-6.0.x86_64.rpm	-	3.47.6.0	3.47-6.0	更新
824	Smart Storage Administrator (SSA) for Windows 64-bit	cp038947.exe	-	3.47.6.0	3.47.6.0	更新
825	Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Linux 64-bit	ssaducli-3.40-3.0.x86_64.rpm	-	3.40.3.0	3.40-3.0	
826	Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Linux 64-bit	ssaducli-3.47-6.0.x86_64.rpm	-	3.47.6.0	3.47-6.0	更新



827	Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit	cp038949.exe	-	3.47.6.0	3.47.6.0	更新
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### 6.2.27 Utility - Tools

No.	Description	Package filename	Device	Package Version	Firmware/Driver version	Update
828	HPE Utilities Bundle Smart Component for ESXi 6.0	cp039409.zip	-	2019.09.01	2019.09.01	更新
829	HPE Utilities Bundle Smart Component for ESXi 6.5	cp039410.zip	-	2019.09.01	2019.09.01	更新
830	HPE Utilities Bundle Smart Component for ESXi 6.7	cp039411.zip	-	2019.09.01	2019.09.01	更新

## 6.3 パッケージの変更内容

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### Online ROM Flash Component for Linux - OEM System ROM U34

Version: 2.10\_05-21-2019

#### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

#### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## Online ROM Flash Component for Linux - System ROM U30

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## Online ROM Flash Component for Linux - System ROM U32

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## **Online ROM Flash Component for Linux - System ROM U41**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".

- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **Online ROM Flash Component for Linux - System ROM U43**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2018-3613, CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique

to Hitachi servers.

- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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## **Online ROM Flash Component for Linux - System ROM U44**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in

this System ROM release: CVE-2018-3613 CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique to Hitachi servers.

- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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## Online ROM Flash Component for Windows x64 - OEM System ROM U34

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## Online ROM Flash Component for Windows x64 - System ROM U30

Version: 2.10\_05-21-2019



### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## **Online ROM Flash Component for Windows x64 - System ROM U32**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".

- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **Online ROM Flash Component for Windows x64 - System ROM U41**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.

- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **Online ROM Flash Component for Windows x64 - System ROM U43**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2018-3613, CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor

with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.

- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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## **Online ROM Flash Component for Windows x64 - System ROM U44**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2018-3613, CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180,

CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique to Hitachi servers.

- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.
- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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## **ROM Flash Firmware Package - System ROM U30**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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## **ROM Flash Firmware Package - System ROM U32**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".

- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **ROM Flash Firmware Package - System ROM U34**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.

- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have been required to detect the presence of the newly added drive.
- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **ROM Flash Firmware Package - System ROM U41**

Version: 2.10\_05-21-2019

### **Problems Fixed:**

- Addressed an issue where the Server Backup and Restore functionality may not work properly if initiated through the HPE RESTful API returning a message "An internal error occurred during RIS operation".
- Addressed an issue where configuring memory to run at 2x refresh rate would still actually operate memory at 1x refresh rate. This issue was introduced with the v2.00 System ROM and did not impact earlier versions of the System ROM. This issue is not unique to Hitachi servers.
- Addressed an issue where the NVMe PCIe Resource Padding option in BIOS/Platform Configuration (RBSU) would not properly allocated sufficient resources to support a NVMe hot add event. In certain configurations, an insufficient amount of resources would have been reserved and a reboot would have



been required to detect the presence of the newly added drive.

- Addressed an issue where the system would not boot to a USB drive when a non-bootable (non-formatted) drive was also present in the system. This issue only impacts systems configured in Legacy Boot Mode.

### **Enhancements**

- Added support for Persistent Memory featuring Intel Optane DC Persistent Memory.
- Added a new BIOS/Platform Configuration (RBSU) option called Intel Priority Based Frequency to support enabling Intel Speed Select - Base Frequency support on select 2nd Generation Xeon Scalable Family Processors that are optimized for NFV workloads. This option, which is disabled by default, is located in the Processor Options menu and visible only when NFV optimized SKUs are installed (denoted by the N in the SKU model). On supported Operating Systems, Intel Speed Select - Based Frequency functionality allows high priority cores to operate at a higher frequency than the nominal base frequency while lower priority cores will run at a slower frequency.
- Added a new BIOS/Platform Configuration (RBSU) I/O Direct Cache (IODC) menu to the Power and Performance Menu. This option allows for tuning the policy for which I/O transactions interact with the processor cache. The caching policy may have a slight impact on cross socket latency. Workloads where this option would need to be modified from its default value for optimum performance are extremely rare.
- Added support for HPE Fast Fault Tolerant Memory (ADDDC) to operate when a single memory rank is only available on a given memory channel. Previous versions of the System ROM required two or more memory ranks to be available on each memory channel. After updating to this version of the System ROM the server will automatically configure the system for HPE Fast Fault Tolerant Memory Mode if the memory configuration supports this option.
- Updated the UEFI OpenSSL support to version 1.0.2r to address security vulnerability CVE-2019-1559.

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### **ROM Flash Firmware Package - System ROM U43**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2018-3613, CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in BIOS/Platform Configuration (RBSU) when they should not. Customers using a Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.

- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
- Addressed an issue where the AHS Download application from the System Utilities Embedded Applications or UEFI Shell may fail to work properly with iLO firmware 1.30 or later.
- Addressed an issue where the UEFI Shell sysconfig command may fail to set an option or become unresponsive.
- Addressed an issue where an optional SATA DVD drive may not unlock and allow media to be ejected after an operating system reboot.
- Addressed an issue where the system may become unresponsive during boot and experience a Red Screen (RSOD) when booting in Legacy Boot mode with a SATA M.2 drive installed. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where a USB KVM may not function properly after a system reboot.

### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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### **ROM Flash Firmware Package - System ROM U44**

Version: 1.20\_02\_02\_2019

### **Problems Fixed:**

- This revision of the System ROM includes the latest revision of the UEFI EDK2 support that provides mitigations for a variety of security vulnerabilities. The following vulnerabilities have been addressed in this System ROM release: CVE-2018-3613, CVE-2017-5731, CVE-2017-5732, CVE-2017-5733, CVE-2017-5734, CVE-2017-5735, CVE-2018-3630, CVE-2018-12178, CVE-2018-12179, CVE-2018-12180, CVE-2018-12181, CVE-2018-12182 and CVE-2018-12183. These security vulnerabilities are not unique to Hitachi servers.
- Addressed an issue where certain Pentium processors were incorrectly showing support for SGX in

BIOS/Platform Configuration (RBSU) when they should not. Customers using an Pentium processor with SGX enabled need to back up any SGX protected data before updating to the 1.20\_01\_28\_2019 or later BIOS versions. Failure to do so will result in any SGX protected data becoming inaccessible. This issue is not unique to Hitachi servers.

- Addressed an issue where certain PCIe option cards may not train properly and cause the system to hang during POST. This issue is not unique to Hitachi servers.
- Addressed an issue in which the system may not properly boot to the 8GB Dual microSD Flash USB Drive when an SD card is installed on the internal SD slot when the system is configured for Legacy Boot Mode. This issue does not impact systems in UEFI Boot Mode.
- Addressed an issue where certain 3rd party USB drive keys may not function properly after a system reset when the system is configured in UEFI Boot Mode.
- Addressed an issue where firmware updates staged through the HPE RESTful API may fail to properly execute on a subsequent boot and be marked with an exception in the iLO firmware installation queue.
- Addressed an issue where iLO virtual media may not boot properly after setting the Boot on Next Reset option in the iLO Remote Console and Media - Virtual Media settings.
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### **Enhancements/New Features**

- Added a new BIOS/Platform Configuration (RBSU) Backup and Restore Settings menu to System Default Options. This option can be used to backup (save off) the current BIOS configurations settings to a USB storage device for migration to another server.
- 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.

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### **Integrated Smart Update Tools 2.4.5 for ESXi 6.0**

Version: 2019.09.09 (Recommended)

### **Important Note!**

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

### **Prerequisites**

For prerequisite information, please see the iSUT Release Notes.

### **Fixes**

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

### **Enhancements**

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

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## **Integrated Smart Update Tools 2.4.5 for ESXi 6.5**

Version: 2019.09.09 (Recommended)

### **Important Note!**

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

### **Prerequisites**

For prerequisite information, please see the iSUT Release Notes.

### **Fixes**

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

### **Enhancements**

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

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## **Integrated Smart Update Tools 2.4.5 for ESXi 6.7**

Version: 2019.09.09 (Recommended)

### **Important Note!**

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

### **Prerequisites**

For prerequisite information, please see the iSUT Release Notes.

### **Fixes**

QXCR1001693797 SLES 15 mount issue

Version related changes

QXCR1001690819 OV 5.0 UEFI installable components in pending state on Gen10 blades.

Localization change and allow that to update

2.4.0.1 Linux offline related changes

CPQSTUB - refresh for Sep SPP

Testing support for RHEL8

Samsung issue pull back from 2.5.0

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## **Integrated Smart Update Tools for Linux x64**

Version: 2.4.5.0 (Recommended)

### **Important Note!**

Please note the following:

iSUT requires a Service Pack for ProLiant-based ISO containing Smart Update Manager (SUM) 8.0.0 or later.

If an earlier version of SUM is used, iSUT will notify the user that SUM 8.0.0 and later is required.

iSUT will service HP ProLiant Gen8 and later versions and requires iLO 4 firmware version 2.51 or later. For Gen10 and above we need iLO 5 firmware version 1.11 or later

Integrated Smart Update Tools requires iLO Advanced Pack license.

### **Prerequisites**

For prerequisite information, please see the iSUT Release Notes.

### **Fixes**

NA

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## **Integrated Smart Update Tools for Windows x64**

Version: 2.4.5.0 (Recommended)

### **Important Note!**

Please note the following:

iSUT requires a Service Pack for ProLiant-based ISO containing Smart Update Manager (SUM) 8.0.0 or later.

If an earlier version of SUM is used, iSUT will notify the user that SUM 8.0.0 and later is required.

iSUT will service HP ProLiant Gen8 and later versions and requires iLO 4 firmware version 2.51 or later. For Gen10 and above we need iLO 5 firmware version 1.11 or later

Integrated Smart Update Tools requires iLO Advanced Pack license.

### **Prerequisites**

For prerequisite information, please see the iSUT Release Notes.

### **Fixes**

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

### **Enhancements**

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

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## **Identifiers for Intel Xeon Processor Scalable Family for Windows Server 2012 R2 to Server 2019**

Version: 10.1.17861.8101 (B) (Optional)

### **Enhancements**

Updated to support deployment on HPE Superdome Flex through Smart Update Manager.

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## HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 6 (64-bit)

Version: 1.2.8-015 (Recommended)

### Enhancements

Version value was updated to be consistent with the smartpqi driver packages released for other OSes as version 1.2.8-015. Smartpqi driver functionality is the same as previous version 1.2.4-065. If target device was previously updated to version 1.2.4-065, it is not necessary to update to 1.2.8-015.

### Supported Devices and Features

SUPPORTED KERNELS:

The kernels of Red Hat Enterprise Linux 6 (64-bit) supported by this driver rpm are:

2.6.32-696.el6 - Red Hat Enterprise Linux 6 Update 9(64-bit) and future errata kernels for update 9.

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## HPE ProLiant Gen10 Smart Array Controller (64-bit) Driver for Red Hat Enterprise Linux 7 (64-bit)

Version: 1.2.8-026 (Recommended)

### Fixes

- Fixed an issue where device scanning would return success prior to all devices being established on large configurations.
- Fixed an issue where some device attributes exposed through /sysfs were not being updated.

### Enhancements

Add support for Red Hat Enterprise Linux 7.7

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## HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.0 (Driver Component).

Version: 2019.06.01 (Recommended)

### 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.

### Fixes

Fixes the following issues

- During hotplug reinsertion and while under heavy I/O system can return a checksum error.
- Customer could encounter a data coherency issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's. Please reference Customer Advisory a00071158en\_us for more details.
- Possible PSOD when a TMF request timed out
- Fixed an issue where I/O tags could get exhausted when Task Management Function (TMF) fails.
- Possible PSOD while Lun reset completes with service response failure
- Possible PSOD due to incorrect queue selection logic for AIO TaskManagement
- Controller could stop responding due to outstanding IO during pqi reset.

- Inquiring command could potentially fail during device discovery
- Refer to the Customer Advisory a00071158en\_us for details for use in the VMware vSAN environment as well as minimal Synergy Core SPP requirements for Synergy environments.

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## **HPE ProLiant Gen10 Smart Array Controller Driver for VMware vSphere 6.5 (Driver Component).**

Version: 2019.06.01 (Recommended)

### **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.

### **Fixes**

Fixes the following issues

- During hotplug reinsertion and while under heavy I/O system can return a checksum error.
- Customer could encounter a data coherency issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's. Please reference Customer Advisory a00071158en\_us for more details.
- Possible PSOD when a TMF request timed out
- Fixed an issue where I/O tags could get exhausted when Task Management Function (TMF) fails.
- Possible PSOD while Lun reset completes with service response failure
- Possible PSOD due to incorrect queue selection logic for AIO TaskManagement
- Controller could stop responding due to outstanding IO during pqi reset.
- Inquiring command could potentially fail during device discovery
- Refer to the Customer Advisory a00071158en\_us for details for use in the VMware vSAN environment as well as minimal Synergy Core SPP requirements for Synergy environments.

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

Version: 2019.06.01 (Recommended)

### **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.

### **Fixes**

Fixes the following issues

- During hotplug reinsertion and while under heavy I/O system can return a checksum error.
- Customer could encounter a data coherency issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's.
- Possible PSOD when a TMF request timed out
- Fixed an issue where I/O tags could get exhausted when Task Management Function (TMF) fails.

- Possible PSOD while Lun reset completes with service response failure
- Possible PSOD due to incorrect queue selection logic for AIO TaskManagement
- Controller could stop responding due to outstanding IO during pqi reset.
- Inquiring command could potentially fail during device discovery
- Refer to the Customer Advisory a00071158en\_us for details for use in the VMware vSAN environment as well as minimal Synergy Core SPP requirements for Synergy environments.

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## **HPE Smart Array Gen10 Controller Driver for Windows Server 2012 R2, Windows Server 2016, and Windows Server 2019**

Version: 106.100.0.1014 (Recommended)

### **Fixes**

Fix the following issues:

- System may become unresponsive during initialization of s DC OFF/ON test
- Corrected a wrong character displayed by Device Manager in a Japanese environment
- Issue where a PQI reset was sent incorrectly to the controller causing the PNP WHQL test case to fail
- Data could become inaccessible when a reboot is executed while the controller is in dump mode because the Power SRB completed before the cache flush

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## **iLO 5 Channel Interface Driver for Windows Server 2012 R2**

Version: 4.5.0.0 (Recommended)

### **Fixes**

Corrected a potential Windows bugcheck 0x50 (PAGE\_FAULT\_IN\_NONPAGED\_AREA) that could occur if Windows restarts the driver without unloading it.

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## **iLO 5 Channel Interface Driver for Windows Server 2016 and Server 2019**

Version: 4.5.0.0 (Recommended)

### **Fixes**

Corrected a potential Windows bugcheck 0x50 (PAGE\_FAULT\_IN\_NONPAGED\_AREA) that could occur if Windows restarts the driver without unloading it.

---

## **Matrox G200eH3 Video Controller Driver for Windows Server 2012 R2**

Version: 9.15.1.224 (Optional)

### **Fixes**

- Fix for random screen corruption when changing resolution that could occur with driver versions 9.15.1.184 and 9.15.1.218.
- Fix for a display freeze that could occur when running the Windows Display Diagnostics tool (dispdia.exe).



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## **Matrox G200eH3 Video Controller Driver for Windows Server 2016 and Server 2019**

Version: 9.15.1.224 (Optional)

### **Fixes**

- Fix for random screen corruption when changing resolution that could occur with driver versions 9.15.1.184 and 9.15.1.218.
- Fix for a display freeze that could occur when running the Windows Display Diagnostics tool (dispdiag.exe).

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## **Language Pack - Japanese**

Version: 1.43 (a) (Recommended)

### **Prerequisites**

Requires iLO 5 firmware version 1.10 or higher

### **Enhancements**

Added Microsoft Windows 2019 as supporting Operating System.

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## **Language Pack - Japanese**

Version: 1.43 (B) (Recommended)

### **Fixes**

Various translation fixes

### **Enhancements**

Japanese Language Pack to support iLO5 firmware v1.43.

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## **Online ROM Flash Component for Linux - iLO 5**

Version: 1.45 (Recommended)

### **Enhancements**

List your enhancements here.

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## **Online ROM Flash Component for Windows x64 - iLO 5**

Version: 1.45 (Recommended)

### **Enhancements**

List your enhancements here.

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## **Online ROM Flash Firmware Package - iLO 5**

Version: 1.45 (Recommended)

### **Enhancements**

List your enhancements here.

---

## Online Firmware Upgrade Utility (ESXi 6.0) for HPE Mellanox Ethernet only adapters

Version: 1.0.10 (Recommended)

### **Important Note!**

Known Issues for FW version 2.42.5044 :

- When using the QSFP module RTX320-581, 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 LED 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). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value 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 SymbolErrorCounter 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 14.24.9000 :
- The maximum “read” size of MTRC\_STDB is limited to 272 Bytes.
  - FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
  - Encapsulation / Decapsulation support in steering has the following limitations:
    - \* Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
    - \* Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
    - \* Encapsulation / Decapsulation per device support:

		NIC	FDB
ConnectX-4	encap	NO	YES non MH
	decap	NO	NO
ConnectX-4 Lx	encap	NO	YES non MH
	decap	NO	YES
ConnectX-5	encap	YES	YES
	decap	YES	YES

### **Prerequisites**

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.

12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).

Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

### **Fixes**

Fixes submitted in version 2.42.5044 :

- Fixed 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 14.24.9006:

- The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.24.9000 :

- Fixed an Active Health System(AHS) packet over PCIe interface issue

## **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 device is updated to 12.24.9000 :

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

Firmware for the following devices are updated to 14.24.9006 :

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.24.9000 :

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

Firmware for the following device is updated to 16.24.9000 :

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

New features and changes in version 14.24.9000 :

- Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- Added support for Management Component Transport Protocol (MCTP) over PCI.
- Added support for Event Description Addendum 2.6.4.

## **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

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## **Online Firmware Upgrade Utility (ESXi 6.5) for HPE Mellanox Ethernet only adapters**

Version: 1.0.5 (Recommended)

### **Important Note!**

Known Issues for FW version 2.42.5044 :

- When using the QSFP module RTX320-581, 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). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value 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 SymbolErrorCounter 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 14.24.9000 :

- The maximum “read” size of `MTRC_STDB` is limited to 272 Bytes.
- FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
- Encapsulation / Decapsulation support in steering has the following limitations:
  - \* Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
  - \* Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
  - \* Encapsulation / Decapsulation per device support:

		NIC	FDB
ConnectX-4	encap	NO	YES non MH
	decap	NO	NO
ConnectX-4 Lx	encap	NO	YES non MH
	decap	NO	YES
ConnectX-5	encap	YES	YES
	decap	YES	YES

## **Prerequisites**

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.

12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).

Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

## **Fixes**

Fixes submitted in version 2.42.5044 :

- Fixed 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 14.24.9006:

- The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.24.9000 :

- Fixed an Active Health System(AHS) packet over PCIe interface issue

## **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 device is updated to 12.24.9000 :

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

Firmware for the following devices are updated to 14.24.9006 :

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.24.9000 :

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

Firmware for the following device is updated to 16.24.9000 :

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

New features and changes in version 14.24.9000 :

- Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- Added support for Management Component Transport Protocol (MCTP) over PCI.
- Added support for Event Description Addendum 2.6.4.

## **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

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

Version: 1.0.1 (Recommended)

### **Important Note!**

Known Issues for FW version 2.42.5044 :

- When using the QSFP module RTX320-581, 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`). `Mlxburn/flint` return `0xffff` as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value 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 `SymbolErrorCounter` 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 14.24.9000 :
- The maximum “read” size of MTRC\_STDB is limited to 272 Bytes.
  - FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
  - Encapsulation / Decapsulation support in steering has the following limitations:
    - \* Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
    - \* Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
    - \* Encapsulation / Decapsulation per device support:

		NIC	FDB
ConnectX-4	encap	NO	YES non MH
	decap	NO	NO
ConnectX-4 Lx	encap	NO	YES non MH
	decap	NO	YES
ConnectX-5	encap	YES	YES
	decap	YES	YES

### **Prerequisites**

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.  
 12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).  
 Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

### **Fixes**

Fixes submitted in version 2.42.5044 :

- Fixed 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 14.24.9006:

- The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.24.9000 :

- Fixed an Active Health System(AHS) packet over PCIe interface issue

### **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 device is updated to 12.24.9000 :

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

Firmware for the following devices are updated to 14.24.9006 :

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.24.9000 :

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

Firmware for the following device is updated to 16.24.9000 :

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

New features and changes in version 14.24.9000 :

- Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- Added support for Management Component Transport Protocol (MCTP) over PCI.
- o Added support for Event Description Addendum 2.6.4.

### **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

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### **Online Firmware Upgrade Utility (Linux x86\_64) for HPE Mellanox Ethernet only adapters**

Version: 1.0.10 (Recommended)

#### **Important Note!**

Known Issues for FW version 2.42.5044 :

- When using the QSFP module RTX320-581, 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). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value 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 SymbolErrorCounter 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 14.24.9000 :
- The maximum "read" size of MTRC\_STDB is limited to 272 Bytes.
  - FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.

- Encapsulation / Decapsulation support in steering has the following limitations:
- \* Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
- \* Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
- \* Encapsulation / Decapsulation per device support:

		NIC	FDB
ConnectX-4	encap	NO	YES non MH
	decap	NO	NO
ConnectX-4 Lx	encap	NO	YES non MH
	decap	NO	YES
ConnectX-5	encap	YES	YES
	decap	YES	YES

## **Fixes**

Fixes submitted in version 2.42.5044 :

- o Fixed 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 14.24.9006:

- o The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.24.9000 :

- o Fixed an Active Health System(AHS) packet over PCIe interface issue

## **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 device is updated to 12.24.9000 :

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

Firmware for the following devices are updated to 14.24.9006 :

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.24.9000 :

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

Firmware for the following device is updated to 16.24.9000 :

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

New features and changes in version 14.24.9000 :

- Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- Added support for Management Component Transport Protocol (MCTP) over PCI.
- Added support for Event Description Addendum 2.6.4.

## **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

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## **Online Firmware Upgrade Utility (Windows x64) for HPE Mellanox Ethernet only adapters**

Version: 1.0.0.10 (Recommended)

### **Important Note!**

Known Issues for FW version 2.42.5044 :

- When using the QSFP module RTX320-581, 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). Mlxburn/flint return 0xffff as GUID while the utilities return a value derived from the MAC address. For all driver/firmware/software purposes, the latter value 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 SymbolErrorCounter 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 14.24.9000 :
- The maximum “read” size of MTRC\_STDB is limited to 272 Bytes.
  - FTE with both forward (FWD) and encapsulation (ENCAP) actions is not supported in the SX NIC Flow Table.
  - Encapsulation / Decapsulation support in steering has the following limitations:
    - \* Encapsulation / Decapsulation can be open on the FDB only if all VFs are non active
    - \* Encapsulation / Decapsulation supports single mode only: FDB / NIC. Opening tables of both types is not supported
    - \* Encapsulation / Decapsulation per device support:

		NIC	FDB
ConnectX-4	encap	NO	YES non MH
	decap	NO	NO
ConnectX-4 Lx	encap	NO	YES non MH
	decap	NO	YES
ConnectX-5	encap	YES	YES
	decap	YES	YES

## **Prerequisites**

HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21) must first be upgraded to prerequisite firmware version 12.21.2808 before updating to 12.22.0148 or 12.22.0194.

12.22.0194 is the first secure firmware for HPE Synergy 6410C 25/50Gb Ethernet Adapter (868779-B21).

Once this device is upgraded to firmware 12.22.0194, downgrade is not allowed.

## **Fixes**

Fixes submitted in version 2.42.5044 :

- Fixed 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 14.24.9006:

- The HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter was not linking in AUX power mode.

Fixes submitted in version 16.24.9000 :

- Fixed an Active Health System(AHS) packet over PCIe interface issue

## **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 device is updated to 12.24.9000 :

868779-B21 (HPE Synergy 6410C 25/50Gb Ethernet Adapter)

Firmware for the following devices are updated to 14.24.9006 :

817749-B21 (HPE Ethernet 25Gb 2-port 640FLR-SFP28 Adapter)

Firmware for the following devices are updated to 14.24.9000 :

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

Firmware for the following device is updated to 16.24.9000 :

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

New features and changes in version 14.24.9000 :

- Implemented DCi specification v.0.80. The specification defines the NIC behavior in case of restore factory default while the NIC does not support AUX power.
- Added support for Abstract Syntax Notation One(ASN1) defaults v3.0 and NIC Discovery Configuration v.0.81
- Added support for Management Component Transport Protocol (MCTP) over PCI.
- Added support for Event Description Addendum 2.6.4.

## **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

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**Supplemental Update / Online ROM Flash Component for Linux (x64) - MT001600KWHAC, MT003200KWHAD and MT006400KWHAE Drives**

Version: HPS1 (B) (Recommended)

**Enhancements**

- o Added support for RHEL8.

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**Online Flash for Windows x64 - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 0.2.1.2 (Optional)

**Prerequisites**

System ROM V1.26 or later

The "iLO 5 Channel Interface Driver" (CHIF) for Windows

**Enhancements**

Version 0.2.1.2 firmware

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**Online ROM Flash Component for VMware ESXi - EG001800JWJNR and EG002400JWJNT Drives**

Version: HPD4 (Recommended)

**Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

**Fixes**

- New servo which prevents the drive from posting non-media errors.
- A fix to prevent the drive from becoming unresponsive during certain mixed read/write random workloads.

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**Online ROM Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives**

Version: HPD5 (Recommended)

**Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.



- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

### **Fixes**

This firmware includes:

- New servo which disables a feature that could cause unrecoverable data errors.
- A fix for an issue where the drive could become unresponsive after a hard reset.

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## **Online ROM Flash Component for Windows (x64) - EG001800JWJNR and EG002400JWJNT Drives**

Version: HPD4 (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

### **Fixes**

- New servo which prevents the drive from posting non-media errors.
- A fix to prevent the drive from becoming unresponsive during certain mixed read/write random workloads.

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## **Online ROM Flash Component for Windows (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives**

Version: HPD5 (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

### **Fixes**

This firmware includes:

- New servo which disables a feature that could cause unrecoverable data errors.
- A fix for an issue where the drive could become unresponsive after a hard reset.

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**Supplemental Update / Online ROM Flash Component for Linux (x64) - EG000600JWEBH and EG000300JWEBF Drives**

Version: HPD4 (B) (Recommended)

**Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc.

**Enhancements**

- o Added support for RHEL 8

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**Supplemental Update / Online ROM Flash Component for Linux (x64) - EG001800JWJNR and EG002400JWJNT Drives**

Version: HPD4 (B) (Recommended)

**Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

**Enhancements**

- Added support for RHEL8.

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**Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JEFRB and MM2000JEFRC Drives**

Version: HPD8 (C) (Optional)

**Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C)

(D) etc..

### **Enhancements**

- Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - EG0300JFCKA, EG0600JEMCV, EG0900JFCKB, and EG1200JEMDA Drives**

Version: HPD6 (E) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Enhancements**

- o Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - EH000300JWCPK, EH000600JWCPL, and EH000900JWCPN Drives**

Version: HPD5 (B) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Enhancements**

Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000JWDFD Drives**

Version: HPD2 (C) (Critical)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

#### **Fixes**

- Corrects a potential data integrity issue during unaligned write commands, only found in supplier ongoing lab testing. Includes additional fixes to improve error handling and reliability.

#### **Enhancements**

- Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000JVYZL, MB2000JVYZN, MB3000JVYZP and MB4000JVYZQ Drives**

Version: HPD3 (B) (Recommended)

#### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

#### **Enhancements**

- o Added support for RHEL8.

---

### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000JFECQ Drives**

Version: HPD7 (C) (Recommended)

#### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

#### **Enhancements**

- Added support for RHEL8.

---

## Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000JFJTH Drives

Version: HPD3 (C) (Optional)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Enhancements**

- Added support for RHEL8.

---

## Online HDD/SDD Flash Component for ESXi - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG6 (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

### **Fixes**

- This firmware includes a fix that changes the response to "SMART READ LOG" command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

---

## Online ROM Flash Component for Linux (x64) - MB001000GWCBC and MB002000GWCBD Drives

Version: HPG6 (B) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

## **Fixes**

- This firmware includes a fix that changes the response to “SMART READ LOG” command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

## **Enhancements**

- Added support for RHEL8.

---

## **Online ROM Flash Component for Windows (x64) - MB001000GWCBC and MB002000GWCBD Drives**

Version: HPG6 (Recommended)

## **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

## **Fixes**

- This firmware includes a fix that changes the response to “SMART READ LOG” command from 04/80/80 to 05/26/00, which prevents the drive from incorrectly reporting an error.

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## **Online ROM Flash Component for Windows (x64) - MB001000GFWFK and MB002000GFWFL Drives**

Version: HPG5 (Critical)

## **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

## **Fixes**

- This firmware corrects a rare but potential data integrity issue, found in specific workloads with improperly ordered write commands or during overlapped read command processing.

---

## **Supplemental Update / Online ROM Flash Component for ESXi - MB001000GFWFK and MB002000GFWFL Drives**

Version: HPG5 (Critical)

## **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode or Host Bus Adapter (HBA) is NOT supported. Only offline firmware flashing of drives is supported

for these configurations.

- In AHCI configuration only offline flashing is supported.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.

#### **Fixes**

- This firmware corrects a rare but potential data integrity issue, found in specific workloads with improperly ordered write commands or during overlapped read command processing.

---

### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB001000GFWFK and MB002000GFWFL Drives**

Version: HPG5 (B) (Critical)

#### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

#### **Fixes**

- This firmware corrects a rare but potential data integrity issue, found in specific workloads with improperly ordered write commands or during overlapped read command processing.

#### **Enhancements**

- Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB002000GWFGH and MB001000GWFGF Drives**

Version: HPG3 (D) (Optional)

#### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

## **Enhancements**

- Added support for RHEL8.

---

## **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB012000GWDFE Drives**

Version: HPG2 (C) (Critical)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Fixes**

- Corrects a potential data integrity issue during unaligned write commands, only found in supplier ongoing lab testing. Includes additional fixes to improve error handling and reliability.

## **Enhancements**

- Added support for RHEL8.

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## **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB1000GVYZE, MB2000GVYZF, MB3000GVYZH, and MB4000GVYZK Drives**

Version: HPG4 (F) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

## **Enhancements**

- Added support for RHEL8.

---

## **Supplemental Update / Online ROM Flash Component for Linux (x64) - MB8000GFECR Drives**

Version: HPG6 (B) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM)



mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.

- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Enhancements**

- Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MM1000GEFQV and MM2000GEFRA Drives**

Version: HPG8 (D) (Recommended)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Enhancements**

- o Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - MR000240GWFLU, MR000480GWFLV, VR000480GWFMD, MR000960GWFMA, VR000960GWFME, MR001920GWFMB and VR001920GWFMC Drives**

Version: HPGB (C) (Critical)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Fixes**

- Fixed issue to a read-disturb mechanism within the NAND induced only during 4K reads with partially programmed blocks. The NAND read time is modified to prevent the impact of the reads. This change prevents premature or false failure of the drive.

- Fix to a non-exploitable vulnerability in the firmware download process. Corrected FW will increment the security version to ensure that all SSDs receiving the update will not be capable of downloading previous FW with the issue. Regression back to an earlier version of firmware will not be possible.

### **Enhancements**

- Added support for RHEL8.

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### **Supplemental Update / Online ROM Flash Component for Linux (x64) - VK000240GWEZB, VK000480GWEZC, VK000960GWEZD, VK001920GWEZE, MK000240GWEZF, MK000480GWEZH, MK000960GWEZK and MK001920GWHRU Drives**

Version: HPGB (C) (Critical)

### **Important Note!**

- Online firmware flashing of drives attached to a Smart Array controller running in Zero Memory (ZM) mode is NOT supported. Only offline firmware flashing of drives is supported for these configurations.
- Online drive firmware update available for Smart Array Controllers configured in systems running supported Linux, Microsoft Windows, and VMware environments. All other OSes would require an offline update using the Service Pack for ProLiant and Smart Update Manager.
- Customers who already installed latest firmware version do not need to update to sub version like (B) (C) (D) etc..

### **Fixes**

- Fixed issue to a read-disturb mechanism within the NAND induced only during 4K reads with partially programmed blocks. The NAND read time is modified to prevent the impact of the reads. This change prevents premature or false failure of the drive.
- Fix to a non-exploitable vulnerability in the firmware download process. Corrected FW will increment the security version to ensure that all SSDs receiving the update will not be capable of downloading previous FW with the issue. Regression back to an earlier version of firmware will not be possible.

### **Enhancements**

- Added support for RHEL8.

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### **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: 1.99 (Recommended)

### **Fixes**

Fixes the following issues

- Customer could encounter a data coherence issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's.
- Refer to the Customer Advisory a00071158en\_us for details for use in the VMware vSAN environment as well as minimal Synergy Core SPP requirements for Synergy environments.

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## Online ROM Flash Component for Windows (x64) - HPE 12Gb/s SAS Expander Firmware for HPE Smart Array Controllers and HPE HBA Controllers

Version: 4.22 (Recommended)

### **Important Note!**

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

### **Fixes**

- Fixes an issue where false Smart Carrier authentication errors may happen.

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## Online ROM Flash Component for Windows (x64) - 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: 1.99 (Recommended)

### **Fixes**

Fixes the following issues

- Customer could encounter a data coherency issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's

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## Supplemental Update / Online ROM Flash Component for Linux (x64) - 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: 1.99 (Recommended)

### **Fixes**

Fixes the following issues

- Customer could encounter a data coherency issue that will cause the system to return a Purple Screen Of Death (PSOD) when system fails to complete I/O's

### **Enhancements**

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## HPE Firmware Flash for Emulex Fibre Channel Host Bus Adapters for Linux (x64)

Version: 2019.03.02 (Recommended)

### **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.

### **Prerequisites**

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

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

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download>.

The Enablement Kit requires that the target environment have the libHBAAPI package installed from your OS installation media.

Install the FC Driver Kit, reboot, and then install the Enablement Kit.

Additional requirements:

Environment must be running the syslog daemon for the flash engine to run

Environment must have 32-bit netlink library (libnl.so) installed for component to be able to discover Emulex Host Bus Adapters(HBAs)

### **Enhancements**

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

16 Gb Standup, 16 Gb Mezzanine, and 32 Gb Standup

Added support to the following:

- o Added duration support for the Link Cable Beacon command. This avoids situations in which the blinking of an Host Bus Adapter(HBA) Light Emitting Diode(LED) might be initiated, but no command is sent to stop the blinking.

Updated 16/32 Gb HBA/Mezz universal boot

Updated 16Gb HBA/Mezz universal boot

Updated 8Gb HBA/Mezz universal boot

Contains:

16/32 Gb HBA/Mezz universal boot 12.0.346.9

16 Gb HBA/Mezz universal boot 12.0.346.9

8 Gb standup/mezz firmware 2.10X6

8 Gb standup/mezz universal boot image 12.00a10 (12.0.325.0 BIOS, 12.0.348.0 UEFI)

## **Supported Devices and Features**

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

- \* 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

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## **HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters - Linux (x86\_64)**

Version: 2019.03.03 (Recommended)

### **Important Note!**

Release Notes:

HPE StoreFabric QLogic Adapter Release Notes

### **Prerequisites**

Firmware updates may be accomplished using the inbox or Out of Box (OOB) drivers. Please consult SPOCK for a list of supported configurations available at the following link:

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

The HPE supplied enablement kit must be installed prior to this firmware component being identified by SUM for deployment.

The OOB driver and enablement kit are available on the Service Pack for ProLiant (SPP) which is available at <http://www.hpe.com/servers/spp/download>.

### **Fixes**

Fixed the following

Transceiver with part number 5700-0077 requires a minimum of 10ms after a write operation before reading it back. But the current Firmware is not waiting long enough, manifests as an intermittently incomplete to connect to Fabric

For more details please go through the document titled "HPE StoreFabric Host Bus Adapters - During A Server Power-On Sequence, A SN1100Q Or SN1600Q Fibre Channel Adapter With A Specific 16GB Transceiver Will Intermittently Fail To Connect To All FC Switches At Both The UEFI And OS Levels" at the following link:

[https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00078768en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00078768en_us)

### **Enhancements**

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

• Gen4 Fibre Channel Host Bus Adapter:

- \* Package 3.79.02
- \* Firmware 8.08.01
- \* UEFI 6.66
- \* BIOS 3.56

• Gen5 Fibre Channel Host Bus Adapter:

- \* Package 6.01.79

- \* Firmware 8.08.203
- \* UEFI 6.65
- \* BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
- \* Package 1.72.02
- \* Firmware 8.08.220
- \* UEFI 6.51
- \* BIOS 3.64

### **Supported Devices and Features**

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

Gen5 Fibre Channel Host Bus Adapter:

Gen6 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

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### **HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.0**

Version: 2019.03.02 (Recommended)

#### **Important Note!**

HPE StoreFabric QLogic Adapter Release Notes

#### **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 <http://www.hpe.com/servers/spp/download/>

#### **Fixes**

Fixed the following

Transceiver with part number 5700-0077 requires a minimum of 10ms after a write operation before reading it back. But the current Firmware is not waiting long enough, manifests as an intermittently incomplete to connect to Fabric

For more details please go through the document titled "HPE StoreFabric Host Bus Adapters - During A Server Power-On Sequence, A SN1100Q Or SN1600Q Fibre Channel Adapter With A Specific 16GB Transceiver Will Intermittently Fail To Connect To All FC Switches At Both The UEFI And OS Levels" at the following link:

[https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00078768en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00078768en_us)

## **Enhancements**

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- Gen4 Fibre Channel Host Bus Adapter:
  - \* Package 3.79.02
  - \* Firmware 8.08.01
  - \* UEFI 6.66
  - \* BIOS 3.56
- Gen5 Fibre Channel Host Bus Adapter:
  - \* Package 6.01.79
  - \* Firmware 8.08.203
  - \* UEFI 6.65
  - \* BIOS 3.43
- Gen6 Fibre Channel Host Bus Adapter:
  - \* Package 1.72.02
  - \* Firmware 8.08.220
  - \* UEFI 6.51
  - \* BIOS 3.64

## **Supported Devices and Features**

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

Gen5 Fibre Channel Host Bus Adapter:

Gen6 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

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## **HPE Firmware Flash for QLogic Fibre Channel Host Bus Adapters for VMware vSphere 6.5**

Version: 2019.03.02 (Recommended)

### **Important Note!**

HPE StoreFabric QLogic Adapter Release Notes

### **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 <http://www.hpe.com/servers/spp/download/>

### **Fixes**

Fixed the following

Transceiver with part number 5700-0077 requires a minimum of 10ms after a write operation before reading it back. But the current Firmware is not waiting long enough, manifests as an intermittently incomplete to connect to Fabric

For more details please go through the document titled "HPE StoreFabric Host Bus Adapters - During A Server Power-On Sequence, A SN1100Q Or SN1600Q Fibre Channel Adapter With A Specific 16GB Transceiver Will Intermittently Fail To Connect To All FC Switches At Both The UEFI And OS Levels" at the following link:

[https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00078768en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00078768en_us)

### **Enhancements**

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

• Gen4 Fibre Channel Host Bus Adapter:

\* Package 3.79.02

\* Firmware 8.08.01

\* UEFI 6.66

\* BIOS 3.56

• Gen5 Fibre Channel Host Bus Adapter:

\* Package 6.01.79

\* Firmware 8.08.203

\* UEFI 6.65

\* BIOS 3.43

• Gen6 Fibre Channel Host Bus Adapter:

\* Package 1.72.02

\* Firmware 8.08.220

\* UEFI 6.51

\* BIOS 3.64

### **Supported Devices and Features**

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

Gen5 Fibre Channel Host Bus Adapter:

Gen6 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

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

Version: 2019.03.03 (Recommended)

### **Important Note!**

HPE StoreFabric QLogic Adapter Release Notes



## **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 <http://www.hpe.com/servers/spp/download/>

## **Fixes**

Fixed the following

Transceiver with part number 5700-0077 requires a minimum of 10ms after a write operation before reading it back. But the current Firmware is not waiting long enough, manifests as an intermittently incomplete to connect to Fabric

For more details please go through the document titled "HPE StoreFabric Host Bus Adapters - During A Server Power-On Sequence, A SN1100Q Or SN1600Q Fibre Channel Adapter With A Specific 16GB Transceiver Will Intermittently Fail To Connect To All FC Switches At Both The UEFI And OS Levels" at the following link:

[https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00078768en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00078768en_us)

## **Enhancements**

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

- Gen4 Fibre Channel Host Bus Adapter:

- \* Package 3.79.02

- \* Firmware 8.08.01

- \* UEFI 6.66

- \* BIOS 3.56

- Gen5 Fibre Channel Host Bus Adapter:

- \* Package 6.01.79

- \* Firmware 8.08.203

- \* UEFI 6.65

- \* BIOS 3.43

- Gen6 Fibre Channel Host Bus Adapter:

- \* Package 1.72.02

- \* Firmware 8.08.220

- \* UEFI 6.51

- \* BIOS 3.64

## **Supported Devices and Features**

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

Gen5 Fibre Channel Host Bus Adapter:

Gen6 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

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## **HPE Firmware Online Flash for QLogic Fibre Channel Host Bus Adapters - Windows 2012/2012R2/2016/2019 (x86\_64)**

Version: 2019.03.02 (Recommended)

### **Important Note!**

Release Notes:

HPE StoreFabric QLogic Adapters Release Notes

### **Prerequisites**

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

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

The OOB driver is available on the Service Pack for ProLiant (SPP) which is available at

<http://www.hpe.com/servers/spp/download>.

### **Fixes**

Fixed the following

Transceiver with part number 5700-0077 requires a minimum of 10ms after a write operation before reading it back. But the current Firmware is not waiting long enough, manifests as an intermittently incomplete to connect to Fabric

For more details please go through the document titled "HPE StoreFabric Host Bus Adapters - During A Server Power-On Sequence, A SN1100Q Or SN1600Q Fibre Channel Adapter With A Specific 16GB Transceiver Will Intermittently Fail To Connect To All FC Switches At Both The UEFI And OS Levels" at the following link:

[https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00078768en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00078768en_us)

### **Enhancements**

Updated the Firmware/BIOS/UEFI packages for 8 Gb, 16 Gb and 32 Gb products.

• Gen4 Fibre Channel Host Bus Adapter:

\* Package 3.79.02

\* Firmware 8.08.01

\* UEFI 6.66

\* BIOS 3.56

• Gen5 Fibre Channel Host Bus Adapter:

\* Package 6.01.79

\* Firmware 8.08.203

\* UEFI 6.65

\* BIOS 3.43

• Gen6 Fibre Channel Host Bus Adapter:

\* Package 1.72.02

- \* Firmware 8.08.220
- \* UEFI 6.51
- \* BIOS 3.64

### **Supported Devices and Features**

This firmware supports the following HPE adapters:

Gen 4 Fibre Channel Host Bus Adapter:

Gen5 Fibre Channel Host Bus Adapter:

Gen6 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

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### **Online Flash for Linux - Innovation Engine Firmware for servers using Intel Xeon Scalable**

**3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 0.2.1.2 (Optional)

#### **Prerequisites**

System ROM V1.26 or later

The "iLO 5 Channel Interface Driver" (CHIF) for Linux which is integrated into the standard Linux kernel.

#### **Enhancements**

Version 0.2.1.2 firmware

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### **Online Flash for Linux - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable**

**3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 04.01.04.296 (Optional)

#### **Enhancements**

Version 04.01.04.296 firmware

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### **Online Flash for Windows x64 - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable**

**3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 04.01.04.296 (Optional)

#### **Enhancements**

Version 04.01.04.296 firmware

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### **Online ROM Flash Component for Windows x64 - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems**

Version: 05.01.03.078 (Optional)

### **Enhancements**

Version 05.01.03.078 firmware

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### **Online ROM Flash for Linux - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems**

Version: 05.01.03.078 (Optional)

### **Enhancements**

Version 05.01.03.078 firmware

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### **ROM Flash Firmware Package - Innovation Engine Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 0.2.1.2 (Optional)

### **Prerequisites**

System ROM V1.26 or later

iLO 5 v1.20 or later

### **Enhancements**

Version 0.2.1.2 firmware

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### **ROM Flash Firmware Package - Server Platform Services (SPS) Firmware for servers using Intel Xeon Scalable 3100/3200/4100/4200/5100/5200/6100/6200/8100/8200 series Processors**

Version: 04.01.04.296 (Optional)

### **Enhancements**

Version 04.01.04.296 firmware

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### **ROM Flash Firmware Package - Server Platform Services Manageability Engine Firmware for the Intel C242 and C246 PCH based systems**

Version: 05.01.03.078 (Optional)

### **Enhancements**

Version 05.01.03.078 firmware

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### **HP Lights-Out Online Configuration Utility for Linux (AMD64/EM64T)**

Version: 5.5.0-0 (Recommended)

### **Prerequisites**

This utility requires the following minimum firmware revisions:

- Integrated Lights-Out 5 firmware v1.20 or later

The management interface driver and management agents must be installed on the server.

For iLO 5, openssl v1.0.x or later is required in addition to above packages.

Customers who manually compile and install openssl or intentionally relocate /usr/bin/openssl, need to set PATH environment variable to direct HPONCFG to the right/intended openssl.

### **Fixes**

Updated the OpenSSL API calls to support Host's OpenSSL FIPS mode.

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## **HPE Management Bundle Smart Component for ESXi 6.0**

Version: 2019.09.01 (Recommended)

### **Fixes**

Agentless Management Service

- Fixed issue with AMS filling up tmp and causing VUM updates to Fail ([https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00073323en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00073323en_us))
- Fixed issue with read spikes seen in Gen9 hosts every 5 minutes

### **Enhancements**

Agentless Management Service

- Added support for HPE Ethernet 10Gb 2-port 524SFP+ Adapter and HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- 

## **HPE Management Bundle Smart Component for ESXi 6.5**

Version: 2019.09.01 (Recommended)

### **Fixes**

Agentless Management Service

- Fixed issue with AMS filling up tmp and causing VUM updates to Fail ([https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00073323en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00073323en_us))
- Fixed issue with read spikes seen in Gen9 hosts every 5 minutes

### **Enhancements**

Agentless Management Service

- Added support for HPE Ethernet 10Gb 2-port 524SFP+ Adapter and HPE Ethernet 10Gb 2-port 548SFP+ Adapter
- 

## **HPE Management Bundle Smart Component for ESXi 6.7**

Version: 2019.09.01 (Recommended)

### **Fixes**

Agentless Management Service

- Fixed issue with AMS filling up tmp and causing VUM updates to Fail ([https://support.hpe.com/hpsc/doc/public/display docId=emr\\_na-a00073323en\\_us](https://support.hpe.com/hpsc/doc/public/display docId=emr_na-a00073323en_us))
- Fixed issue with read spikes seen in Gen9 hosts every 5 minutes

## **Enhancements**

Agentless Management Service

- Added support for HPE Ethernet 10Gb 2-port 524SFP+ Adapter and HPE Ethernet 10Gb 2-port 548SFP+ Adapter

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## **HPE Smart Array SR Event Notification Service for Windows Server 64-bit Editions**

Version: 1.2.1.64 (A) (Recommended)

## **Fixes**

Event Notification Service may report invalid BMIC command in the system logs

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## **Fibreutils for HPE Storage Fibre Channel Host Bus Adapters for Linux -Red Hat Enterprise Linux (RHEL)**

Version: 3.3-6 (b) (Optional)

## **Prerequisites**

- Requires the following packages to be installed: glibc, libgcc, libstdc++, bash, perl

On RedHat Enterprise Linux 6 perl has to be install in %bin path to make sure there are no dependencies for the installation.

## **Fixes**

Fixed adapter\_info code to display correct Vendor name instead of Unknown

## **Enhancements**

This package supports only RedHat Enterprise Linux(RHEL) Distros

RedHat Enterprise Linux 6

RedHat Enterprise Linux 7

RedHat Enterprise Linux 8

## **Supported Devices and Features**

Supports the following:

- HPE StoreFabric SN1600Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter
- HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter

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## **Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 6 Server**

Version: 1.4.2 (Optional)

## **Prerequisites**

- amsd only supported on HPE ProLiant Gen10 Servers.
- amsd provides information to the iLO 5 service providing SNMP support.
- SNMP PASS-THRU on the iLO 5 MUST be disabled, and SNMP should be configured on the iLO 5. The iLO 5 may need to be reset after changing these settings.
- Requirements:
  - \* Minimum iLO 5 Firmware Version = 1.1
  - \* Minimum supported OS Versions = Red Hat Enterprise Linux 6.9

## **Fixes**

Fixed the following items:

- addressed segfaults seen in the ahslog
- amsd no longer segfaults when a NIC virtual function is created
- addressed an occasional segfault/system hang/NMI with amsd
- added support for the HPE Smart Array P824i-p storage controller in MRSA and Storcli
- Corrected the cpqFcaHostCntlrFirmwareVersion for the HPE Synergy 5830C 32Gb FC Host Bus Adapter

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## **Agentless Management Service (iLO 5) for Red Hat Enterprise Linux 7 Server**

Version: 1.4.2 (Optional)

## **Prerequisites**

- amsd only supported on HPE Gen10 Servers.
- amsd provides information to the iLO 5 service providing SNMP support.
- SNMP PASS-THRU on the iLO 5 MUST be disabled, and SNMP should be configured on the iLO 5. The iLO 5 may need to be reset after changing these settings.
- Requirements:
  - \* Minimum iLO 5 Firmware Version = 1.1
  - \* Minimum supported OS Versions = Red Hat Enterprise Linux 7.3 Errata 3.10.0.514.6.1

## **Fixes**

Fixed the following items:

- addressed segfaults seen in the ahslog
- amsd no longer segfaults when a NIC virtual function is created
- addressed an occasional segfault/system hang/NMI with amsd
- added support for the HPE Smart Array P824i-p storage controller in MRSA and Storcli
- Corrected the cpqFcaHostCntlrFirmwareVersion for the HPE Synergy 5830C 32Gb FC Host Bus Adapter

## **Enhancements**

Enhancements:

- Support for Red Hat Enterprise Linux 7.7

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## Agentless Management Service for Windows X64

Version: 1.44.0.0 (Optional)

### **Important Note!**

iLO Firmware Version:

- This version of AMS has been tested with iLO 5 firmware version 1.44. It is recommended to install AMS 1.44 on systems with iLO 5 firmware 1.43 or newer.

About installation and enablement of SMA service:

- During AMS installation in interactive mode, there is pop up message to selectively install SMA.
  - \* If Yes is selected, SMA service will be installed and set to running state.
  - \* If No is selected, SMA service will be installed but the service is not enabled.
- During AMS installation in silent mode, SMA is installed but the service is not enabled.
- To enable SMA service at a later time, go to the following folder: %ProgramFiles%\%OEM%\AMS\Service\ (Typically c:\Program Files\%OEM%\AMS\Service) and execute "EnableSma.bat /f"
- IMPORTANT: The SNMP service community name and permission must also be setup. This is not done by "EnableSma.bat".
- To disable SMA after it has been enabled, go to the following folder: %ProgramFiles%\%OEM%\AMS\Service\ (Typically c:\Program Files\%OEM%\AMS\Service) and execute "DisableSma.bat /f"
- After installing Windows operating system, make sure all the latest Microsoft Updates are downloaded and installed (wuapp.exe can be launched to start the update process). If this is not done, a critical error may be reported in Windows Event Log, "The Agentless Management Service terminated unexpectedly."

AMS Control Panel Applet:

- The AMS control panel applet UI is best displayed on the system when screen resolution is 1280 x 1024 pixels or higher and text size 100%.

### **Prerequisites**

The Channel Interface Driver for Windows X64 must be installed prior to this component.

Microsoft SNMP Service must be enabled, if SMA (System Management Assistant) is enabled.

### **Fixes**

- Fixed the minor memory leak in ams.exe process.
- Fixed the security vulnerability of missing double-quote (") character in ImagePath value of AMS service in the registry.

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## Smart Storage Administrator (SSA) CLI for Linux 64-bit

Version: 3.47.6.0 (Optional)

### **Enhancements**

Added support for RHEL 8.0



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## Smart Storage Administrator (SSA) CLI for Windows 64-bit

Version: 3.47.6.0 (Optional)

### Enhancements

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## Smart Storage Administrator (SSA) for Linux 64-bit

Version: 3.47.6.0 (Optional)

### Prerequisites

The Smart Storage Administrator for Linux requires the System Management Homepage software to be installed on the server. If the System Management Homepage software is not already installed on your server, please download it from HPE.com and install it before installing the Smart Storage Administrator for Linux.

IMPORTANT UPDATE: SSA (GUI) for Linux can now be run without requiring the System Management Homepage. SSA now supports a Local Application Mode for Linux. The System Management Homepage is still supported, but no longer required to run the SSA GUI.

To invoke, enter the following at the command prompt:

```
ssa -local
```

The command will start SSA in a new Firefox browser window. When the browser window is closed, SSA will automatically stop. This is only valid for the loopback interface, and not visible to external network connections.

### Enhancements

Added support for RHEL 8.0

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## Smart Storage Administrator (SSA) for Windows 64-bit

Version: 3.47.6.0 (Optional)

### Enhancements

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## Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit

Version: 3.47.6.0 (Optional)

### Important Note!

This stand alone version of the Smart Storage Administrator's Diagnostic feature is available only in CLI form. For the GUI version of Diagnostic reports, please use Smart Storage Administrator (SSA).

### Enhancements

.Utility - Tools

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## **HPE Utilities Bundle Smart Component for ESXi 6.0**

Version: 2019.09.01 (Recommended)

### **Important Note!**

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.0 U3 which is located at HPE Information Library.

### **Enhancements**

Updated the Smart Storage Array Command Line Interface (SSACLI) utility

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## **HPE Utilities Bundle Smart Component for ESXi 6.5**

Version: 2019.09.01 (Recommended)

### **Important Note!**

Refer to the HPE VMware Utilities Guide for VMware vSphere 6.5 U3 which is located at [www.hpe.com/info/vmware/proliant-docs](http://www.hpe.com/info/vmware/proliant-docs).

### **Enhancements**

Updated the Smart Storage Administrator CLI (SSACLI)

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## **HPE Utilities Bundle Smart Component for ESXi 6.7**

Version: 2019.09.01 (Recommended)

### **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)