

# HITACHI

## HA8000V シリーズ

### Service Pack for HA8000V (SPH)

### Version 12.02 10

## Readme

2025年11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

HITACHI は、株式会社 日立製作所の商標または登録商標です。

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

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。

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### 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す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ください。ご覧ください。事前にご理解いただくべき内容を記載しています。こちらも合わせてご参照ください。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 |
|----------|------|
| 2025年11月 | 初版   |

## 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

SPH のバージョン及び適用機種/適用 OS の組み合わせについては、「[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。

### 3.1 適用機種

- HA8000V/DL320 Gen12(U71)
- HA8000V/ML350 Gen12(U68)
- HA8000V/DL360 Gen12 (U68)
- HA8000V/DL380 Gen12 (U68)
- HA8000V/DL380a Gen12 (U72)

### 3.2 適用 OS

- Microsoft® Windows Server® 2025
- Microsoft® Windows Server® 2022
- Red Hat® Enterprise Linux® Server 9.5
- VMware® ESX 9.0
- VMware ESXi™ 8.0

## 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

『3 適用機種及びOS』を参照してください。

#### (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

- Red Hat® Enterprise Linux® Server 9.5

#### (2) 追加サポートデバイス

なし

#### (3) サポート除外機種及びOS

- サポート除外機種

なし

- サポート除外OS

- Red Hat® Enterprise Linux® Server 9.4

## 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 ]ー[ 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、OS セットアップ前に、セットアップ対象装置の BIOS システムユーティリティを起動した状態で、「5.3 (4) SUM の展開モードに関する補足説明」記載の SUM 展開モードのうち『iLO レポジトリアップデート』を使用してファームウェアを更新してください。OS セットアップ後のオンライン展開モードでの初回 SPH 適用では、SUM インベントリ結果の「推奨されたコンポーネント」に、ファームウェアが選択されていないことを確認してから、適用してください。

「推奨されたコンポーネント」にファームウェアが選択された場合は、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

ツ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) ]-[ アドバンストオプション(Advanced Options) ]から「アドバンストオプション(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：

"--softwareonly"パラメータを使用してください。

例) # ./smartupdate --s --softwareonly

### 5.3 SUM によるアップデート時の注意事項

(1) iLO インタフェースについて

SUM および iSUT を使用したファームウェア/ドライバのアップデートには、iLO 仮想 NIC (Virtual NIC)を使用します。iLO 仮想 NIC との疎通(“ping 16.1.15.1”)が取れない場合、通信経路に問題がありますので「iLO7 ユーザーガイド」の「Configuring the Virtual NIC feature」を参照して Virtual NIC を有効化してください。

(2) 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：

"--report"パラメータを使用してレポート作成し、作成されたレポートを参照してください。レポート出力先は画面に表示されます。レポートを参照し、“Install Needed”の項目が、“0”となっていることを確認してください。

例) # ./smartupdate --report

(3) 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。

#### (4) SUM の展開モードに関する補足説明

SUM にはいくつかのアップデート方法(展開モード)があります。展開モードにより、対象 OS/更新対象が異なりますので、以下の表を参照の上、展開モードを決定してください。

| SUM 展開モード |                               | 展開対象 OS(※ 1) |      |        | 更新対象    |                           |
|-----------|-------------------------------|--------------|------|--------|---------|---------------------------|
|           |                               | Windows      | RHEL | VMware | ファームウェア | ソフトウェア<br>(ドライバ、ユーティリティ等) |
| オンライン     | ローカル                          | ○            | ○    | —      | ○       | ○                         |
|           | リモート(※2)<br>(OS を介したアップデート)   | ○            | ○    | —      | ○       | ○                         |
|           | リモート(※3)<br>(iLO レポジトリアップデート) | ○            | ○    | ○      | ○       | ○                         |

※1：ゲスト OS は対象外。

※2：対象ノードにホスト OS の IP アドレスを指定した場合。

※3：対象ノードに iLO アドレスを指定した場合。対象ノードのホスト OS に iSUT 及び AMS のインストール・設定が必要

#### (5) SUM GUI での適用パッケージの選択について

SUM GUI を使用している場合、インベントリが完了すると展開(Deploy)するパッケージの確認画面が表示されます。

確認画面では、選択した SPH/ベースラインに含まれる更新パッケージのうち、対象装置に適用可能なパッケージが表示され、適用が推奨される(現在のバージョンより新しい)パッケージが展開対象として自動的



に選択されます。(選択されたパッケージは、行背景が反転し「選択済み」()または「Selected」()ボタン表示となります。ボタンをクリックすると、選択が解除され「選択」()「Select」()ボタン表示となります。)

自動選択されなかったパッケージは、「強制」()または「Force」()ボタンをクリックすることで強制的に適用対象とすることができます。(強制適用を選択した場合、行背景が反転し「強制」()「Forced」()ボタンで表示されます。)

#### 【注意】

ファームウェア/ドライバ/ユーティリティは、別途ご案内のない限り、最新のものをご使用いただくことを推奨しています。特に、強制適用を選択した場合、選択したバージョンが古いとダウングレードとなりますので、意図せずダウングレードしてしまうことが無いよう、操作には注意してください。

#### (6) Linux 環境における適用パッケージのOSライブラリ依存について

Linux 環境で利用するパッケージには、特定の os ライブラリを前提とするものがあります。そのパッケージを適用する際、前提とする os ライブラリが事前にインストールされていない場合、インベントリ完了後、または展開(Deploy)完了後に依存関係エラーとなります。

エラーが発生する場合、以降記述の各エラー表示例をご参照頂き、依存ファイルとして表示されるファイル/ライブラリをインストール後、再度 SPH を適用して下さい。

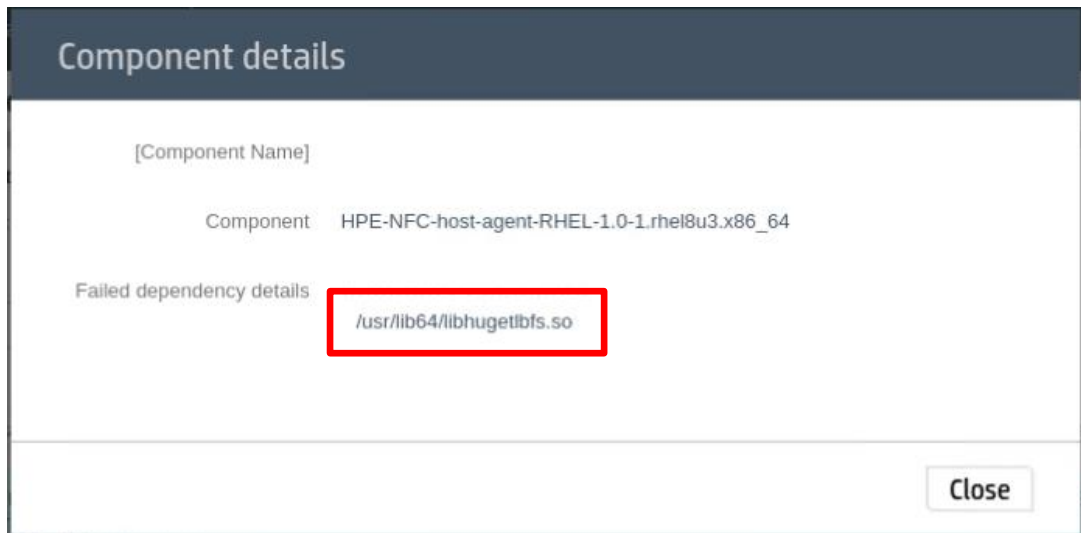
なお、依存する os ライブラリは、依存関係解消後に新たな依存関係が発生する場合があります、その場合は依存関係エラーが解消するまで、SPH 適用を繰り返す必要があります。

#### 【インベントリ完了後のエラー表示】

エラーが発生したパッケージは、赤丸(赤枠内)で表示されます。

|                                                                                     |                                                                                                                 |                                                                                     |          |             |               |    |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------|---------------|----|
|  | HPE NFS host agent for RedHat Enterprise Linux(RHEL) Server -7/8 (HPE-NFC-host-agent-RHEL-1.0-1.rhel8u3.x86_64) |  | Software | Recommended | 1.0-1.rhel8u3 | No |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------|-------------|---------------|----|

上記赤枠内の赤丸をダブルクリックすると次のダイアログが表示され、“Failed dependency details”として、インストールが必要となるファイル/ライブラリが表示されます。(赤枠内)



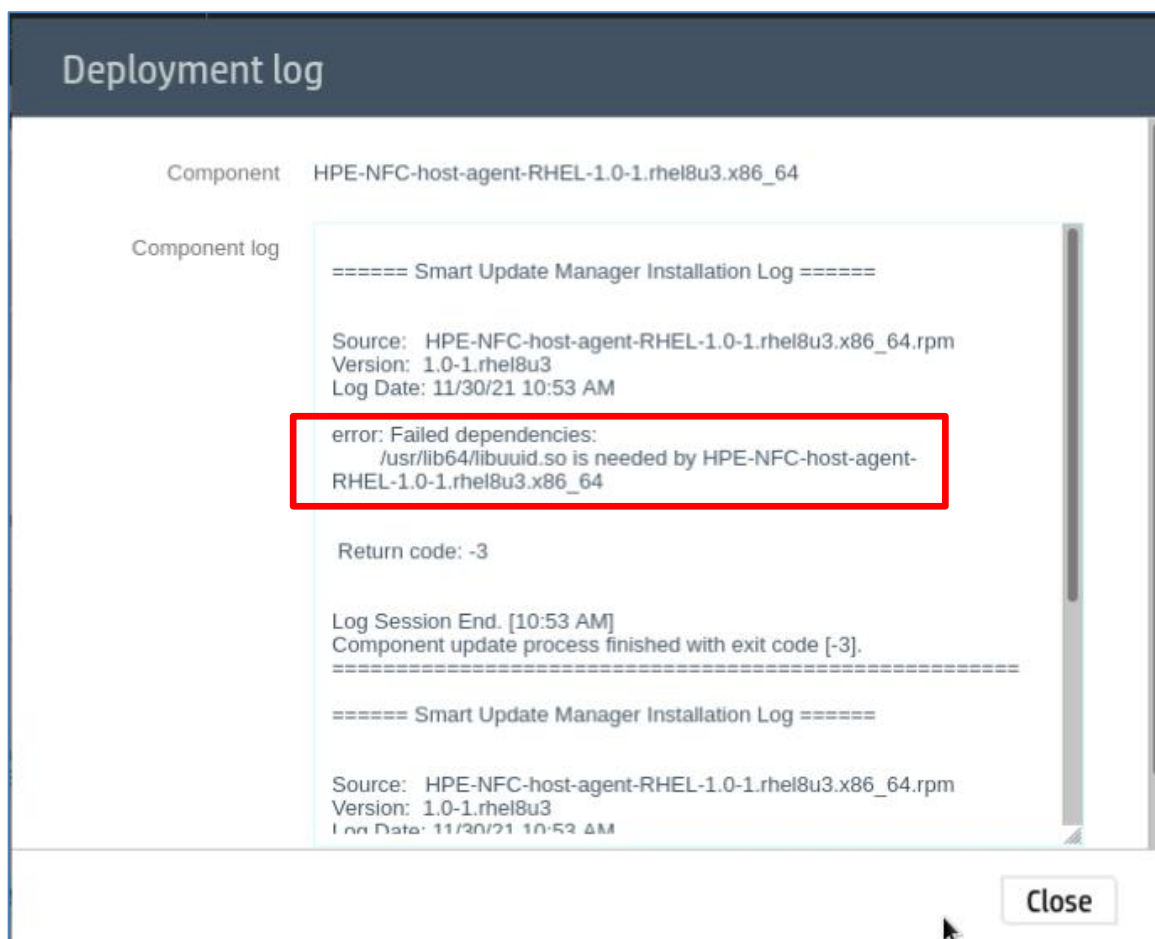
上記の例では、インストールが必要となるファイル/ライブラリとして、“libhugetlbfs.so”を示しています。

#### 【展開(Deploy)完了後のエラー表示】

エラーが発生したパッケージは、赤丸(赤枠内)で表示されます。



上記赤枠内の“View log”をクリックすると次のダイアログが表示され、“error: Failed dependencies:”として、インストールが必要となるファイル/ライブラリが表示されます。(赤枠内)



上記の例では、インストールが必要となるファイル/ライブラリとして、“libuuid.so”を示しています。

#### (7) iLO レポジトリを利用したアップデートについて

コンポーネントの形式によって、iLO レポジトリを使用した iLO 経由でコンポーネントが展開(Deploy)されます。iLO レポジトリにアップロードされたコンポーネントは、インストールキューに追加され順次展開されていきます。

この時、キューに追加された途中のコンポーネントで展開エラーが発生した場合、以降のコンポーネントは展開保留状態となります。その状態のコンポーネントがキューに存在すると、以降 iLO レポジトリを利用したアップデートができません。

次に示すエラー状態を参照の上、上記状態と判断できる場合は、インストールキューに残っているコンポーネントをすべて削除し、再度 SPH を適用してください。

#### 【エラーが発生した場合のインストールキューの状態】

iLO WEB インタフェースの[ファームウェア]>[インストールキュー]ページを参照します。

「例外」及び「保留」状態となっているパッケージが表示されている場合、「全て削除」ボタンをクリックして、キューに登録されたコンポーネントを削除してください。

#### (8) SUM 実行でのインベントリ失敗時の対応について

SUM は、アップデートに必要なデバイスならびにソフトウェア等の情報を iLO 経由で取得します。

iLO の状態により、まれに情報取得できないことがあり、以下に示すようにインベントリに失敗します。

## 【インベントリ失敗時の表示例】



SUM を再実行しても本エラーが解消されない場合は、下記のいずれかの手順を実施してください。

- iLO の再起動（リセット）を実施してください。詳細は『iLO 7 x.xx ユーザーガイド』(※)の「iLO の再起動（リセット）」を参照してください。『iLO 7 x.xx ユーザーガイド』は、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」に掲載されている「製品マニュアル」よりダウンロードしてください。
- オンラインアップデート(OS 稼働中のアップデート)の場合、装置の再起動を実施してください。
- 装置の給電を停止(電源ケーブルの抜去や UPS の出力停止等)後、10 秒待った後に給電を再開してください。

※x.xx の部分にはバージョンが入ります。

### (9) オンライン SUM 実行中の OS 再起動について

オンラインにて SUM 実行中に、対象装置が自動的に OS 再起動することがあります。この場合、いくつかパッケージがアップデートされていない可能性がありますので、再度 SUM を実行して、残りのパッケージをアップデートしてください。

全てアップデートされているかの確認方法は、『5.3 (2) ファームウェア/ドライバの依存関係について』記載の手順を参考にしてください。

### (10) SPH を使用したダウングレードについて

SPH を使用してダウングレード(バージョンダウン)を行う場合は、以下に記載された機能をデフォルト(※)のまま使用し、展開サマリーに表示される一覧から対象のコンポーネントを個別に選択して実施してください。

※：ファームウェアおよびソフトウェアのアップグレード

| アップデートオプション          | 機 能                              |
|----------------------|----------------------------------|
| ローカルホスト<br>ガイドアップデート | レビュー画面の<br>「アクション」－「アドバンストオプション」 |
| ノード                  | 展開画面中の「オプション」                    |

#### 【注意】

System FW のダウングレードは、「重要事項および読替ガイド」の「制限事項および注意事項」に記載されているとおり、原則として実施しないでください。

## 5.4 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の再起動をおこなう機能です。IP を使った OS のインストール又は SPH の適用、その他の方法による ASR ドライバ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。

### 5.4.1 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。以下を参照して 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、下表の各 OS バージョンに対応した『6.2.8 Driver - System Management』の「Package filename」欄記載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。

| No. | Windows バージョン       | Description                                                                       |
|-----|---------------------|-----------------------------------------------------------------------------------|
| 1   | Windows Server 2022 | iLO 7 Automatic Server Recovery Driver for Microsoft Windows Server 2022 and 2025 |
| 2   | Windows Server 2025 | iLO 7 Automatic Server Recovery Driver for Microsoft Windows Server 2022 and 2025 |

#### (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

### 5.4.2 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
```

### 5.4.3 ASR の無効化方法

Windows の PowerShell より以下のオプションで 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
```

### 5.4.4 ASR の有効化方法

Windows の PowerShell より以下のオプションで 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
```

## 5.5 VMware をご使用にあたっての注意事項

### 5.5.1 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、ESXi サーバ、または BIOS セットアップユーティリティを起動した状態で、SUM のリモートオンライン 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。)

【ESXi サーバを起動した状態で適用する場合】

本状態では、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、『5.5.2 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、以下の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) 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。

【BIOS セットアップユーティリティを起動した状態で適用する場合】

本状態では、ファームウェアのアップデートのみ可能です。

- (1) 装置の起動後、BIOS セットアップユーティリティを起動しておきます。
- (2) 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) ファームウェアのアップデートを有効化するためには装置の再起動が必要です。全てのコンポーネントの適用が完了するまで、数回装置が再起動します。

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]ー[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。

5.5.2 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(zip ファイル)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 ESXi™ 8.0 | cp068046.zip      | sutComponent:800.6.3.0.13-*.zip |
| 2   | VMware® ESX 9.0  |                   |                                 |

- (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) 次の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) 次のコマンドを実行し、iSUT を AutoDeployReboot モードに設定します。
- (11) 作業終了後、OnDemand モードに変更します。iSUT を AutoDeployReboot モードに設定すると、iSUT が常駐し常時稼働し続けます。アップデート作業時以外は iSUT の稼働は不要ですので、常駐解除することを推奨します。iSUT を OnDemand モードに設定するには、次のコマンドを実行してください。

```
sut -set mode=ondemand
```

### 5.5.3 iSUT を使用するための設定について

#### (1) iLO 認証情報の設定

iSUT を使うためには、以下のいずれかの方法で iLO のアカウント設定が必要です。

##### ① iSUT への iLO 認証情報設定

##### ② iLO への Application Account の設定

#### 【補足】

iLO Application Account 利用が必須でない場合は、①の iLO 認証情報設定の使用を推奨します。

##### ① iSUT への認証情報設定

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

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

#### 【注意】

認証情報の設定は、iSUT が OnDemand モードの状態で行ってください。AutoDeployReboot モードで設定した場合、認証情報が有効にならない場合があります。

##### ② iLO への Application Account の設定

iLO に isut の Application Account を設定します。設定は、ESXi ホスト上で以下コマンドを実行します。



```
sut appaccount create -u <iLO username> -p password <iLO username>
```

#### 【注意】

iSUT の Application Account の設定状況は、[iLO 設定]>[ユーザー管理]>[ユーザー]の「アプリケーションアカウント」から確認できます。この iLO 画面から iSUT の Application Account を削除してしまった場合は、ESXi ホスト上で、“sut appaccount delete”コマンドで情報を削除したのち、再度 Application Account を設定して下さい。

#### (2) iSUT の設定確認・変更

ESXi ホスト上で “sut -status” を実行し、iSUT の設定が “EnableiLOQueuedUpdates=true”となっていることを確認してください。“false”の場合は、ESXi ホスト上で以下を実行してください。

```
sut -set enableiloqueuedupdates=true
```

#### 5.5.4 リモートオンライン 展開モードをご使用時の注意事項

本モードをご使用の際は、iLO が Agentless Management Service(AMS)に接続している必要があります。iLO が AMS に接続していない場合、適用可能なコンポーネントにソフトウェア/ドライバパッケージが追加されません。

iLO と AMS の接続状態を確認するには、iLO WEB インタフェースの[ダッシュボード]>[ホストの概要]で、「AMS」のステータスが「OK」となっていることを確認してください。

iLO が AMS に接続していない場合、以下の手順を実施し、再度 iLO と AMS の接続状態を確認して下さい。

- 装置電源 OFF(ESXi ホストシャットダウン)
- 装置電源ケーブルの抜き差し
- 装置電源 ON(ESXi ホスト起動)

#### 5.5.5 Agentless Management Service の設定

システム装置 Gen12 の VMware システムに対して、iLO Web コンソール上でのドライバ情報の表示および SPH/SUM を使用したドライバのアップデート(『リモートオンライン』展開モード)を行うには、ESXi ホスト上で Agentless Management Service へのアカウント情報の設定が必要です。アカウント情報の設定方法については、「HA8000V Gen12 重要事項および読替ガイド」の[Agentless Management Service(AMS)について]-[AMS の設定]を参照してください。

### 5.6 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、下記の制限事項があります。

#### 5.6.1 Intel 製ネットワークアダプタのファームウェアアップデートについて

Intel 製ネットワークアダプタのファームウェアアップデートを行う場合、ファームウェアアップデート後に再起動を行っても、サブ電源で動作する機能は動作し続けているため、アップデートが完全には反映されません。

アップデート後に電源ケーブルを抜いて電源を 5 秒以上切断してから、電源ケーブルを差しなおし電源を入れなおしてください。電源ケーブルを抜き差しする必要があるため、リモートでは実施できません。

本制限事項の最新の状況並びに具体的な対象アダプタの情報については、アドバイザリ：「特定のネットワークアダプタについてファームウェアアップデート後に電源ケーブルの抜き差しが必要になる」(ADV-2019-0019)を参照してください。

## 5.7 RAID コントローラ環境での OS セットアップの注意事項

### 5.7.1 ドライバの適用について

下表記載の RAID コントローラご利用環境で、Windows または RHEL の新規・再セットアップの際には、SPH を適用する前に SPH に収録された「6.2.6 Driver - Storage Controller」記載の各 OS に対応した RAID コントローラドライバを適用してください。

ドライバの適用方法は、「HA8000V Gen12 重要事項および読替ガイド」の[システム装置のセットアップ]-[OS のインストール]を参照して下さい。

| 形名(*1)            | 製品名                   | Device                                |
|-------------------|-----------------------|---------------------------------------|
| TQ-R□□-P47789-B21 | MR216i-o Gen11 コントローラ | HPE MR216i-o Gen11 12G Controller Kit |
| TQ-R□□-P47785-B21 | MR216i-p Gen11 コントローラ | HPE MR216i-p Gen11 12G Controller Kit |
| TQ-R□□-P58335-B21 | MR408i-o Gen11 コントローラ | HPE MR408i-o Gen11 SPDM Storage Cntlr |
| TQ-R□□-P74775-B21 | MR408i-p Gen11 コントローラ | HPE MR408i-p Gen11 12G Controller Kit |
| TQ-R□□-P47781-B21 | MR416i-o Gen11 コントローラ | HPE MR416i-o Gen11 12G Controller Kit |
| TQ-R□□-P47777-B21 | MR416i-p Gen11 コントローラ | HPE MR416i-p Gen11 12G Controller Kit |

(\*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   | 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<br>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】

- BCM 5719 1Gb 4p BASE-T Adptr
- BCM 5719 1Gb 4p BASE-T OCP Adptr

#### (1) 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。(表中の"x"表記は、本ドキュメントリリース時点で未サポートであることを示します。)

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
```

この時、ログイン画面が表示された場合には、SUM 起動時にご使用の(ログインしていた)OS ユーザー名/パスワードを入力してください。

なお、SUM の詳細な操作方法は、「[日立アドバンスドサーバ HA8000V シリーズ ホームページ](#)」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。

次節以降、カテゴリ別にパッケージの情報を示します。

「Firmware/Driver version」列の情報は、SPH 収録の各パッケージに含まれるファームウェアまたはドライバのバージョン情報を示していますが、VMware システム向けパッケージの場合は、VMware vSphere コンポーネントバージョンを示しています。

## 6.2.1 Application - System Management

| No. | Description                                   | Package filename | Device | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------|------------------|--------|-----------------|-------------------------|
| 1   | Integrated Smart Update Tools for Windows x64 | cp067828.exe     | -      | 6.3.0.0         | 6.3.0.0                 |

## 6.2.2 BIOS - System ROM

| No. | Description                                 | Package filename              | Device            | Package Version     | Firmware/Driver version |
|-----|---------------------------------------------|-------------------------------|-------------------|---------------------|-------------------------|
| 2   | ROM Flash Firmware Package - System ROM U68 | OEM.U68_1.46_08_08_2025.fwpkg | System BIOS - U68 | 1.46_08-08-2025 (B) | U68 v1.46 (08/08/2025)  |
| 3   | ROM Flash Firmware Package - System ROM U71 | OEM.U71_1.46_08_08_2025.fwpkg | System BIOS - U71 | 1.46_08-08-2025     | U71 v1.46 (08/08/2025)  |
| 4   | ROM Flash Firmware Package - System ROM U72 | OEM.U72_1.46_08_08_2025.fwpkg | System BIOS - U72 | 1.46_08-08-2025     | U72 v1.46 (08/08/2025)  |

## 6.2.3 Driver - Chipset

| No. | Description | Package filename | Device | Package Version | Firmware/Driver version |
|-----|-------------|------------------|--------|-----------------|-------------------------|
|-----|-------------|------------------|--------|-----------------|-------------------------|

## 6.2.4 Driver - Network

| No. | Description                                                   | Package filename | Device                                                           | Package Version | Firmware/Driver version |
|-----|---------------------------------------------------------------|------------------|------------------------------------------------------------------|-----------------|-------------------------|
| 5   | Broadcom NX1 1Gb Driver for Windows Server x64 Editions       | cp067898.exe     | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE      | 221.0.8.0 (B)   | 221.0.8.0               |
| 6   | Broadcom NX1 1Gb Driver for Windows Server x64 Editions       | cp067898.exe     | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE | 221.0.8.0 (B)   | 221.0.8.0               |
| 7   | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57414 10/25GbE 2p SFP28 Adptr                                | 233.0.148.0     | 233.0.148.0             |
| 8   | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                           | 233.0.148.0     | 233.0.148.0             |
| 9   | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57416 10GbE 2p BASE-T Adptr                                  | 233.0.148.0     | 233.0.148.0             |
| 10  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                             | 233.0.148.0     | 233.0.148.0             |
| 11  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57412 10GbE 2p SFP+ Adptr                                    | 233.0.148.0     | 233.0.148.0             |
| 12  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                               | 233.0.148.0     | 233.0.148.0             |
| 13  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr            | 233.0.148.0     | 233.0.148.0             |
| 14  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr          | 233.0.148.0     | 233.0.148.0             |
| 15  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57504 10/25GbE 4p SFP28 Adptr                                | 233.0.148.0     | 233.0.148.0             |
| 16  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022 | cp066627.exe     | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                           | 233.0.148.0     | 233.0.148.0             |
| 17  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025 | cp067900.exe     | BCM 57414 10/25GbE 2p SFP28 Adptr                                | 233.0.148.0 (B) | 233.0.148.0             |
| 18  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025 | cp067900.exe     | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                           | 233.0.148.0 (B) | 233.0.148.0             |
| 19  | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025 | cp067900.exe     | BCM 57416 10GbE 2p BASE-T Adptr                                  | 233.0.148.0 (B) | 233.0.148.0             |

|    |                                                                 |                                                    |                                                         |                    |                            |
|----|-----------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------|--------------------|----------------------------|
| 20 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 233.0.148.0 (B)    | 233.0.148.0                |
| 21 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | BCM 57412 10GbE 2p SFP+ Adptr                           | 233.0.148.0 (B)    | 233.0.148.0                |
| 22 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 233.0.148.0 (B)    | 233.0.148.0                |
| 23 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 233.0.148.0 (B)    | 233.0.148.0                |
| 24 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 233.0.148.0 (B)    | 233.0.148.0                |
| 25 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 233.0.148.0 (B)    | 233.0.148.0                |
| 26 | Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025   | cp067900.exe                                       | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 233.0.148.0 (B)    | 233.0.148.0                |
| 27 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 28 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                  | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 29 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57416 10GbE 2p BASE-T Adptr                         | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 30 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 31 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57412 10GbE 2p SFP+ Adptr                           | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 32 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 33 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 34 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 35 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 36 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u4.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u4 |
| 37 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5 |
| 38 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                  | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5 |

|    |                                                                 |                                                    |                                                         |                    |                                   |
|----|-----------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------|--------------------|-----------------------------------|
| 39 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57416 10GbE 2p BASE-T Adptr                         | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 40 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 41 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57412 10GbE 2p SFP+ Adptr                           | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 42 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 43 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 44 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 45 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 46 | HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9 | kmod-bnxt_en-1.10.3-233.0.152.2.rhel9u5.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 1.10.3-233.0.152.2 | 1.10.3-233.0.152.2.rhel9u5        |
| 47 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 48 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                  | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 49 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57416 10GbE 2p BASE-T Adptr                         | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 50 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 51 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57412 10GbE 2p SFP+ Adptr                           | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 52 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 53 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 54 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 55 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 56 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0         | cp066625.zip                                       | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 2025.05.00         | 233.0.256.0-10EM.800.1.0.20613240 |
| 57 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0         | cp066626.zip                                       | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 2025.05.00         | 233.0.256.0-10EM.800.1.0          |

|    |                                                                                |                                           |                                                         |             |                                    |
|----|--------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------|-------------|------------------------------------|
|    |                                                                                |                                           |                                                         |             | .20613240                          |
| 58 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                  | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 59 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57416 10GbE 2p BASE-T Adptr                         | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 60 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 61 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57412 10GbE 2p SFP+ Adptr                           | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 62 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 63 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 64 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 65 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 66 | HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0                        | cp066626.zip                              | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 2025.05.00  | 233.0.256.0-10EM.800.1.0 .20613240 |
| 67 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 68 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                  | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 69 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57416 10GbE 2p BASE-T Adptr                         | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 70 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                    | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 71 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57412 10GbE 2p SFP+ Adptr                           | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 72 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                      | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 73 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr   | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 74 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 75 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 Adptr                       | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 76 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4. | libbnxt_re-233.0.152.2-rhel9u4.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                  | 233.0.152.2 | 233.0.152.2-rhel9u4                |
| 77 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57414 10/25GbE 2p SFP28 Adptr                       | 233.0.152.2 | 233.0.152.2-rhel9u5                |
| 78 | HPE Broadcom NetXtreme-E RoCE                                                  | libbnxt_re-                               | BCM 57414 10/25GbE                                      | 233.0.152.2 | 233.0.152.2-                       |



|    |                                                                                |                                           |                                                                    |               |                     |
|----|--------------------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------|---------------|---------------------|
|    | Library for Red Hat Enterprise Linux 9 Update 5.                               | 233.0.152.2-rhel9u5.x86_64.rpm            | 2p SFP28 OCP3 Adptr                                                |               | rhel9u5             |
| 79 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57416 10GbE 2p BASE-T Adptr                                    | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 80 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                               | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 81 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57412 10GbE 2p SFP+ Adptr                                      | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 82 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                                 | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 83 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr              | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 84 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr            | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 85 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 Adptr                                  | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 86 | HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5. | libbnxt_re-233.0.152.2-rhel9u5.x86_64.rpm | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                             | 233.0.152.2   | 233.0.152.2-rhel9u5 |
| 87 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 9               | kmod-tg3-3.139t-1.rhel9u4.x86_64.rpm      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE        | 3.139t-1      | 3.139t-1.rhel9u4    |
| 88 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 9               | kmod-tg3-3.139t-1.rhel9u4.x86_64.rpm      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE   | 3.139t-1      | 3.139t-1.rhel9u4    |
| 89 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 9               | kmod-tg3-3.139t-1.rhel9u5.x86_64.rpm      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE        | 3.139t-1      | 3.139t-1.rhel9u5    |
| 90 | HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 9               | kmod-tg3-3.139t-1.rhel9u5.x86_64.rpm      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE   | 3.139t-1      | 3.139t-1.rhel9u5    |
| 91 | HPE Intel iavf Drivers for Red Hat Enterprise Linux 9                          | kmod-hp-iavf-4.13.14-1.rhel9u5.x86_64.rpm | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE      | 4.13.14-1     | 4.13.14-1.rhel9u5   |
| 92 | HPE Intel iavf Drivers for Red Hat Enterprise Linux 9                          | kmod-hp-iavf-4.13.14-1.rhel9u5.x86_64.rpm | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 4.13.14-1     | 4.13.14-1.rhel9u5   |
| 93 | HPE Intel iavf Drivers for Red Hat Enterprise Linux 9                          | kmod-hp-iavf-4.13.14-1.rhel9u5.x86_64.rpm | Intel E810-XXVDA2 adapter                                          | 4.13.14-1     | 4.13.14-1.rhel9u5   |
| 94 | HPE Intel iavf Drivers for Red Hat Enterprise Linux 9                          | kmod-hp-iavf-4.13.14-1.rhel9u5.x86_64.rpm | Intel E810-XXVDA2 OCP3 adapter                                     | 4.13.14-1     | 4.13.14-1.rhel9u5   |
| 95 | HPE Intel iavf Drivers for Red Hat Enterprise Linux 9                          | kmod-hp-iavf-4.13.14-1.rhel9u5.x86_64.rpm | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 4.13.14-1     | 4.13.14-1.rhel9u5   |
| 96 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-             | mlnx-ofa_kernel-25.04-                    | MLX MCX631102 10/25GbE 2p SFP28                                    | 25.04-0.6.1.1 | 25.04-OFED.25.04.0. |

|     |                                                                                                                             |                                                                  |                                                                    |               |                                  |
|-----|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------|---------------|----------------------------------|
|     | 7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64)                                                                   | OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm                            | Adptr                                                              |               | 6.1.1.rhel9u5                    |
| 97  | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm      | MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr                           | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 98  | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm      | HPE IB NDR/EN 400G 1p OSFP Adptr                                   | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 99  | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm      | HPE IB NDR200/EN 200G 1p OSFP Adptr                                | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 100 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm      | HPE IB NDR200/EN 200G 2p QSFP112 Adptr                             | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 101 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm      | HPE Ethernet 100Gb 2-port QSFP56 MCX623106AS-CDAT Adapter          | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 102 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | MLX MCX631102 10/25GbE 2p SFP28 Adptr                              | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 103 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr                           | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 104 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | HPE IB NDR/EN 400G 1p OSFP Adptr                                   | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 105 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | HPE IB NDR200/EN 200G 1p OSFP Adptr                                | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 106 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | HPE IB NDR200/EN 200G 2p QSFP112 Adptr                             | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 107 | HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86_64) | kmod-mlnx-ofa_kernel-25.04-OFED.25.04.0.6.1.1.rhel9u5.x86_64.rpm | HPE Ethernet 100Gb 2-port QSFP56 MCX623106AS-CDAT Adapter          | 25.04-0.6.1.1 | 25.04-OFED.25.04.0.6.1.1.rhel9u5 |
| 108 | Intel ice Drivers for Red Hat Enterprise Linux 9                                                                            | kmod-ice-1.17.8-1.rhel9u5.x86_64.rpm                             | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE      | 1.17.8-1      | 1.17.8-1.rhel9u5                 |
| 109 | Intel ice Drivers for Red Hat Enterprise Linux 9                                                                            | kmod-ice-1.17.8-1.rhel9u5.x86_64.rpm                             | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 1.17.8-1      | 1.17.8-1.rhel9u5                 |
| 110 | Intel ice Drivers for Red Hat Enterprise Linux 9                                                                            | kmod-ice-1.17.8-1.rhel9u5.x86_64.rpm                             | Intel E810-XXVDA2 adapter                                          | 1.17.8-1      | 1.17.8-1.rhel9u5                 |
| 111 | Intel ice Drivers for Red Hat Enterprise Linux 9                                                                            | kmod-ice-1.17.8-1.rhel9u5.x86_64.rpm                             | Intel E810-XXVDA2 OCP3 adapter                                     | 1.17.8-1      | 1.17.8-1.rhel9u5                 |
| 112 | Intel ice Drivers for Red Hat Enterprise Linux 9                                                                            | kmod-ice-1.17.8-1.rhel9u5.x86_64.rpm                             | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 1.17.8-1      | 1.17.8-1.rhel9u5                 |
| 113 | Intel icea Driver for Microsoft Windows Server 2022                                                                         | cp067503.exe                                                     | Intel E810-CQDA2 Ethernet 100Gb 2-                                 | 1.17.72.0     | 1.17.72.0                        |

|     |                                                    |              |                                                                    |            |                                |
|-----|----------------------------------------------------|--------------|--------------------------------------------------------------------|------------|--------------------------------|
|     |                                                    |              | port QSFP28 Adapter for HPE                                        |            |                                |
| 114 | Intel ica Driver for Microsoft Windows Server 2022 | cp067503.exe | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 1.17.72.0  | 1.17.72.0                      |
| 115 | Intel ica Driver for Microsoft Windows Server 2022 | cp067503.exe | Intel E810-XXVDA2 adapter                                          | 1.17.72.0  | 1.17.72.0                      |
| 116 | Intel ica Driver for Microsoft Windows Server 2022 | cp067503.exe | Intel E810-XXVDA2 OCP3 adapter                                     | 1.17.72.0  | 1.17.72.0                      |
| 117 | Intel ica Driver for Microsoft Windows Server 2022 | cp067503.exe | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 1.17.72.0  | 1.17.72.0                      |
| 118 | Intel ica Driver for Microsoft Windows Server 2025 | cp067504.exe | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE      | 1.17.73.0  | 1.17.73.0                      |
| 119 | Intel ica Driver for Microsoft Windows Server 2025 | cp067504.exe | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 1.17.73.0  | 1.17.73.0                      |
| 120 | Intel ica Driver for Microsoft Windows Server 2025 | cp067504.exe | Intel E810-XXVDA2 adapter                                          | 1.17.73.0  | 1.17.73.0                      |
| 121 | Intel ica Driver for Microsoft Windows Server 2025 | cp067504.exe | Intel E810-XXVDA2 OCP3 adapter                                     | 1.17.73.0  | 1.17.73.0                      |
| 122 | Intel ica Driver for Microsoft Windows Server 2025 | cp067504.exe | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 1.17.73.0  | 1.17.73.0                      |
| 123 | Intel icen Driver for VMware vSphere 8.0           | cp064886.zip | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE      | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 124 | Intel icen Driver for VMware vSphere 8.0           | cp064886.zip | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 125 | Intel icen Driver for VMware vSphere 8.0           | cp064886.zip | Intel E810-XXVDA2 adapter                                          | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 126 | Intel icen Driver for VMware vSphere 8.0           | cp064886.zip | Intel E810-XXVDA2 OCP3 adapter                                     | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 127 | Intel icen Driver for VMware vSphere 8.0           | cp064886.zip | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 128 | Intel icen Driver for VMware vSphere 9.0           | cp065383.zip | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE      | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 129 | Intel icen Driver for VMware vSphere 9.0           | cp065383.zip | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 130 | Intel icen Driver for VMware vSphere 9.0           | cp065383.zip | Intel E810-XXVDA2 adapter                                          | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 131 | Intel icen Driver for VMware vSphere 9.0           | cp065383.zip | Intel E810-XXVDA2 OCP3 adapter                                     | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |
| 132 | Intel icen Driver for VMware vSphere 9.0           | cp065383.zip | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE    | 2025.05.00 | 1.15.4.0-IOEM.800.1.0.20613240 |

|     |                                                                 |              |                                                           |              |              |
|-----|-----------------------------------------------------------------|--------------|-----------------------------------------------------------|--------------|--------------|
| 133 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2022 | cp067781.exe | HPE Ethernet 100Gb 2-port QSFP56 MCX623106AS-CDAT Adapter | 25.4.26768.0 | 25.4.26768.0 |
| 134 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2022 | cp067781.exe | MLX MCX631102 10/25GbE 2p SFP28 Adptr                     | 25.4.26768.0 | 25.4.26768.0 |
| 135 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2022 | cp067781.exe | MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr                  | 25.4.26768.0 | 25.4.26768.0 |
| 136 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2025 | cp067783.exe | HPE Ethernet 100Gb 2-port QSFP56 MCX623106AS-CDAT Adapter | 25.4.26768.0 | 25.4.26768.0 |
| 137 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2025 | cp067783.exe | MLX MCX631102 10/25GbE 2p SFP28 Adptr                     | 25.4.26768.0 | 25.4.26768.0 |
| 138 | Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2025 | cp067783.exe | MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr                  | 25.4.26768.0 | 25.4.26768.0 |

### 6.2.5 Driver - Security

| No. | Description                                               | Package filename | Device | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------------------|------------------|--------|-----------------|-------------------------|
| 139 | Intel QuickAssist Technology driver for Microsoft Windows | cp068357.exe     | -      | 2.5.0.13 (B)    | 2.5.0.13                |

### 6.2.6 Driver - Storage Controller

| No. | Description                                                                                                                                                                        | Package filename | Device             | Package Version | Firmware/Driver version            |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|-----------------|------------------------------------|
| 140 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0 | cp067936.zip     | HPE_MR416i-o_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |
| 141 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0 | cp067936.zip     | HPE_MR416i-p_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |
| 142 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0 | cp067936.zip     | HPE_MR216i-o_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |
| 143 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0 | cp067936.zip     | HPE_MR408i-o_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |
| 144 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0 | cp067936.zip     | HPE_MR216i-p_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |
| 145 | HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o,                                                                                | cp067936.zip     | HPE_MR408i-p_Gen11 | 2025.09.01      | 7.732.04.00-10EM.800.1.0 .20613240 |

|     |                                                                                                                                                                                                                |                                                             |                        |                  |                                           |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------|------------------|-------------------------------------------|
|     | MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>8.0                                                                                                                           |                                                             |                        |                  |                                           |
| 146 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR416i-<br>o_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 147 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR416i-<br>p_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 148 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR216i-<br>o_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 149 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR408i-<br>o_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 150 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR216i-<br>p_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 151 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver (64-bit) for vSphere<br>9.0              | cp067967.zip                                                | HPE_MR408i-<br>p_Gen11 | 2025.09.01       | 7.732.04.00-<br>10EM.800.1.0<br>.20613240 |
| 152 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR416i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1                |
| 153 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR416i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1                |
| 154 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR216i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1                |
| 155 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR408i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1                |
| 156 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,                                                                                                      | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR216i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1                |

|     |                                                                                                                                                                                                                |                                                             |                        |                  |                            |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------|------------------|----------------------------|
|     | MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9                                                                                                              |                                                             |                        |                  |                            |
| 157 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u4<br>-1.x86_64.rpm | HPE_MR408i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u4-1 |
| 158 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR416i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 159 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR416i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 160 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR216i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 161 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR408i-<br>o_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 162 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR216i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 163 | HPE MR416i-p, MR216i-p, MR416i-a,<br>MR216i-a Gen10 plus Controllers and<br>MR416i-p, MR416i-o, MR216i-o,<br>MR408i-o, MR216i-p, MR408i-p Gen11<br>Controllers Driver for 64-bit Red Hat<br>Enterprise Linux 9 | kmod-megaraid_sas-<br>07.732.03.00_rhel9u5<br>-1.x86_64.rpm | HPE_MR408i-<br>p_Gen11 | 07.732.03.0<br>0 | 07.732.03.00_<br>rhel9u5-1 |
| 164 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition       | cp064820.exe                                                | HPE_MR416i-<br>o_Gen11 | 7.732.3.0        | 7.732.3.0                  |
| 165 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition       | cp064820.exe                                                | HPE_MR416i-<br>p_Gen11 | 7.732.3.0        | 7.732.3.0                  |
| 166 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition       | cp064820.exe                                                | HPE_MR216i-<br>o_Gen11 | 7.732.3.0        | 7.732.3.0                  |
| 167 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,                                                                                                          | cp064820.exe                                                | HPE_MR408i-<br>o_Gen11 | 7.732.3.0        | 7.732.3.0                  |

|     |                                                                                                                                                                                                          |                                                        |                                                   |                    |                                                 |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------|--------------------|-------------------------------------------------|
|     | MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition                                                                                                          |                                                        |                                                   |                    |                                                 |
| 168 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition | cp064820.exe                                           | HPE_MR216i-<br>p_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 169 | HPE MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2025 edition | cp064820.exe                                           | HPE_MR408i-<br>p_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 170 | HPE ProLiant Gen10 Smart Array and<br>Gen10 Plus and Gen11 Smart RAID<br>Controller Driver for VMware vSphere<br>8.0 (Driver Component).                                                                 | cp067564.zip                                           | HPE Smart Array<br>E208e-p SR Gen10<br>Controller | 2025.10.01         | 80.4862.0.104<br>-<br>10EM.800.1.0<br>.20613240 |
| 171 | HPE ProLiant Gen10 Smart Array and<br>Gen10 Plus and Gen11 Smart RAID<br>Controller Driver for VMware vSphere<br>9.0 (Driver Component).                                                                 | cp067562.zip                                           | HPE Smart Array<br>E208e-p SR Gen10<br>Controller | 2025.09.01         | 90.4862.0.104<br>-<br>10EM.900.0.2<br>4755229   |
| 172 | HPE ProLiant Gen10, Gen10Plus and<br>Gen11 Smart Array Controller (64-bit)<br>Driver for Red Hat Enterprise Linux 9<br>(64-bit)                                                                          | kmod-smartpq-<br>2.1.36-<br>026.rhel9u5.x86_64.r<br>pm | HPE Smart Array<br>E208e-p SR Gen10<br>Controller | 2.1.36-026         | 2.1.36-<br>026.rhel9u5                          |
| 173 | HPE Smart Array Gen10, Gen10Plus and<br>Gen11 Controller Driver for Windows<br>Server 2019, Windows Server 2022 and<br>Windows Server 2025                                                               | cp067563.exe                                           | HPE Smart Array<br>E208e-p SR Gen10<br>Controller | 1016.24.0.1<br>002 | 1016.24.0.100<br>2                              |
| 174 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2022 edition     | cp064819.exe                                           | HPE_MR416i-<br>o_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 175 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2022 edition     | cp064819.exe                                           | HPE_MR416i-<br>p_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 176 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2022 edition     | cp064819.exe                                           | HPE_MR216i-<br>o_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 177 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2022 edition     | cp064819.exe                                           | HPE_MR408i-<br>o_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 178 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft<br>Windows 2022 edition     | cp064819.exe                                           | HPE_MR216i-<br>p_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |
| 179 | MR416i-p, MR416i-a, MR216i-p,<br>MR216i-a Gen10p Controllers and<br>MR416i-o, MR416i-p, MR216i-o,<br>MR216i-p, MR408i-o , MR408i-p Gen11<br>Controllers driver for Microsoft                             | cp064819.exe                                           | HPE_MR408i-<br>p_Gen11                            | 7.732.3.0          | 7.732.3.0                                       |

|  |                      |  |  |  |  |
|--|----------------------|--|--|--|--|
|  | Windows 2022 edition |  |  |  |  |
|--|----------------------|--|--|--|--|

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

| No. | Description                                                                                                | Package filename                                      | Device                                                 | Package Version | Firmware/Driver version  |
|-----|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------------|-----------------|--------------------------|
| 180 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2022 | cp063576.exe                                          | HPE SN1620E 32Gb 2p FC HBA                             | 14.4.393.20     | 14.4.393.20              |
| 181 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2022 | cp063576.exe                                          | HPE SN1720E 64Gb 2p FC HBA                             | 14.4.393.20     | 14.4.393.20              |
| 182 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2025 | cp066363.exe                                          | HPE SN1620E 32Gb 2p FC HBA                             | 14.4.393.20 (b) | 14.4.393.20              |
| 183 | HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2025 | cp066363.exe                                          | HPE SN1720E 64Gb 2p FC HBA                             | 14.4.393.20 (b) | 14.4.393.20              |
| 184 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2022 | cp064250.exe                                          | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 9.4.11.20       | 9.4.11.20                |
| 185 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2022 | cp064250.exe                                          | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 9.4.11.20       | 9.4.11.20                |
| 186 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2025 | cp066395.exe                                          | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 9.4.11.20 (b)   | 9.4.11.20                |
| 187 | HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2025 | cp066395.exe                                          | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 9.4.11.20 (b)   | 9.4.11.20                |
| 188 | Red Hat Enterprise Linux 9 Update 5 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapter        | kmod-elx-lpfc-14.4.473.24-1.rhel9u5.x86_64.rpm        | HPE SN1620E 32Gb 2p FC HBA                             | 14.4.473.24     | 14.4.473.24-1.rhel9u5    |
| 189 | Red Hat Enterprise Linux 9 Update 5 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapter        | kmod-elx-lpfc-14.4.473.24-1.rhel9u5.x86_64.rpm        | HPE SN1720E 64Gb 2p FC HBA                             | 14.4.473.24     | 14.4.473.24-1.rhel9u5    |
| 190 | Red Hat Enterprise Linux 9 Update 5 Server Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters       | kmod-qlgc-qla2xxx-10.02.14.00_k1-1.rhel9u5.x86_64.rpm | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 10.02.14.00 -k1 | 10.02.14.00_k1-1.rhel9u5 |
| 191 | Red Hat Enterprise Linux 9 Update 5 Server Fibre Channel Driver Kit for HPE QLogic Host Bus Adapters       | kmod-qlgc-qla2xxx-10.02.14.00_k1-1.rhel9u5.x86_64.rpm | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 10.02.14.00 -k1 | 10.02.14.00_k1-1.rhel9u5 |

## 6.2.8 Driver – System Management

| No. | Description                                                                       | Package filename | Device | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------------------------------------------|------------------|--------|-----------------|-------------------------|
| 192 | iLO 6 Automatic Server Recovery Driver for Microsoft Windows Server 2022          | cp068360.exe     | -      | 4.7.1.0 (H)     | 4.7.1.0                 |
| 193 | iLO 6 Automatic Server Recovery Driver for Microsoft Windows Server 2025          | cp068362.exe     | -      | 4.7.2.0 (F)     | 4.7.2.0                 |
| 194 | iLO 6 Channel Interface Driver for Microsoft Windows Server 2022                  | cp068359.exe     | -      | 4.7.1.0 (H)     | 4.7.1.0                 |
| 195 | iLO 6 Channel Interface Driver for Microsoft Windows Server 2025                  | cp068361.exe     | -      | 4.7.2.0 (F)     | 4.7.2.0                 |
| 196 | iLO 7 Automatic Server Recovery Driver for Microsoft Windows Server 2022 and 2025 | cp068368.exe     | -      | 4.8.0.0 (D)     | 4.8.0.0                 |
| 197 | iLO 7 Channel Interface Driver for Microsoft Windows Server 2022 and 2025         | cp068367.exe     | -      | 4.8.0.0 (D)     | 4.8.0.0                 |



## 6.2.9 Driver – Video

| No. | Description                                                                             | Package filename | Device | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------------------------------------------------|------------------|--------|-----------------|-------------------------|
| 198 | Matrox G200eH3 Video Controller Driver for Microsoft Windows Server 2019, 2022 and 2025 | cp068363.exe     | -      | 9.15.1.268 (E)  | 9.15.1.268              |
| 199 | Matrox G200eH5 Video Controller Driver for Microsoft Windows Server 2022 and 2025       | cp068369.exe     | -      | 9.15.1.271 (C)  | 9.15.1.271              |

## 6.2.10 Firmware – Lights-Out Management

| No. | Description                                       | Package filename      | Device | Package Version | Firmware/Driver version     |
|-----|---------------------------------------------------|-----------------------|--------|-----------------|-----------------------------|
| 200 | Hitachi Online ROM Flash Firmware Package - iLO 7 | ilo7_1.17.00.fwpkg    | -      | 1.17.00         | 1.17.00_pass_53 Aug 13 2025 |
| 201 | Language Pack - Japanese                          | lang_ja_117.lpk.fwpkg | -      | 1.17.00         | 1.17.11 Aug 27 2025         |

## 6.2.11 Firmware – Network

| No. | Description                                                                     | Package filename                                   | Device                                                           | Package Version | Firmware/Driver version |
|-----|---------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------|-----------------|-------------------------|
| 202 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57414 10/25GbE 2p SFP28 Adptr                                | 233.1.135.7     | 233.1.135.7             |
| 203 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57414 10/25GbE 2p SFP28 OCP3 Adptr                           | 233.1.135.7     | 233.1.135.7             |
| 204 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57416 10GbE 2p BASE-T Adptr                                  | 233.1.135.7     | 233.1.135.7             |
| 205 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57416 10GbE 2p BASE-T OCP3 Adptr                             | 233.1.135.7     | 233.1.135.7             |
| 206 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57412 10GbE 2p SFP+ Adptr                                    | 233.1.135.7     | 233.1.135.7             |
| 207 | Broadcom Firmware Package for BCM5741x adapters                                 | bcm233.1.135.7.pup.fwpkg                           | BCM 57412 10GbE 2p SFP+ OCP3 Adptr                               | 233.1.135.7     | 233.1.135.7             |
| 208 | Broadcom Firmware Package for BCM5750x adapters                                 | bcm233.1.135.7_Thor.pup.fwpkg                      | BCM 57504 10/25GbE 4p SFP28 Adptr                                | 233.1.135.7     | 233.1.135.7             |
| 209 | Broadcom Firmware Package for BCM5750x adapters                                 | bcm233.1.135.7_Thor.pup.fwpkg                      | BCM 57504 10/25GbE 4p SFP28 OCP3 Adptr                           | 233.1.135.7     | 233.1.135.7             |
| 210 | Broadcom Firmware Package for BCM57608 100GbE 2p Adapter                        | BCM233.1.135.7_BC M957608-P2100HQF00.fwpkg         | Broadcom NetXtreme-E BCM57608 100GbE 2p QSFP112 Adptr            | 233.1.135.7     | 233.1.135.7             |
| 211 | Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter                   | BCM233.1.135.7_BC M957608-N2100HQI00.fwpkg         | Broadcom NetXtreme-E BCM57608 100GbE QSFP112 OCP3 Adptr          | 233.1.135.7     | 233.1.135.7             |
| 212 | Broadcom NX1 Firmware Package for BCM5719 OCP3 adapter                          | BCM5719N1905HC-4x1G-14E4-1657-14E4-1590.fwpkg      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE | 20.33.41        | 20.33.41                |
| 213 | Broadcom NX1 Firmware Package for BCM5719 adapter                               | BCM5719A1907HC-4x1G-14E4-1657-14E4-1591.fwpkg      | Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE      | 20.33.41        | 20.33.41                |
| 214 | Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter      | HPE_E810_CQDA2_4p80_PLDMoMCTP_80020543.fwpkg       | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE    | 4.80            | 4.80                    |
| 215 | Intel Firmware Package For E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter | HPE_E810_CQDA2_OCP_4p80_NCSlWPLD MoMCTP_8002053D.f | Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3               | 4.80            | 4.80                    |

|     |                                                                                                                                                                          | wpkg                                                        | Adapter for HPE                                                 |            |            |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------|------------|------------|
| 216 | Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter                                                                                             | HPE_E810_XXVDA2_S D_4p80_PLDMoMCTP_8002053C.fwpkg           | Intel E810-XXVDA2 adapter                                       | 4.80       | 4.80       |
| 217 | Intel Firmware Package For E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter                                                                                        | HPE_E810_XXVDA2_S D_OCP_4p80_NCSlwP LDMoMCTP_80020544.fwpkg | Intel E810-XXVDA2 OCP3 adapter                                  | 4.80       | 4.80       |
| 218 | Intel Firmware Package For E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter                                                                                             | HPE_E810_XXVDA4_F H_4p80_PLDMoMCTP_80020540.fwpkg           | Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE | 4.80       | 4.80       |
| 219 | NVIDIA Firmware Package (FWPKG) - Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE                                                                | 26_45_1020-MCX631102AS-ADA_Ax.pldm.fwpkg                    | MLX MCX631102 10/25GbE 2p SFP28 Adptr                           | 26.45.1020 | 26.45.1020 |
| 220 | NVIDIA Firmware Package (FWPKG) - Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE                                                           | 26_45_1020-MCX631432AS-ADA_Ax.pldm.fwpkg                    | MLX MCX6314 10/25GbE 2p SFP28 OCP3 Adptr                        | 26.45.1020 | 26.45.1020 |
| 221 | NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16 MCX75310AAS-NEAT Adapter : HPE part numbers P45641-B23 and P45641-H23        | 28_45_1200-MCX75310AAS-NEAT_HPE2_Ax.pldm.fwpkg              | HPE IB NDR/EN 400G 1p OSFP Adptr                                | 28.45.1200 | 28.45.1200 |
| 222 | NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter : HPE part numbers P45642-B22 and P45642-H22     | 28_45_1200-MCX75310AAS-HEAT_HPE2_Ax.pldm.fwpkg              | HPE IB NDR200/EN 200G 1p OSFP Adptr                             | 28.45.1200 | 28.45.1200 |
| 223 | NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200GbE 2-port QSFP112 PCIe5 x16 MCX755106AC-HEAT Adapter : HPE part numbers P65333-B21 and P65333-H21 | 28_45_1200-MCX755106AC-HEAT_HPE_Ax.pldm.fwpkg               | HPE IB NDR200/EN 200G 2p QSFP112 Adptr                          | 28.45.1200 | 28.45.1200 |
| 224 | NVIDIA Firmware Package (FWPKG) for Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE                                                               | 22_45_1020-MCX623106AS-CDA_Ax.pldm.fwpkg                    | HPE Ethernet 100Gb 2-port QSFP56 MCX623106AS-CDAT Adapter       | 22.45.1020 | 22.45.1020 |

## 6.2.12 Firmware - PCIe NVMe Storage Disk

| No. | Description                                                                                                                                                       | Package filename                   | Device        | Package Version | Firmware/Driver version |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|-----------------|-------------------------|
| 225 | Universal Firmware Package for Drives - VR000480KXNXE,VR000960KXNZU and VS001920KXNXF                                                                             | Micron_7450_M7450 ALLHPK4.fwpkg    | VR000480KXNXE | HPK4            | HPK4                    |
| 226 | Universal Firmware Package for Drives - VR000480KXNXE,VR000960KXNZU and VS001920KXNXF                                                                             | Micron_7450_M7450 ALLHPK4.fwpkg    | VR000960KXNZU | HPK4            | HPK4                    |
| 227 | Universal Firmware Package for Drives - VR000480KXNXE,VR000960KXNZU and VS001920KXNXF                                                                             | Micron_7450_M7450 ALLHPK4.fwpkg    | VS001920KXNXF | HPK4            | HPK4                    |
| 228 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | MO000800KXPRV | HPK2            | HPK2                    |
| 229 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | MO001600KXPTR | HPK2            | HPK2                    |
| 230 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN,                                 | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | MO003200KXPTT | HPK2            | HPK2                    |

|     |                                                                                                                                                                                  |                                    |               |      |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|------|------|
|     | VO003840KXPTP and VO007680KXPTQ                                                                                                                                                  |                                    |               |      |      |
| 231 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ                | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | MO006400KXPTU | HPK2 | HPK2 |
| 232 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ                | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | VO000960KXPRU | HPK2 | HPK2 |
| 233 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ                | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | VO001920KXPTN | HPK2 | HPK2 |
| 234 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ                | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | VO003840KXPTP | HPK2 | HPK2 |
| 235 | Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ                | SKHynix_PE81X0_KPE 81X0AHPK2.fwpkg | VO007680KXPTQ | HPK2 | HPK2 |
| 236 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | MO000800KXUJT | HPK2 | HPK2 |
| 237 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | MO001600KXUJU | HPK2 | HPK2 |
| 238 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | MO003200KXUJV | HPK2 | HPK2 |
| 239 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | MO006400KXUKA | HPK2 | HPK2 |
| 240 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | VO000960KXUJN | HPK2 | HPK2 |
| 241 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | VO001920KXUJP | HPK2 | HPK2 |
| 242 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP,                                                | Kioxia_CD8_KACD8AL SHPK2.fwpkg     | VO003840KXUJQ | HPK2 | HPK2 |

|     |                                                                                                                                                                                  |                                             |               |      |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------|------|------|
|     | VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ                                                                                                                                   |                                             |               |      |      |
| 243 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg              | VO007680KXUJR | HPK2 | HPK2 |
| 244 | Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ | Kioxia_CD8_KACD8AL SHPK2.fwpkg              | VO015360KYGZQ | HPK2 | HPK2 |
| 245 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | MO006400KYDZU | HPK1 | HPK1 |
| 246 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | MO003200KYDZT | HPK1 | HPK1 |
| 247 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | MO001600KYDZR | HPK1 | HPK1 |
| 248 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | MO000800KYDZK | HPK1 | HPK1 |
| 249 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | VO007680KYDZP | HPK1 | HPK1 |
| 250 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | VO003840KYDZN | HPK1 | HPK1 |
| 251 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | VO001920KYDZL | HPK1 | HPK1 |
| 252 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | VO000960KYDZH | HPK1 | HPK1 |
| 253 | Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL,                                                | Micron_7500_Micron_7500_M7500ALLHPK 1.fwpkg | VO001536KYDZQ | HPK1 | HPK1 |

|     |                                                                                                                                                    |                                    |               |      |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|------|------|
|     | VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP                                                                                                     |                                    |               |      |      |
| 254 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | MO001600KXVYH | HPK3 | HPK3 |
| 255 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | MO003200KXVZD | HPK3 | HPK3 |
| 256 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | MO006400KXVZE | HPK3 | HPK3 |
| 257 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | VO001920KXVYF | HPK3 | HPK3 |
| 258 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | VO003840KXVZA | HPK3 | HPK3 |
| 259 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | VO007680KXVZB | HPK3 | HPK3 |
| 260 | Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC | Kioxia_CM7_KACM7A LSHPK3.fwpkg     | VO015360KXVZC | HPK3 | HPK3 |
| 261 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | MO001600KYDMU | HPK6 | HPK6 |
| 262 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | MO003200KYDNC | HPK6 | HPK6 |
| 263 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | MO006400KYDND | HPK6 | HPK6 |
| 264 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | VO001920KYDMT | HPK6 | HPK6 |
| 265 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | VO003840KYDMV | HPK6 | HPK6 |
| 266 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA                   | Samsung_PM173X_G PM173XAHPK6.fwpkg | VO007680KYDNA | HPK6 | HPK6 |

|     |                                                                                                                                                    |                                    |               |      |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|------|------|
|     | and VO015360KYDNB                                                                                                                                  |                                    |               |      |      |
| 267 | Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB | Samsung_PM173X_G PM173XAHPK6.fwpkg | VO015360KYDNB | HPK6 | HPK6 |
| 268 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | VO015360KYFER | HPK2 | HPK2 |
| 269 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | VO007680KYFEQ | HPK2 | HPK2 |
| 270 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | VO003840KYFEP | HPK2 | HPK2 |
| 271 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | VO001920KYFFE | HPK2 | HPK2 |
| 272 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | MO006400KYFEU | HPK2 | HPK2 |
| 273 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | MO003200KYFET | HPK2 | HPK2 |
| 274 | Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER | SKHynix_PS10x0_KPS 10x0U3DK2.fwpkg | MO001600KYFFF | HPK2 | HPK2 |
| 275 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | MO001600KZYWU | HPK5 | HPK5 |
| 276 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | MO003200KZYXB | HPK5 | HPK5 |
| 277 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | MO006400KZYXC | HPK5 | HPK5 |
| 278 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | VO001920KZYWT | HPK5 | HPK5 |
| 279 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | VO003840KZYWV | HPK5 | HPK5 |
| 280 | Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA                | Solidigm_P5x20_4IAA HPK5.fwpkg     | VO007680KZYXA | HPK5 | HPK5 |
| 281 | Universal Firmware Package for Drives -                                                                                                            | Kioxia_CM7_KACM7A                  | MO001600YXUJB | HPK3 | HPK3 |

|     |                                                                                                                                                                |                                       |               |      |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------|------|------|
|     | MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                                                              | LFHPK3.fwpkg                          |               |      |      |
| 282 | Universal Firmware Package for Drives -<br>MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                   | Kioxia_CM7_KACM7A<br>LFHPK3.fwpkg     | MO003200YXUJC | HPK3 | HPK3 |
| 283 | Universal Firmware Package for Drives -<br>MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                   | Kioxia_CM7_KACM7A<br>LFHPK3.fwpkg     | MO006400YXUJD | HPK3 | HPK3 |
| 284 | Universal Firmware Package for Drives -<br>MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                   | Kioxia_CM7_KACM7A<br>LFHPK3.fwpkg     | VO001920YXUHU | HPK3 | HPK3 |
| 285 | Universal Firmware Package for Drives -<br>MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                   | Kioxia_CM7_KACM7A<br>LFHPK3.fwpkg     | VO003840YXUHV | HPK3 | HPK3 |
| 286 | Universal Firmware Package for Drives -<br>MO001600YXUJB, MO003200YXUJC,<br>MO006400YXUJD, VO001920YXUHU,<br>VO003840YXUHV and VO007680YXUJA                   | Kioxia_CM7_KACM7A<br>LFHPK3.fwpkg     | VO007680YXUJA | HPK3 | HPK3 |
| 287 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | VV015360LYHDC | HPK3 | HPK3 |
| 288 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | MV006400LYCBB | HPK3 | HPK3 |
| 289 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | MV003200LYCBA | HPK3 | HPK3 |
| 290 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | MV001600LYCBT | HPK3 | HPK3 |
| 291 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | VV001920LYCBR | HPK3 | HPK3 |
| 292 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | VV003840LYCAU | HPK3 | HPK3 |
| 293 | Universal Firmware Package for Drives -<br>MV001600LYCBT, MV003200LYCBA,<br>MV006400LYCBB, VV015360LYHDC,<br>VV001920LYCBR, VV003840LYCAU and<br>VV007680LYCAV | Kioxia_CD8P_KACD8A<br>LEHPK3.fwpkg    | VV007680LYCAV | HPK3 | HPK3 |
| 294 | Universal Firmware Package for Drives -<br>MV003200KYFFK, MV006400KYFFA,<br>MV012800KYFFB, VV003840KYFFH,<br>VV007680KYFFL and VV015360KYFEV                   | SKHynix_PS10x0_KPS<br>10x0E3SK3.fwpkg | MV003200KYFFK | HPK3 | HPK3 |
| 295 | Universal Firmware Package for Drives -<br>MV003200KYFFK, MV006400KYFFA,<br>MV012800KYFFB, VV003840KYFFH,<br>VV007680KYFFL and VV015360KYFEV                   | SKHynix_PS10x0_KPS<br>10x0E3SK3.fwpkg | MV006400KYFFA | HPK3 | HPK3 |

|     |                                                                                                                                                                   |                                             |               |      |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------|------|------|
| 296 | Universal Firmware Package for Drives - MV003200KYFFK, MV006400KYFFA, MV012800KYFFB, VV003840KYFFH, VV007680KYFFL and VV015360KYFEV                               | SKHynix_PS10x0_KPS 10x0E3SK3.fwpkg          | MV012800KYFFB | HPK3 | HPK3 |
| 297 | Universal Firmware Package for Drives - MV003200KYFFK, MV006400KYFFA, MV012800KYFFB, VV003840KYFFH, VV007680KYFFL and VV015360KYFEV                               | SKHynix_PS10x0_KPS 10x0E3SK3.fwpkg          | VV003840KYFFH | HPK3 | HPK3 |
| 298 | Universal Firmware Package for Drives - MV003200KYFFK, MV006400KYFFA, MV012800KYFFB, VV003840KYFFH, VV007680KYFFL and VV015360KYFEV                               | SKHynix_PS10x0_KPS 10x0E3SK3.fwpkg          | VV007680KYFFL | HPK3 | HPK3 |
| 299 | Universal Firmware Package for Drives - MV003200KYFFK, MV006400KYFFA, MV012800KYFFB, VV003840KYFFH, VV007680KYFFL and VV015360KYFEV                               | SKHynix_PS10x0_KPS 10x0E3SK3.fwpkg          | VV015360KYFEV | HPK3 | HPK3 |
| 300 | Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH                                              | Kioxia_CM7_KACM7A LEHPK7.fwpkg              | MV003200LXUJK | HPK7 | HPK7 |
| 301 | Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH                                              | Kioxia_CM7_KACM7A LEHPK7.fwpkg              | MV006400LXUJL | HPK7 | HPK7 |
| 302 | Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH                                              | Kioxia_CM7_KACM7A LEHPK7.fwpkg              | VV003840LXUJE | HPK7 | HPK7 |
| 303 | Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH                                              | Kioxia_CM7_KACM7A LEHPK7.fwpkg              | VV007680LXUJF | HPK7 | HPK7 |
| 304 | Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH                                              | Kioxia_CM7_KACM7A LEHPK7.fwpkg              | VV015360LXUJH | HPK7 | HPK7 |
| 305 | Universal Firmware Package for Drives - MV003200LYJKH, MV006400LYJKK, VV007680LYJKF and VV015360LYXMT                                                             | Kioxia_CM7_KACM7A EFHPK4.fwpkg              | MV003200LYJKH | HPK4 | HPK4 |
| 306 | Universal Firmware Package for Drives - MV003200LYJKH, MV006400LYJKK, VV007680LYJKF and VV015360LYXMT                                                             | Kioxia_CM7_KACM7A EFHPK4.fwpkg              | MV006400LYJKK | HPK4 | HPK4 |
| 307 | Universal Firmware Package for Drives - MV003200LYJKH, MV006400LYJKK, VV007680LYJKF and VV015360LYXMT                                                             | Kioxia_CM7_KACM7A EFHPK4.fwpkg              | VV007680LYJKF | HPK4 | HPK4 |
| 308 | Universal Firmware Package for Drives - MV003200LYJKH, MV006400LYJKK, VV007680LYJKF and VV015360LYXMT                                                             | Kioxia_CM7_KACM7A EFHPK4.fwpkg              | VV015360LYXMT | HPK4 | HPK4 |
| 309 | Universal Firmware Package for Drives - VK000960KYDPT, VK001920KYDPU, VK003840KYDPV and VK007680KYDQA                                                             | Samsung_PM9A3_GP M9A3SAHPK5.fwpkg           | VK000960KYDPT | HPK5 | HPK5 |
| 310 | Universal Firmware Package for Drives - VK000960KYDPT, VK001920KYDPU, VK003840KYDPV and VK007680KYDQA                                                             | Samsung_PM9A3_GP M9A3SAHPK5.fwpkg           | VK001920KYDPU | HPK5 | HPK5 |
| 311 | Universal Firmware Package for Drives - VK000960KYDPT, VK001920KYDPU, VK003840KYDPV and VK007680KYDQA                                                             | Samsung_PM9A3_GP M9A3SAHPK5.fwpkg           | VK003840KYDPV | HPK5 | HPK5 |
| 312 | Universal Firmware Package for Drives - VK000960KYDPT, VK001920KYDPU, VK003840KYDPV and VK007680KYDQA                                                             | Samsung_PM9A3_GP M9A3SAHPK5.fwpkg           | VK007680KYDQA | HPK5 | HPK5 |
| 313 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | VO001920KXNZQ | HPS3 | HPS3 |



|     |                                                                                                                                                                   |                                             |               |      |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|---------------|------|------|
| 314 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | VO003840KXNZR | HPS3 | HPS3 |
| 315 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | VO007680KXNZT | HPS3 | HPS3 |
| 316 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | MO000800KXNXH | HPS3 | HPS3 |
| 317 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | MO001600KXNZV | HPS3 | HPS3 |
| 318 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | MO003200KXPAA | HPS3 | HPS3 |
| 319 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | MO006400KXPAB | HPS3 | HPS3 |
| 320 | Universal Firmware Package for Drives - VO000960KXNXD, VO001920KXNZQ, VO003840KXNZR, VO007680KXNZT, MO000800KXNXH, MO001600KXNZV, MO003200KXPAA and MO006400KXPAB | Micron_7450_Micron_7450_M7450ALLHPS 3.fwpkg | VO000960KXNXD | HPS3 | HPS3 |
| 321 | Universal Firmware Package for Drives - VR000480KXLXF                                                                                                             | Samsung_PM9A3_GP M9A3SAHPK4.fwpkg           | VR000480KXLXF | HPK4 | HPK4 |
| 322 | Universal Firmware Package for Drives - VR000480KYXPQ, VR000960KYXQA and VR001920KYXQB                                                                            | SKHynix_PE90X0_KPE 9010IHPK2.fwpkg          | VR000480KYXPQ | HPK2 | HPK2 |
| 323 | Universal Firmware Package for Drives - VR000480KYXPQ, VR000960KYXQA and VR001920KYXQB                                                                            | SKHynix_PE90X0_KPE 9010IHPK2.fwpkg          | VR000960KYXQA | HPK2 | HPK2 |
| 324 | Universal Firmware Package for Drives - VR000480KYXPQ, VR000960KYXQA and VR001920KYXQB                                                                            | SKHynix_PE90X0_KPE 9010IHPK2.fwpkg          | VR001920KYXQB | HPK2 | HPK2 |
| 325 | Universal Firmware Package for Drives - VR000960YYXPR                                                                                                             | SKHynix_PE90X0_KPE 9010SHPK2.fwpkg          | VR000960YYXPR | HPK2 | HPK2 |
| 326 | Universal Firmware Package for Drives - VV001920LYDTT, VV003840LYDTU and VV007680LYDTV                                                                            | Kioxia_CD7_KACD7AL SHPK6.fwpkg              | VV001920LYDTT | HPK6 | HPK6 |
| 327 | Universal Firmware Package for Drives - VV001920LYDTT, VV003840LYDTU and VV007680LYDTV                                                                            | Kioxia_CD7_KACD7AL SHPK6.fwpkg              | VV003840LYDTU | HPK6 | HPK6 |
| 328 | Universal Firmware Package for Drives - VV001920LYDTT, VV003840LYDTU and VV007680LYDTV                                                                            | Kioxia_CD7_KACD7AL SHPK6.fwpkg              | VV007680LYDTV | HPK6 | HPK6 |
| 329 | Universal Firmware Package for Drives - VV003840KXNTH, VV007680KXNTN and                                                                                          | Samsung_PM1743_G PM1743HPK6.fwpkg           | VV003840KXNTH | HPK6 | HPK6 |

|     |                                                                                        |                                    |               |      |      |
|-----|----------------------------------------------------------------------------------------|------------------------------------|---------------|------|------|
|     | VV015360KXNTP                                                                          |                                    |               |      |      |
| 330 | Universal Firmware Package for Drives - VV003840KXNTH, VV007680KXNTN and VV015360KXNTP | Samsung_PM1743_G PM1743HPK6.fwpkg  | VV007680KXNTN | HPK6 | HPK6 |
| 331 | Universal Firmware Package for Drives - VV003840KXNTH, VV007680KXNTN and VV015360KXNTP | Samsung_PM1743_G PM1743HPK6.fwpkg  | VV015360KXNTP | HPK6 | HPK6 |
| 332 | Universal Firmware Package for Drives - VV003840KXWBF, VV007680KXWBL and VV015360KXWBN | Solidigm_P5x30_SP54 304KHPK5.fwpkg | VV003840KXWBF | HPK5 | HPK5 |
| 333 | Universal Firmware Package for Drives - VV003840KXWBF, VV007680KXWBL and VV015360KXWBN | Solidigm_P5x30_SP54 304KHPK5.fwpkg | VV007680KXWBL | HPK5 | HPK5 |
| 334 | Universal Firmware Package for Drives - VV003840KXWBF, VV007680KXWBL and VV015360KXWBN | Solidigm_P5x30_SP54 304KHPK5.fwpkg | VV015360KXWBN | HPK5 | HPK5 |

### 6.2.13 Firmware – SAS Storage Disk

| No. | Description                                                                                                          | Package filename                    | Device        | Package Version | Firmware/Driver version |
|-----|----------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------|-----------------|-------------------------|
| 335 | Universal Firmware Package for Drive - MB016000JWXKH                                                                 | Toshiba_MG08_TAM G08scHPDC.fwpkg    | MB016000JWXKH | HPDC            | HPDC                    |
| 336 | Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU | Seagate_Skybolt_SSK YBT512ND9.fwpkg | EG000600JWJNP | HPD9            | HPD9                    |
| 337 | Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU | Seagate_Skybolt_SSK YBT512ND9.fwpkg | EG001200MXJQU | HPD9            | HPD9                    |
| 338 | Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU | Seagate_Skybolt_SSK YBT512ND9.fwpkg | EG001200JWJNQ | HPD9            | HPD9                    |
| 339 | Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU | Seagate_Skybolt_SSK YBT512ND9.fwpkg | EG000600JXLVV | HPD9            | HPD9                    |
| 340 | Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU | Seagate_Skybolt_SSK YBT512ND9.fwpkg | EG001200JXLWA | HPD9            | HPD9                    |
| 341 | Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT | Seagate_Skybolt_SSK YBT512EDB.fwpkg | EG002400MXJQT | HPDB            | HPDB                    |
| 342 | Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT | Seagate_Skybolt_SSK YBT512EDB.fwpkg | EG001800JWJNR | HPDB            | HPDB                    |
| 343 | Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT | Seagate_Skybolt_SSK YBT512EDB.fwpkg | EG002400JWJNT | HPDB            | HPDB                    |
| 344 | Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT | Seagate_Skybolt_SSK YBT512EDB.fwpkg | EG001800JXLWB | HPDB            | HPDB                    |
| 345 | Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT | Seagate_Skybolt_SSK YBT512EDB.fwpkg | EG002400JXLWC | HPDB            | HPDB                    |
| 346 | Universal Firmware Package for Drives - MB001000JWWPV, MB002000JWWQA                                                 | Seagate_Cimarron_SC IMARRNSD8.fwpkg | MB001000JWWPV | HPD8            | HPD8                    |

|     |                                                                                                                      |                                       |               |          |      |
|-----|----------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------|----------|------|
|     | and MB004000JWWQB                                                                                                    |                                       |               |          |      |
| 347 | Universal Firmware Package for Drives - MB001000JWWPV, MB002000JWWQA and MB004000JWWQB                               | Seagate_Cimarron_SC IMARRNNSD8.fwpkg  | MB002000JWWQA | HPD8     | HPD8 |
| 348 | Universal Firmware Package for Drives - MB001000JWWPV, MB002000JWWQA and MB004000JWWQB                               | Seagate_Cimarron_SC IMARRNNSD8.fwpkg  | MB004000JWWQB | HPD8     | HPD8 |
| 349 | Universal Firmware Package for Drives - MB002000JYDNE and MB004000JYDPB                                              | Seagate_CimarronBP_SCIMARBPNSD6.fwpkg | MB002000JYDNE | HPD6     | HPD6 |
| 350 | Universal Firmware Package for Drives - MB002000JYDNE and MB004000JYDPB                                              | Seagate_CimarronBP_SCIMARBPNSD6.fwpkg | MB004000JYDPB | HPD6     | HPD6 |
| 351 | Universal Firmware Package for Drives - MB004000JWZVU                                                                | Toshiba_MG08Air_TA MG08SDAnD3.fwpkg   | MB004000JWZVU | HPD3 (B) | HPD3 |
| 352 | Universal Firmware Package for Drives - MB006000JWZVQ and MB008000JWZVR                                              | Toshiba_MG08Air_TA MG08SDAeD3.fwpkg   | MB006000JWZVQ | HPD3 (B) | HPD3 |
| 353 | Universal Firmware Package for Drives - MB006000JWZVQ and MB008000JWZVR                                              | Toshiba_MG08Air_TA MG08SDAeD3.fwpkg   | MB008000JWZVR | HPD3 (B) | HPD3 |
| 354 | Universal Firmware Package for Drives - MB006000JYDNF, MB008000JYDPC and MB010000JYDNH                               | Seagate_CimarronBP_SCIMARBPESD5.fwpkg | MB008000JYDPC | HPD5     | HPD5 |
| 355 | Universal Firmware Package for Drives - MB006000JYDNF, MB008000JYDPC and MB010000JYDNH                               | Seagate_CimarronBP_SCIMARBPESD5.fwpkg | MB006000JYDNF | HPD5     | HPD5 |
| 356 | Universal Firmware Package for Drives - MB006000JYDNF, MB008000JYDPC and MB010000JYDNH                               | Seagate_CimarronBP_SCIMARBPESD5.fwpkg | MB010000JYDNH | HPD5     | HPD5 |
| 357 | Universal Firmware Package for Drives - MB008000JWWQP and MB006000JWWQN                                              | Seagate_Cimarron_SC IMARRNESD8.fwpkg  | MB008000JWWQP | HPD8     | HPD8 |
| 358 | Universal Firmware Package for Drives - MB008000JWWQP and MB006000JWWQN                                              | Seagate_Cimarron_SC IMARRNESD8.fwpkg  | MB006000JWWQN | HPD8     | HPD8 |
| 359 | Universal Firmware Package for Drives - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE                | Seagate_Evans_SHPE EVANSSD4.fwpkg     | MB012000JWZHB | HPD4     | HPD4 |
| 360 | Universal Firmware Package for Drives - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE                | Seagate_Evans_SHPE EVANSSD4.fwpkg     | MB010000JWZHA | HPD4     | HPD4 |
| 361 | Universal Firmware Package for Drives - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE                | Seagate_Evans_SHPE EVANSSD4.fwpkg     | MB014000JWZHC | HPD4     | HPD4 |
| 362 | Universal Firmware Package for Drives - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE                | Seagate_Evans_SHPE EVANSSD4.fwpkg     | MB016000JWZHE | HPD4     | HPD4 |
| 363 | Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF, MB014000JYCJV, MB016000JYDKL and MB018000JYDKN | Seagate_EvansBP_SH PEEVSBPSD6.fwpkg   | MB010000JYDKK | HPD6     | HPD6 |
| 364 | Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF, MB014000JYCJV, MB016000JYDKL and MB018000JYDKN | Seagate_EvansBP_SH PEEVSBPSD6.fwpkg   | MB012000JYCJF | HPD6     | HPD6 |
| 365 | Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF, MB014000JYCJV, MB016000JYDKL and MB018000JYDKN | Seagate_EvansBP_SH PEEVSBPSD6.fwpkg   | MB014000JYCJV | HPD6     | HPD6 |
| 366 | Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF,                                                | Seagate_EvansBP_SH PEEVSBPSD6.fwpkg   | MB016000JYDKL | HPD6     | HPD6 |

|     |                                                                                                                                     |                                       |               |          |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------|----------|------|
|     | MB014000JYCJV, MB016000JYDKL and MB018000JYDKN                                                                                      |                                       |               |          |      |
| 367 | Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF, MB014000JYCJV, MB016000JYDKL and MB018000JYDKN                | Seagate_EvansBP_SH PEEVSBPDS6.fwpkg   | MB018000JYDKN | HPD6     | HPD6 |
| 368 | Universal Firmware Package for Drives - MB012000JZYVN, MB014000JZYVP, MB016000JZYVQ and MB018000JYCLK                               | Toshiba_MG09_TAM G09scHPD4.fwpkg      | MB012000JZYVN | HPD4     | HPD4 |
| 369 | Universal Firmware Package for Drives - MB012000JZYVN, MB014000JZYVP, MB016000JZYVQ and MB018000JYCLK                               | Toshiba_MG09_TAM G09scHPD4.fwpkg      | MB014000JZYVP | HPD4     | HPD4 |
| 370 | Universal Firmware Package for Drives - MB012000JZYVN, MB014000JZYVP, MB016000JZYVQ and MB018000JYCLK                               | Toshiba_MG09_TAM G09scHPD4.fwpkg      | MB016000JZYVQ | HPD4     | HPD4 |
| 371 | Universal Firmware Package for Drives - MB012000JZYVN, MB014000JZYVP, MB016000JZYVQ and MB018000JYCLK                               | Toshiba_MG09_TAM G09scHPD4.fwpkg      | MB018000JYCLK | HPD4     | HPD4 |
| 372 | Universal Firmware Package for Drives - MB014000JXUCC                                                                               | WDC_ParisC_PCHFA2 BP.fwpkg            | MB014000JXUCC | HPD4     | HPD4 |
| 373 | Universal Firmware Package for Drives - MB016000JXLBA and MB018000JXLAU                                                             | WDC_ParisC_PCHFA2 B3.fwpkg            | MB018000JXLAU | HPD3     | HPD3 |
| 374 | Universal Firmware Package for Drives - MB016000JXLBA and MB018000JXLAU                                                             | WDC_ParisC_PCHFA2 B3.fwpkg            | MB016000JXLBA | HPD3     | HPD3 |
| 375 | Universal Firmware Package for Drives - MB018000JXMTH and MB020000JXMTP                                                             | Seagate_Longspcak_S LONGSPKESD3.fwpkg | MB018000JXMTH | HPD3     | HPD3 |
| 376 | Universal Firmware Package for Drives - MB018000JXMTH and MB020000JXMTP                                                             | Seagate_Longspcak_S LONGSPKESD3.fwpkg | MB020000JXMTP | HPD3     | HPD3 |
| 377 | Universal Firmware Package for Drives - MB020000JXMVU                                                                               | WDC_ParisD_Wparisd ASFD1.fwpkg        | MB020000JXMVU | HPD1 (B) | HPD1 |
| 378 | Universal Firmware Package for Drives - MB12000JYESN, MB16000JYEVC, MB20000JYEVD                                                    | Seagate_Summit_SU MMITSUSND1.fwpkg    | MB12000JYESN  | HPD1 (B) | HPD1 |
| 379 | Universal Firmware Package for Drives - MB12000JYESN, MB16000JYEVC, MB20000JYEVD                                                    | Seagate_Summit_SU MMITSUSND1.fwpkg    | MB16000JYEVC  | HPD1 (B) | HPD1 |
| 380 | Universal Firmware Package for Drives - MB12000JYESN, MB16000JYEVC, MB20000JYEVD                                                    | Seagate_Summit_SU MMITSUSND1.fwpkg    | MB20000JYEVD  | HPD1 (B) | HPD1 |
| 381 | Universal Firmware Package for Drives - MB24000JYEVE                                                                                | Seagate_Summit_SU MMITSUSND1.fwpkg    | MB24000JYEVE  | HPD1 (B) | HPD1 |
| 382 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | MO000960RXKRC | HPD5 (B) | HPD5 |
| 383 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | MO001920RXKRH | HPD5 (B) | HPD5 |
| 384 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | MO003840RXKRC | HPD5 (B) | HPD5 |
| 385 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | VO000960RXKRB | HPD5 (B) | HPD5 |
| 386 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | VO001920RXKRD | HPD5 (B) | HPD5 |
| 387 | Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRC, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE | Seagate_LangeBP_SL NGBPHPESD5.fwpkg   | VO003840RXKRE | HPD5 (B) | HPD5 |

|     |                                                                                                                                                   |                                    |               |          |      |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|----------|------|
|     | VO001920RXKRD and VO003840RXKRE                                                                                                                   |                                    |               |          |      |
| 388 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | MO000960RXRQK | HPD4 (B) | HPD4 |
| 389 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | MO001920XRRH  | HPD4 (B) | HPD4 |
| 390 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | MO003840XRRK  | HPD4 (B) | HPD4 |
| 391 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | VO000960RXRQL | HPD4 (B) | HPD4 |
| 392 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | VO001920XRRL  | HPD4 (B) | HPD4 |
| 393 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | VO003840XRRL  | HPD4 (B) | HPD4 |
| 394 | Universal Firmware Package for Drives - MO000960RXRQK, MO001920XRRH, MO003840XRRK, VO000960RXRQL, VO001920XRRL, VO003840XRRL and VO007680RYEWD    | Seagate_Cooper_SCO OPRHPESD4.fwpkg | VO007680RYEWD | HPD4 (B) | HPD4 |
| 395 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | VO015360PXMTU | HPD4     | HPD4 |
| 396 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | VO007680PXMTT | HPD4     | HPD4 |
| 397 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | VO003840PXMT  | HPD4     | HPD4 |
| 398 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | VO001920PXMTL | HPD4     | HPD4 |
| 399 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | MO006400PXMUA | HPD4     | HPD4 |
| 400 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMT, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | MO003200PXMTV | HPD4     | HPD4 |

|     |                                                                                                                                                    |                                    |               |          |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|----------|------|
| 401 | Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMTM, VO007680PXMTT and VO015360PXMTU | Kioxia_PM7_KAPM7A LSHPD4.fwpkg     | MO001600PXMTN | HPD4     | HPD4 |
| 402 | Universal Firmware Package for Drives - MO001600PXVRU, VO003840PXVRR and VO007680PXVRT                                                             | Kioxia_PM7_KAPM7A LFHPD3.fwpkg     | VO007680PXVRT | HPD3     | HPD3 |
| 403 | Universal Firmware Package for Drives - MO001600PXVRU, VO003840PXVRR and VO007680PXVRT                                                             | Kioxia_PM7_KAPM7A LFHPD3.fwpkg     | VO003840PXVRR | HPD3     | HPD3 |
| 404 | Universal Firmware Package for Drives - MO001600PXVRU, VO003840PXVRR and VO007680PXVRT                                                             | Kioxia_PM7_KAPM7A LFHPD3.fwpkg     | MO001600PXVRU | HPD3     | HPD3 |
| 405 | Universal Firmware Package for Drives - MO001600PZWSH, MO003200PZWSK, MO000800PZWSF and MO006400PZXFA                                              | Samsung_PM165X_G PM1655SAMD4.fwpkg | MO001600PZWSH | HPD4     | HPD4 |
| 406 | Universal Firmware Package for Drives - MO001600PZWSH, MO003200PZWSK, MO000800PZWSF and MO006400PZXFA                                              | Samsung_PM165X_G PM1655SAMD4.fwpkg | MO003200PZWSK | HPD4     | HPD4 |
| 407 | Universal Firmware Package for Drives - MO001600PZWSH, MO003200PZWSK, MO000800PZWSF and MO006400PZXFA                                              | Samsung_PM165X_G PM1655SAMD4.fwpkg | MO000800PZWSF | HPD4     | HPD4 |
| 408 | Universal Firmware Package for Drives - MO001600PZWSH, MO003200PZWSK, MO000800PZWSF and MO006400PZXFA                                              | Samsung_PM165X_G PM1655SAMD4.fwpkg | MO006400PZXFA | HPD4     | HPD4 |
| 409 | Universal Firmware Package for Drives - VO000960PZWSL, VO001920PZWSN, VO003840PZWSP, VO007680PZXFB and VO015360PZXEU                               | Samsung_PM165X_G PM1653SAMD4.fwpkg | VO000960PZWSL | HPD4     | HPD4 |
| 410 | Universal Firmware Package for Drives - VO000960PZWSL, VO001920PZWSN, VO003840PZWSP, VO007680PZXFB and VO015360PZXEU                               | Samsung_PM165X_G PM1653SAMD4.fwpkg | VO001920PZWSN | HPD4     | HPD4 |
| 411 | Universal Firmware Package for Drives - VO000960PZWSL, VO001920PZWSN, VO003840PZWSP, VO007680PZXFB and VO015360PZXEU                               | Samsung_PM165X_G PM1653SAMD4.fwpkg | VO003840PZWSP | HPD4     | HPD4 |
| 412 | Universal Firmware Package for Drives - VO000960PZWSL, VO001920PZWSN, VO003840PZWSP, VO007680PZXFB and VO015360PZXEU                               | Samsung_PM165X_G PM1653SAMD4.fwpkg | VO007680PZXFB | HPD4     | HPD4 |
| 413 | Universal Firmware Package for Drives - VO000960PZWSL, VO001920PZWSN, VO003840PZWSP, VO007680PZXFB and VO015360PZXEU                               | Samsung_PM165X_G PM1653SAMD4.fwpkg | VO015360PZXEU | HPD4     | HPD4 |
| 414 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg     | VO000960RZWUP | HPD1 (B) | HPD1 |
| 415 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg     | VO000960RZWUQ | HPD1 (B) | HPD1 |
| 416 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg     | VO001920RZWUR | HPD1 (B) | HPD1 |
| 417 | Universal Firmware Package for Drives -                                                                                                            | Kioxia_RM6_KARM6A                  | VO001920RZWUV | HPD1 (B) | HPD1 |

|     |                                                                                                                                                    |                                |               |          |      |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------|----------|------|
|     | VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU                                         | LSHPD1.fwpkg                   |               |          |      |
| 418 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg | VO003840RZWUT | HPD1 (B) | HPD1 |
| 419 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg | VO003840RZWVA | HPD1 (B) | HPD1 |
| 420 | Universal Firmware Package for Drives - VO000960RZWUP, VO000960RZWUQ, VO001920RZWUR, VO001920RZWUV, VO003840RZWUT, VO003840RZWVA and VO007680RZWUU | Kioxia_RM6_KARM6A LSHPD1.fwpkg | VO007680RZWUU | HPD1 (B) | HPD1 |

#### 6.2.14 Firmware - SATA Storage Disk

| No. | Description                                                                                                         | Package filename                      | Device        | Package Version | Firmware/Driver version |
|-----|---------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------|-----------------|-------------------------|
| 421 | Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR | Seagate_EvansBP_SH PEEVSBPTG3.fwpkg   | MB010000GYDKP | HPG3            | HPG3                    |
| 422 | Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR | Seagate_EvansBP_SH PEEVSBPTG3.fwpkg   | MB012000GYCJL | HPG3            | HPG3                    |
| 423 | Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR | Seagate_EvansBP_SH PEEVSBPTG3.fwpkg   | MB014000GYCJT | HPG3            | HPG3                    |
| 424 | Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR | Seagate_EvansBP_SH PEEVSBPTG3.fwpkg   | MB016000GYDKQ | HPG3            | HPG3                    |
| 425 | Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR | Seagate_EvansBP_SH PEEVSBPTG3.fwpkg   | MB018000GYDKR | HPG3            | HPG3                    |
| 426 | Universal Firmware Package for Drive - MB016000GWXKK                                                                | Toshiba_MG08_TAM G08acHPG4.fwpkg      | MB016000GWXKK | HPG4            | HPG4                    |
| 427 | Universal Firmware Package for Drives - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB                              | Toshiba_Tomcat_TATC ATSATAG1.fwpkg    | MB001000GWJAN | HPG1            | HPG1                    |
| 428 | Universal Firmware Package for Drives - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB                              | Toshiba_Tomcat_TATC ATSATAG1.fwpkg    | MB002000GWFWA | HPG1            | HPG1                    |
| 429 | Universal Firmware Package for Drives - MB001000GWJAN, MB002000GWFWA and MB004000GWFWB                              | Toshiba_Tomcat_TATC ATSATAG1.fwpkg    | MB004000GWFWB | HPG1            | HPG1                    |
| 430 | Universal Firmware Package for Drives - MB002000GYDNK and MB004000GYDPD                                             | Seagate_CimarronBP_SCIMARBPNTG4.fwpkg | MB002000GYDNK | HPG4            | HPG4                    |
| 431 | Universal Firmware Package for Drives - MB002000GYDNK and MB004000GYDPD                                             | Seagate_CimarronBP_SCIMARBPNTG4.fwpkg | MB004000GYDPD | HPG4            | HPG4                    |
| 432 | Universal Firmware Package for Drives - MB004000GWKGV                                                               | WDC_VelaA_HVLAnA aseFG1.fwpkg         | MB004000GWKGV | HPG1            | HPG1                    |
| 433 | Universal Firmware Package for Drives - MB004000GWZVT                                                               | Toshiba_MG08Air_TA MG08ADAnG3.fwpkg   | MB004000GWZVT | HPG3            | HPG3                    |

|     |                                                                                                                                   |                                        |               |      |      |
|-----|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------|------|------|
| 434 | Universal Firmware Package for Drives - MB006000GWKGR                                                                             | WDC_VelaA_HVLAeA aseFG1.fwpkg          | MB006000GWKGR | HPG1 | HPG1 |
| 435 | Universal Firmware Package for Drives - MB006000GWZVL and MB008000GWZVN                                                           | Toshiba_MG08Air_TA MG08ADAeG3.fwpkg    | MB006000GWZVL | HPG3 | HPG3 |
| 436 | Universal Firmware Package for Drives - MB006000GWZVL and MB008000GWZVN                                                           | Toshiba_MG08Air_TA MG08ADAeG3.fwpkg    | MB008000GWZVN | HPG3 | HPG3 |
| 437 | Universal Firmware Package for Drives - MB006000GYDNL, MB008000GYDPE and MB010000GYDNN                                            | Seagate_CimarronBP_ SCIMARBPETG4.fwpkg | MB006000GYDNL | HPG4 | HPG4 |
| 438 | Universal Firmware Package for Drives - MB006000GYDNL, MB008000GYDPE and MB010000GYDNN                                            | Seagate_CimarronBP_ SCIMARBPETG4.fwpkg | MB008000GYDPE | HPG4 | HPG4 |
| 439 | Universal Firmware Package for Drives - MB006000GYDNL, MB008000GYDPE and MB010000GYDNN                                            | Seagate_CimarronBP_ SCIMARBPETG4.fwpkg | MB010000GYDNN | HPG4 | HPG4 |
| 440 | Universal Firmware Package for Drives - MB012000GZVVT, MB014000GZVU, MB016000GZVYV and MB018000GYCLL                              | Toshiba_MG09_TAM G09acHPG4.fwpkg       | MB012000GZVVT | HPG4 | HPG4 |
| 441 | Universal Firmware Package for Drives - MB012000GZVVT, MB014000GZVU, MB016000GZVYV and MB018000GYCLL                              | Toshiba_MG09_TAM G09acHPG4.fwpkg       | MB014000GZVU  | HPG4 | HPG4 |
| 442 | Universal Firmware Package for Drives - MB012000GZVVT, MB014000GZVU, MB016000GZVYV and MB018000GYCLL                              | Toshiba_MG09_TAM G09acHPG4.fwpkg       | MB016000GZVYV | HPG4 | HPG4 |
| 443 | Universal Firmware Package for Drives - MB012000GZVVT, MB014000GZVU, MB016000GZVYV and MB018000GYCLL                              | Toshiba_MG09_TAM G09acHPG4.fwpkg       | MB018000GYCLL | HPG4 | HPG4 |
| 444 | Universal Firmware Package for Drives - MB018000GXMTK and MB020000GXMTQ                                                           | Seagate_Longspcak_S LONGSPKETG3.fwpkg  | MB018000GXMTK | HPG3 | HPG3 |
| 445 | Universal Firmware Package for Drives - MB018000GXMTK and MB020000GXMTQ                                                           | Seagate_Longspcak_S LONGSPKETG3.fwpkg  | MB020000GXMTQ | HPG3 | HPG3 |
| 446 | Universal Firmware Package for Drives - MB12000GYESP, MB16000GYEVF and MB20000GYEVH                                               | Seagate_Summit_SU MMITSUANG1.fwpkg     | MB12000GYESP  | HPG1 | HPG1 |
| 447 | Universal Firmware Package for Drives - MB12000GYESP, MB16000GYEVF and MB20000GYEVH                                               | Seagate_Summit_SU MMITSUANG1.fwpkg     | MB16000GYEVF  | HPG1 | HPG1 |
| 448 | Universal Firmware Package for Drives - MB12000GYESP, MB16000GYEVF and MB20000GYEVH                                               | Seagate_Summit_SU MMITSUANG1.fwpkg     | MB20000GYEVH  | HPG1 | HPG1 |
| 449 | Universal Firmware Package for Drives - MB24000GYEVK                                                                              | Seagate_Summit_SU MMITSUANG1.fwpkg     | MB24000GYEVK  | HPG1 | HPG1 |
| 450 | Universal Firmware Package for Drives - MK000480GWXFF, MK000960GWXFF, MK001920GWXFK and MK003840GWXFL                             | SKHynix_SE5031_K50 3HPG3.fwpkg         | MK000480GWXFF | HPG3 | HPG3 |
| 451 | Universal Firmware Package for Drives - MK000480GWXFF, MK000960GWXFF, MK001920GWXFK and MK003840GWXFL                             | SKHynix_SE5031_K50 3HPG3.fwpkg         | MK000960GWXFF | HPG3 | HPG3 |
| 452 | Universal Firmware Package for Drives - MK000480GWXFF, MK000960GWXFF, MK001920GWXFK and MK003840GWXFL                             | SKHynix_SE5031_K50 3HPG3.fwpkg         | MK001920GWXFK | HPG3 | HPG3 |
| 453 | Universal Firmware Package for Drives - MK000480GWXFF, MK000960GWXFF, MK001920GWXFK and MK003840GWXFL                             | SKHynix_SE5031_K50 3HPG3.fwpkg         | MK003840GWXFL | HPG3 | HPG3 |
| 454 | Universal Firmware Package for Drives - MK000480GXNKB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, | Micron_5400_M5400 ALLHPG1.fwpkg        | MK000480GXNKB | HPG1 | HPG1 |



|     |                                                                                                                                                                                                                                                             |                                 |               |      |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------|------|------|
|     | VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP                                                                                                                                   |                                 |               |      |      |
| 455 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | MK000960GXNZK | HPG1 | HPG1 |
| 456 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | MK001920GXNZL | HPG1 | HPG1 |
| 457 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | MK003840GXNZN | HPG1 | HPG1 |
| 458 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK000240GXNWU | HPG1 | HPG1 |
| 459 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK000480GXNZA | HPG1 | HPG1 |
| 460 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK000960GXNZB | HPG1 | HPG1 |
| 461 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK001920GXNZC | HPG1 | HPG1 |
| 462 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE,                                                               | Micron_5400_M5400 ALLHPG1.fwpkg | VK003840GXNZD | HPG1 | HPG1 |

|     |                                                                                                                                                                                                                                                             |                                 |               |      |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|---------------|------|------|
|     | VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP                                                                                                                                                                                               |                                 |               |      |      |
| 463 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | MK000960SXNXC | HPG1 | HPG1 |
| 464 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | MK001920SXNZP | HPG1 | HPG1 |
| 465 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK001920SXNZF | HPG1 | HPG1 |
| 466 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK000480SXNWV | HPG1 | HPG1 |
| 467 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VK007680GXNZE | HPG1 | HPG1 |
| 468 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VR000240GXNXA | HPG1 | HPG1 |
| 469 | Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP | Micron_5400_M5400 ALLHPG1.fwpkg | VR000480GXNZH | HPG1 | HPG1 |
| 470 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU                               | Solidigm_54X20_4IYY HPG4.fwpkg  | MK000480GYCNT | HPG4 | HPG4 |
| 471 | Universal Firmware Package for Drives -                                                                                                                                                                                                                     | Solidigm_54X20_4IYY             | MK000960GYCNP | HPG4 | HPG4 |

|     |                                                                                                                                                                                                                               |                                   |               |      |      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------|------|------|
|     | MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU                                         | HPG4.fwpkg                        |               |      |      |
| 472 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | MK001920GYCNF | HPG4 | HPG4 |
| 473 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | MK003840GYCNQ | HPG4 | HPG4 |
| 474 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK000240GYCNU | HPG4 | HPG4 |
| 475 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK000480GYCNH | HPG4 | HPG4 |
| 476 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK000960GYCNK | HPG4 | HPG4 |
| 477 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK001920GYCNL | HPG4 | HPG4 |
| 478 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK003840GYCNN | HPG4 | HPG4 |
| 479 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VK007680GYCNE | HPG4 | HPG4 |
| 480 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000                                                                                       | Solidigm_S4X20_4IYY<br>HPG4.fwpkg | VR000240GXPQT | HPG4 | HPG4 |

|     |                                                                                                                                                                                                                                 |                                |               |      |      |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------|------|------|
|     | 960GYCNK ,VK001920GYCNL ,VK003840 GYCNN ,VK007680GYCNE ,VR000240GX PQT and VR000480GXPQU                                                                                                                                        |                                |               |      |      |
| 481 | Universal Firmware Package for Drives - MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYCNH ,VK000960GYCNK ,VK001920GYCNL ,VK003840 GYCNN ,VK007680GYCNE ,VR000240GX PQT and VR000480GXPQU | Solidigm_S4X20_4IYY HPG4.fwpkg | VR000480GXPQU | HPG4 | HPG4 |
| 482 | Universal Firmware Package for Drives - MK000480GZXRA, MK000960GZXR, MK001920GZXRC and MK003840GZXRV                                                                                                                            | Samsung_PM897_HP G1PM897.fwpkg | MK000480GZXRA | HPG1 | HPG1 |
| 483 | Universal Firmware Package for Drives - MK000480GZXRA, MK000960GZXR, MK001920GZXRC and MK003840GZXRV                                                                                                                            | Samsung_PM897_HP G1PM897.fwpkg | MK000960GZXR  | HPG1 | HPG1 |
| 484 | Universal Firmware Package for Drives - MK000480GZXRA, MK000960GZXR, MK001920GZXRC and MK003840GZXRV                                                                                                                            | Samsung_PM897_HP G1PM897.fwpkg | MK001920GZXRC | HPG1 | HPG1 |
| 485 | Universal Firmware Package for Drives - MK000480GZXRA, MK000960GZXR, MK001920GZXRC and MK003840GZXRV                                                                                                                            | Samsung_PM897_HP G1PM897.fwpkg | MK003840GZXRV | HPG1 | HPG1 |
| 486 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK000240GZXRU | HPG1 | HPG1 |
| 487 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK000480GZXRF | HPG1 | HPG1 |
| 488 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK000960GZXQU | HPG1 | HPG1 |
| 489 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK001920GZXQV | HPG1 | HPG1 |
| 490 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK003840GZXRH | HPG1 | HPG1 |
| 491 | Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT                                                                                             | Samsung_PM893_HP G1PM893.fwpkg | VK007680GZXRT | HPG1 | HPG1 |
| 492 | Universal Firmware Package for Drives - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK                                                                                                                           | SKHynix_SE5110_K51 1HPG3.fwpkg | VK003840GZCNK | HPG3 | HPG3 |
| 493 | Universal Firmware Package for Drives - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK                                                                                                                           | SKHynix_SE5110_K51 1HPG3.fwpkg | VK001920GZCNH | HPG3 | HPG3 |
| 494 | Universal Firmware Package for Drives - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK                                                                                                                           | SKHynix_SE5110_K51 1HPG3.fwpkg | VK000480GZCNE | HPG3 | HPG3 |
| 495 | Universal Firmware Package for Drives - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK                                                                                                                           | SKHynix_SE5110_K51 1HPG3.fwpkg | VK000960GZCNF | HPG3 | HPG3 |

## 6.2.15 Firmware – Storage Controller

| No. | Description                                               | Package filename                        | Device             | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------------------|-----------------------------------------|--------------------|-----------------|-------------------------|
| 496 | Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller | HPE_MR216i-o_Gen11_52.32.3-6333_A.fwpkg | HPE_MR216i-o_Gen11 | 52.32.3-6333    | 52.32.3-6333            |

|     |                                                                                                                                                                                           |                                         |                                             |              |              |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|---------------------------------------------|--------------|--------------|
| 497 | Firmware Package - HPE MR216i-p Gen11 Tri Mode Controller                                                                                                                                 | HPE_MR216i-p_Gen11_52.32.3-6333_A.fwpkg | HPE_MR216i-p_Gen11                          | 52.32.3-6333 | 52.32.3-6333 |
| 498 | Firmware Package - HPE MR408i-o Gen11 Tri Mode Controller                                                                                                                                 | HPE_MR408i-o_Gen11_52.32.3-6333_A.fwpkg | HPE_MR408i-o_Gen11                          | 52.32.3-6333 | 52.32.3-6333 |
| 499 | Firmware Package - HPE MR408i-p Gen11 Tri Mode Controller                                                                                                                                 | HPE_MR408i-p_Gen11_52.32.3-6333_A.fwpkg | HPE_MR408i-p_Gen11                          | 52.32.3-6333 | 52.32.3-6333 |
| 500 | Firmware Package - HPE MR416i-o Gen11 Tri Mode Controller                                                                                                                                 | HPE_MR416i-o_Gen11_52.32.3-6333_A.fwpkg | HPE_MR416i-o_Gen11                          | 52.32.3-6333 | 52.32.3-6333 |
| 501 | Firmware Package - HPE MR416i-p Gen11 Tri Mode Controller                                                                                                                                 | HPE_MR416i-p_Gen11_52.32.3-6333_A.fwpkg | HPE_MR416i-p_Gen11                          | 52.32.3-6333 | 52.32.3-6333 |
| 502 | Firmware Package - HPE Smart Array P408i-p, P408e-p, P408i-a, P408i-c, E208i-p, E208e-p, E208i-c, E208i-a, P204i-c, P416ie-m and P816i-a SR Gen10 and SR308i-o,SR308i-p Gen11 controllers | HPE_SR_Gen10_7.81_A.fwpkg               | HPE Smart Array E208e-p SR Gen10 Controller | 7.81         | 7.81         |

#### 6.2.16 Firmware – Storage Fibre Channel

| No. | Description                                                                 | Package filename                | Device                                                 | Package Version | Firmware/Driver version |
|-----|-----------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------|-----------------|-------------------------|
| 503 | HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters | PP14.4.473.30_header.pldm.fwpkg | HPE SN1620E 32Gb 2p FC HBA                             | 14.4.473.30     | 14.4.473.30             |
| 504 | HPE Firmware Flash for Emulex 32Gb and 64Gb Fibre Channel Host Bus Adapters | PP14.4.473.30_header.pldm.fwpkg | HPE SN1720E 64Gb 2p FC HBA                             | 14.4.473.30     | 14.4.473.30             |
| 505 | HPE Firmware Flash for QLogic 32Gb and 64Gb Fibre Channel Host Bus Adapters | mh021101.upd_header.pldm.fwpkg  | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 02.11.01        | 02.11.01                |
| 506 | HPE Firmware Flash for QLogic 32Gb and 64Gb Fibre Channel Host Bus Adapters | mh021101.upd_header.pldm.fwpkg  | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 02.11.01        | 02.11.01                |

#### 6.2.17 Firmware – System

| No. | Description                                                                                          | Package filename       | Device              | Package Version | Firmware/Driver version |
|-----|------------------------------------------------------------------------------------------------------|------------------------|---------------------|-----------------|-------------------------|
| 507 | Firmware Package - UBM10 Backplane PIC PLDM Firmware                                                 | HPE_UBM10_1.04_A.fwpkg | UBM10 Backplane PIC | 1.04            | 1.04                    |
| 508 | Firmware Package - UBM2 Backplane PIC PLDM Firmware for Gen10/Gen10P/Gen11 Servers                   | HPE_UBM2_1.20_F.fwpkg  | UBM2 Backplane PIC  | 1.20 (F)        | 1.20                    |
| 509 | Firmware Package - UBM3 Backplane PIC PLDM Firmware for Gen10 and Gen10 Plus and Gen11 servers usage | HPE_UBM3_1.24_G.fwpkg  | UBM3 Backplane PIC  | 1.24 (G)        | 1.24                    |
| 510 | Firmware Package - UBM4 Backplane PIC PLDM Firmware for Gen10P/Gen11/Gen12 servers usage             | HPE_UBM4_1.24_G.fwpkg  | UBM4 Backplane PIC  | 1.24 (G)        | 1.24                    |
| 511 | Firmware Package - UBM6 Backplane PIC PLDM Firmware for Gen10/Gen10P/Gen11/Gen12 servers usage       | HPE_UBM6_1.04_C.fwpkg  | UBM6 Backplane PIC  | 1.04 (C)        | 1.04                    |

#### 6.2.18 Software – Management

| No. | Description                                                            | Package filename | Device                           | Package Version | Firmware/Driver version |
|-----|------------------------------------------------------------------------|------------------|----------------------------------|-----------------|-------------------------|
| 512 | Smart Storage Administrator (SSA) CLI Smart Component for ESXi 8.0 for | cp065587.zip     | HPE Smart Array E208e-p SR Gen10 | 2025.09.01      | 6.50.11.0-8.0.0         |

|     |                                                                                                           |              |                                             |            |                      |
|-----|-----------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------|------------|----------------------|
|     | Gen10/Gen10 Plus/Gen11 Controllers                                                                        |              | Controller                                  |            |                      |
| 513 | Smart Storage Administrator (SSA) CLI Smart Component for ESXi 9.0 for Gen10/Gen10 Plus/Gen11 Controllers | cp066605.zip | HPE Smart Array E208e-p SR Gen10 Controller | 2025.09.01 | 6.50.11.0-10EM.900.0 |

### 6.2.19 Software – Storage Controller

| No. | Description                                                                                 | Package filename | Device             | Package Version | Firmware/Driver version |
|-----|---------------------------------------------------------------------------------------------|------------------|--------------------|-----------------|-------------------------|
| 514 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR416i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 515 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR416i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 516 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR216i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 517 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR408i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 518 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR216i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 519 | HPE MegaRAID Storage Administrator StorCLI for VMware8.0 (For Gen10P and Gen11 Controllers) | cp067756.zip     | HPE_MR408i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 520 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR416i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 521 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR416i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 522 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR216i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 523 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR408i-o_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 524 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR216i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |
| 525 | HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers) | cp067757.zip     | HPE_MR408i-p_Gen11 | 2025.08.01      | 007.3212.000 0.0000-02  |

### 6.2.20 Software – Storage Fibre Channel

| No. | Description                                                      | Package filename | Device                                                 | Package Version | Firmware/Driver version         |
|-----|------------------------------------------------------------------|------------------|--------------------------------------------------------|-----------------|---------------------------------|
| 526 | HPE QLogic Fibre Channel driver component for VMware vSphere 8.0 | cp066387.zip     | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 2025.05.01      | 5.4.85.0-10EM.803.0.0 .24022510 |
| 527 | HPE QLogic Fibre Channel driver component for VMware vSphere 8.0 | cp066387.zip     | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 2025.05.01      | 5.4.85.0-10EM.803.0.0 .24022510 |
| 528 | HPE QLogic Fibre Channel driver component for VMware vSphere 9.0 | cp066388.zip     | HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter | 2025.05.01      | 5.5.85.0-10EM.900.0.2 4580437   |
| 529 | HPE QLogic Fibre Channel driver component for VMware vSphere 9.0 | cp066388.zip     | HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | 2025.05.01      | 5.5.85.0-10EM.900.0.2 4580437   |

## 6.2.21 Software - System Management

| No. | Description                                                                                                | Package filename                                     | Device             | Package Version | Firmware/Driver version |
|-----|------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------|-----------------|-------------------------|
| 530 | Agentless Management Service (iLO 5, iLO 6 and iLO 7) for Red Hat Enterprise Linux 9 Server                | amsd-4.3.0-2073.5.rhel9.x86_64.rpm                   | -                  | 4.3.0           | 4.3.0-2073.5.rhel9      |
| 531 | Agentless Management Service for Microsoft Windows x64                                                     | cp068099.exe                                         | -                  | 4.40.0.0        | 4.40.0.0                |
| 532 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR416i-o_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 533 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR416i-p_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 534 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR216i-o_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 535 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR408i-o_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 536 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR216i-p_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 537 | HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)           | cp067755.exe                                         | HPE_MR408i-p_Gen11 | 7.3212.0.0      | 7.3212.0.0              |
| 538 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR416i-o_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 539 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR416i-p_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 540 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR216i-o_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 541 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR408i-o_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 542 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR216i-p_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 543 | HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers) | MRStorageAdministrator-008.012.052.000-00.x86_64.rpm | HPE_MR408i-p_Gen11 | 8.12.52.0       | 008.012.052.000-00      |
| 544 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)      | cp066589.exe                                         | HPE_MR416i-o_Gen11 | 8.12.52.0       | 8.12.52.0               |
| 545 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)      | cp066589.exe                                         | HPE_MR416i-p_Gen11 | 8.12.52.0       | 8.12.52.0               |
| 546 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)      | cp066589.exe                                         | HPE_MR216i-o_Gen11 | 8.12.52.0       | 8.12.52.0               |
| 547 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)      | cp066589.exe                                         | HPE_MR408i-o_Gen11 | 8.12.52.0       | 8.12.52.0               |
| 548 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)      | cp066589.exe                                         | HPE_MR216i-p_Gen11 | 8.12.52.0       | 8.12.52.0               |

|     |                                                                                                                      |              |                                             |           |           |
|-----|----------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------|-----------|-----------|
| 549 | HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)                | cp066589.exe | HPE_MR408i-p_Gen11                          | 8.12.52.0 | 8.12.52.0 |
| 550 | Smart Storage Administrator (SSA) CLI for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers                      | cp065586.exe | HPE Smart Array E208e-p SR Gen10 Controller | 6.50.11.0 | 6.50.11.0 |
| 551 | Smart Storage Administrator (SSA) for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers                          | cp065585.exe | HPE Smart Array E208e-p SR Gen10 Controller | 6.50.11.0 | 6.50.11.0 |
| 552 | Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers | cp065588.exe | HPE Smart Array E208e-p SR Gen10 Controller | 6.50.11.0 | 6.50.11.0 |



## 6.3 パッケージの変更内容

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### ROM Flash Firmware Package - System ROM U68

Version: 1.46\_08-08-2025 (Recommended)

#### **Important Notes:**

- This version of the System ROM contains updates aligned with the Intel GNR MR2.5 updates.
- This version of the System ROM contains updates aligned with Intel Birch Stream GNR MR2.5 BKC.
- This version of the System ROM contains updates aligned with Intel SRF 2S MR2 and 4S PV BKC update.

#### **Problems Fixed:**

- Addressed an issue where the system Redfish URIs for BIOS Registry Attribute would include wrong names and strings.
- Addressed an issue where the System ROM/RBSU setting change might not take effect when the System ROM is being updated.
- Addressed an issue where the system might be turned off before booting into RedHat Linux when TPM is hidden.
- Addressed an issue where the system might have unbalanced NUMA node configuration when specific core number is configured and sub-NUMA is enabled.
- Addressed an issue where the mapping between Ethernet Adapter Port and its MAC address might not be correct.
- Addressed an issue where some iLO related features might not be recognized in Windows environments when there is a MR-serious controller installed.
- Addressed an issue where the setting in Intel Speed Select Technology - Performance Profile of RBSU menu might not return to default setting once applied invalid settings.
- Addressed an issue where system time in operating systems might be delayed when the system is under stressful conditions.
- Addressed an issue where the system power cycle action might be incorrect when triggered through IPMI timeout.
- Addressed an issue where the system might encounter UMCE during power-on when a USB mouse is connected.
- Addressed an issue where the number of Boot Retry Count setting of each of network boot device might not take effect.
- Addressed an issue where certain Intel CPU property options in system RBSU might be changed to unexpected values.
- Addressed an issue where the "Negotiated Link Width" value of OCP adapter in system RBSU might be incorrect.
- Addressed an issue where the system might generate the "Failed to set power regulator settings" event when changing the setting to OS control mode.
- Addressed an issue where the options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.
- Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu >

Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.

- Addressed an issue where the OS (Operating System) system time might shift when the time-zone setting in System Configuration (RBSU) menu is "unspecified time zone".
- Addressed an issue where the system might have incorrect drive storage information shown in the One-Time Boot menu.
- Addressed an issue where the system might encounter RSOD when performing drive encryption without select any drive in "System Configuration (RBSU) > Server Security > Device Encryption Options > Drive Encryption Settings > Encrypted Drives".
- Addressed an issue where the Product Names of DVD Drive might not be displayed in the boot options of System Configuration (RBSU).
- Addressed an issue where the system virtual media might malfunction.
- Addressed an issue where the display content of "System Configuration (RBSU) -> Power and Performance Options -> Advanced Power Options -> Efficiency Latency Control (ELC)" might be incorrect.
- Addressed an issue where the logical drive name of MR controllers might be incorrect in the System Configuration (RBSU) menu.
- Addressed an issue where the "Enhanced C-states" did not gray out after setting the Core C-states to No C-states in "System Configuration (RBSU) > Power and Performance options".

#### **Enhancements:**

- Added a new "Mission Critical Mode" option under "System Configuration > BIOS/Platform Configuration (RBSU) > System Options > Server Availability" options. This setting has the following Redfish properties: /redfish/v1/systems/1/bios/settings/MissionCriticalMode.
- Removed "Energy Performance Preference" option from "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance" options.
- Removed unsupported option "Intel DMI Link Frequency" from "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "CPU C1 Auto Demotion" and "CPU C1 Auto UnDemotion" options in "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "Pre-boot DMA protection" option in "System Configuration > BIOS/Platform Configuration (RBSU) > Virtualization Options".
- Added help description to avoid having wrong configuration values of PPL1 or PPL2.
- Enabled Bifurcation capability support for system OCP slots.

---

#### **ROM Flash Firmware Package - System ROM U71**

Version: 1.46\_08-08-2025 (Recommended)

#### **Important Notes:**

- This version of the System ROM contains updates aligned with the Intel GNR MR2.5 updates.
- This version of the System ROM contains updates aligned with Intel Birch Stream GNR MR2.5 BKC.
- This version of the System ROM contains updates aligned with Intel SRF 2S MR2 and 4S PV BKC update.

### **Problems Fixed:**

- Addressed an issue where the system Redfish URIs for BIOS Registry Attribute would include wrong names and strings.
- Addressed an issue where the System ROM/RBSU setting change might not take effect when the System ROM is being updated.
- Addressed an issue where the system might be turned off before booting into RedHat Linux when TPM is hidden.
- Addressed an issue where the system might have unbalanced NUMA node configuration when specific core number is configured and sub-NUMA is enabled.
- Addressed an issue where the mapping between Ethernet Adapter Port and its MAC address might not be correct.
- Addressed an issue where some iLO related features might not be recognized in Windows environments when there is a MR-serious controller installed.
- Addressed an issue where the setting in Intel Speed Select Technology - Performance Profile of RBSU menu might not return to default setting once applied invalid settings.
- Addressed an issue where system time in operating systems might be delayed when the system is under stressful conditions.
- Addressed an issue where the system power cycle action might be incorrect when triggered through IPMI timeout.
- Addressed an issue where the system might encounter UMCE during power-on when a USB mouse is connected.
- Addressed an issue where the number of Boot Retry Count setting of each of network boot device might not take effect.
- Addressed an issue where certain Intel CPU property options in system RBSU might be changed to unexpected values.
- Addressed an issue where the "Negotiated Link Width" value of OCP adapter in system RBSU might be incorrect.
- Addressed an issue where the system might generate the "Failed to set power regulator settings" event when changing the setting to OS control mode.
- Addressed an issue where the options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.
- Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu > Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.
- Addressed an issue where the OS (Operating System) system time might shift when the time-zone setting in System Configuration (RBSU) menu is "unspecified time zone".
- Addressed an issue where the system might have incorrect drive storage information shown in the One-Time Boot menu.
- Addressed an issue where the system might encounter RSOD when performing drive encryption without select any drive in "System Configuration (RBSU) > Server Security > Device Encryption Options > Drive Encryption Settings > Encrypted Drives".

- Addressed an issue where the Product Names of DVD Drive might not be displayed in the boot options of System Configuration (RBSU).
- Addressed an issue where the system virtual media might malfunction.
- Addressed an issue where the display content of "System Configuration (RBSU) -> Power and Performance Options -> Advanced Power Options -> Efficiency Latency Control (ELC)" might be incorrect.
- Addressed an issue where the logical drive name of MR controllers might be incorrect in the System Configuration (RBSU) menu.
- Addressed an issue where the "Enhanced C-states" did not gray out after setting the Core C-states to No C-states in "System Configuration (RBSU) > Power and Performance options".

#### **Enhancements:**

- Added a new "Mission Critical Mode" option under "System Configuration > BIOS/Platform Configuration (RBSU)> System Options>Server Availability" options. This setting has the following Redfish properties: /redfish/v1/systems/1/bios/settings/MissionCriticalMode.
- Removed "Energy Performance Preference" option from "System Configuration > BIOS/Platform Configuration (RBSU)> Power and Performance" options.
- Removed unsupported option "Intel DMI Link Frequency" from "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "CPU C1 Auto Demotion" and "CPU C1 Auto UnDemotion" options in "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "Pre-boot DMA protection" option in "System Configuration > BIOS/Platform Configuration (RBSU) > Virtualization Options".
- Added help description to avoid having wrong configuration values of PPL1 or PPL2.
- Enabled Bifurcation capability support for system OCP slots.

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### **ROM Flash Firmware Package - System ROM U72**

Version: 1.46\_08-08-2025 (Recommended)

#### **Important Notes:**

- This version of the System ROM contains updates aligned with the Intel GNR MR2.5 updates.
- This version of the System ROM contains updates aligned with Intel Birch Stream GNR MR2.5 BKC.
- This version of the System ROM contains updates aligned with Intel SRF 2S MR2 and 4S PV BKC update.

#### **Problems Fixed:**

- Addressed an issue where the system Redfish URIs for BIOS Registry Attribute would include wrong names and strings.
- Addressed an issue where the System ROM/RBSU setting change might not take effect when the System ROM is being updated.
- Addressed an issue where the system might be turned off before booting into RedHat Linux when TPM is hidden.
- Addressed an issue where the system might have unbalanced NUMA node configuration when specific

core number is configured and sub-NUMA is enabled.

- Addressed an issue where the mapping between Ethernet Adapter Port and its MAC address might not be correct.
- Addressed an issue where some iLO related features might not be recognized in Windows environments when there is a MR-serious controller installed.
- Addressed an issue where the setting in Intel Speed Select Technology - Performance Profile of RBSU menu might not return to default setting once applied invalid settings.
- Addressed an issue where system time in operating systems might be delayed when the system is under stressful conditions.
- Addressed an issue where the system power cycle action might be incorrect when triggered through IPMI timeout.
- Addressed an issue where the system might encounter UMCE during power-on when a USB mouse is connected.
- Addressed an issue where the number of Boot Retry Count setting of each of network boot device might not take effect.
- Addressed an issue where certain Intel CPU property options in system RBSU might be changed to unexpected values.
- Addressed an issue where the "Negotiated Link Width" value of OCP adapter in system RBSU might be incorrect.
- Addressed an issue where the system might generate the "Failed to set power regulator settings" event when changing the setting to OS control mode.
- Addressed an issue where the options of "Intel Speed Select Technology - Performance Profile" in System Configuration (RBSU) menu might not be configurable.
- Addressed an issue where the "Export Signature" operation in "System Configuration (RBSU) menu > Server Security > Secure Boot Settings > Advanced Secure Boot Options" might not display and work normally.
- Addressed an issue where the OS (Operating System) system time might shift when the time-zone setting in System Configuration (RBSU) menu is "unspecified time zone".
- Addressed an issue where the system might have incorrect drive storage information shown in the One-Time Boot menu.
- Addressed an issue where the system might encounter RSOD when performing drive encryption without select any drive in "System Configuration (RBSU) > Server Security > Device Encryption Options > Drive Encryption Settings > Encrypted Drives".
- Addressed an issue where the Product Names of DVD Drive might not be displayed in the boot options of System Configuration (RBSU).
- Addressed an issue where the system virtual media might malfunction.
- Addressed an issue where the display content of "System Configuration (RBSU) -> Power and Performance Options -> Advanced Power Options -> Efficiency Latency Control (ELC)" might be incorrect.
- Addressed an issue where the logical drive name of MR controllers might be incorrect in the System Configuration (RBSU) menu.
- Addressed an issue where the "Enhanced C-states" did not gray out after setting the Core C-states to No

C-states in "System Configuration (RBSU) > Power and Performance options".

#### **Enhancements:**

- Added a new "Mission Critical Mode" option under "System Configuration > BIOS/Platform Configuration (RBSU)> System Options>Server Availability" options. This setting has the following Redfish properties: /redfish/v1/systems/1/bios/settings/MissionCriticalMode.
- Removed "Energy Performance Preference" option from "System Configuration > BIOS/Platform Configuration (RBSU)> Power and Performance" options.
- Removed unsupported option "Intel DMI Link Frequency" from "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "CPU C1 Auto Demotion" and "CPU C1 Auto UnDemotion" options in "System Configuration > BIOS/Platform Configuration (RBSU) > Power and Performance Options".
- Added "Pre-boot DMA protection" option in "System Configuration > BIOS/Platform Configuration (RBSU) > Virtualization Options".
- Added help description to avoid having wrong configuration values of PPL1 or PPL2.
- Enabled Bifurcation capability support for system OCP slots.

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#### **Hitachi Online ROM Flash Firmware Package - iLO 7**

Version: 1.17

#### **Problems Fixed:**

- Fixed an issue where there was no VSP output on DL360 Gen11 iLO6 due to stack overflow on VSP log buffer handling.
- Fixed an issue where the fan speed was not set as per the thermal configuration due to server device discovery not reaching vMainDeviceDiscoveryComplete.
- Fixed an issue that did not allow to enable mTLS for subscription and returned error in loading client private key.
- Fixed an issue where param2 check-in challenge\_auth response for NVIDIA adapter failed during SPDM authentication.
- Fixed an issue where the Kerberos client advertised insecure encryption (RC4, DES) types and rejected the deprecated ones. As a part of this fix, RC4, DES, and 3DES algorithms are removed from the Kerberos requests.
- Fixed an issue where the MCTP retry mechanism in i2c communication failed.
- Fixed an issue where a low value of the iLO reset progress bar time caused mismatch in the configuration during the iLO reset time.
- Fixed an issue where the IPMI fan's pwm values were set to a default of 255 to calculate dutycycle percentage.
- Fixed an issue with the time delay between retries for PCIe VDM transmit buffer.
- Fixed an issue for the sensor values that were reported in the GET\_SENSOR response though these sensors were marked as non-supported in the PDR table.
- Fixed a BundleUpdate issue for Smart components of size greater than 32MB size.

- Fixed an issue where iLO RIBCL queries generated incorrect CAPACITY VALUE responses.
- Fixed an issue where fetching the email details of LDAP user where DistinguishedName containing special characters were causing the two-factor authentication process to fail.
- Fixed the cpqHoMIBStatusArray status issue that did not get updated with proper details when a drive attached to Smart Array P408i-a SR controller failed or degraded.

#### **Enhancements:**

- Replaced references of SSL to TLS for both UI and Redfish API responses.
- Support for ECDSA P384 keys across all iLO security modes for TLS connections. The default RSA key size for iLO CSR generation is increased to 4096 bits.
- Support for volume creation and deletion on iLO WebUI.
- Support for 5-minute idle timeout on iLO sessions.
- Enabled iLO SPDM authentication for PSU.
- NVMe-MI firmware update supported by iLO.
- Support for NS204i-u v2 Boot Controller and NS204i-u v2 Boot Controller with SED Support.
- Power on and Bundle updates will be restricted if Liquid cooling leakage is detected.
- Enabled Gen12 BMC support for LLDP on the iLO dedicated port and host NIC ports.
- Support added to keep the iLO LDAP session to remain active and to avoid network timeouts when the LDAP server timeout setting is configured to 45 seconds or more in LDAP server. The default LDAP server timeout setting is 9000 seconds.
- Support added for windbg\_enable SSH CLI command.
- Support added to enable or disable Virtual Serial Port (VSP) from iLO GUI and Redfish interfaces.
- Added support for importing CA certificate chains for CAC authentication (maximum 6 CA certificates). Certificates must be imported in order, beginning with the issuer of the user certificate and continuing up the chain to the root certificate.
- Enhanced to support rendering of iLO UI across multiple screens and browsers.
- Enhancement to have better user experience while changing the source of time settings on the RTC page.

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### **Broadcom NetXtreme-E Driver for Microsoft Windows Server 2022**

Version: 233.0.148.0 (Recommended)

#### **Important Note!**

HPE recommends the firmware provided in Broadcom Firmware Package for BCM5741x, BCM5750x and BCM5760x adapters, version 233.1.135.7 or later, for use with this driver.

#### **Fixes**

This product fixes issue where packet drops is seen when jumbo frame is enabled.

#### **Enhancements**

This product enhances to improve user mode RDMA abortive cleanup. This product enhances FW logging to host to work across device reset.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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### **Broadcom NetXtreme-E Driver for Microsoft Windows Server 2025**

Version: 233.0.148.0 (B) (Recommended)

#### **Important Note!**

HPE recommends the firmware provided in Broadcom Firmware Package for BCM5741x, BCM5750x and BCM5760x adapters, version 233.1.135.7 or later, for use with this driver.

#### **Enhancements**

This product now supports Azure Local 24H2.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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### **Broadcom NX1 1Gb Driver for Windows Server x64 Editions**

Version: 221.0.8.0 (B) (Recommended)

#### **Important Note!**

HPE recommends the firmware provided in HPE Broadcom NX1 Online Firmware Upgrade Utility for Windows Server x64 Editions, version 5.4.5.0 or later, for use with this driver.

#### **Enhancements**

This product now supports Azure Local 24H2.

### **Supported Devices and Features**

This product supports the following network adapters:

- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T LOM Adapter for HPE
- Broadcom BCM5720 Ethernet 1Gb 2-port BASE-T LOM Adapter for HPE

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### **HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9**

Version: 1.10.3-233.0.152.2 (Recommended)

#### **Important Note!**

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



### **Prerequisites**

This product is required to unload inbox NIC driver before install OOB driver if user want OOB driver to take effect immediately. Otherwise, OOB driver will take effect after system reboot under inbox driver is loaded.

### **Fixes**

This product fixes issue where hwrng failure while running ethtool reset.o This product fixes issue where incorrect GSO type reporting in HW-GRO. (Generic Receive Offload)

### **Enhancements**

This product enhances to create per PF worker thread to process Async events.This product enhances to Improve driver init in kdump kernel.This product enhances to handle FW recovery when bond mode is present.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## **HPE Broadcom NetXtreme-E Drivers for VMware vSphere 8.0**

Version: 2025.05.00 (Recommended)

### **Important Note!**

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

### **Fixes**

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

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## **HPE Broadcom NetXtreme-E Drivers for VMware vSphere 9.0**

Version: 2025.05.00 (Recommended)

### **Important Note!**

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

### **Fixes**

This product fixes the issue where ESXi Datastore not seen when NPAR is enabled.This product fixes the

issue where PSOD is seen when enable NPAR using 2 NICs.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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### **HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 4.**

Version: 233.0.152.2 (Optional)

### **Prerequisites**

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9, version 1.10.3-233.0.152.2 or later, must be installed before installing this product.

The libibverbs and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

### **Fixes**

- This product fixes issue where In HW LAG mode 1 with Port1 link down, RX packet and byte counters in the VM do not increment during VF-to-VF RoCE traffic.
- This product fixes issue where Active CQ value differs between debugfs and rdma resource show.
- This product fixes issue where in existing sysfs counters.
- This product fixes issue where header file inclusion.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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### **HPE Broadcom NetXtreme-E RoCE Library for Red Hat Enterprise Linux 9 Update 5.**

Version: 233.0.152.2 (Optional)

### **Prerequisites**

HPE Broadcom NetXtreme-E Drivers for Red Hat Enterprise Linux 9, version 1.10.3-233.0.152.2 or later, must be installed before installing this product.

The libibverbs and rdma-core package must be installed on the target system prior to the installation of the RoCE library. If not already present, the packages can be obtained from the operating system installation media.

### **Fixes**

- This product fixes issue where In HW LAG mode 1 with Port1 link down, RX packet and byte counters in the VM do not increment during VF-to-VF RoCE traffic.
- This product fixes issue where Active CQ value differs between debugfs and rdma resource show.

- This product fixes issue where in existing sysfs counters.
- This product fixes issue where header file inclusion.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## **HPE Broadcom tg3 Ethernet Drivers for Red Hat Enterprise Linux 9**

Version: 3.139t-1 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in HPE NX1 Broadcom Online Firmware Upgrade Utility for Linux x86\_64, version 2.41.x or later, for use with these drivers.

### **Prerequisites**

This product is required to unload inbox NIC driver before install OOB driver if user want OOB driver to take effect immediately. Otherwise, OOB driver will take effect after system reboot under inbox driver is loaded.

### **Fixes**

This product fixes issue where link disconnected with the latest Out-of-Box (OOB) Driver.

### **Supported Devices and Features**

These drivers support the following network adapters:

- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T OCP3 Adapter for HPE
- Broadcom BCM5720 Ethernet 1Gb 2-port BASE-T LOM Adapter for HPE
- Broadcom BCM5719 Ethernet 1Gb 4-port Base-T LOM Adapter for HPE

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## **HPE Intel iavf Drivers for Red Hat Enterprise Linux 9**

Version: 4.13.14-1 (Recommended)

### **Important Note!**

Intel Firmware Package For E810, version 4.80 or later for use with these drivers.

### **Fixes**

This product fixes default number of queues to resolve RSS issues.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

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## **HPE Mellanox RoCE ConnectX-4, ConnectX-5, ConnectX-6 and ConnectX-7 Driver for Red Hat Enterprise Linux 9 Update 5 (x86\_64)**

Version: 25.04-0.6.1.1 (Recommended)

### **Important Note!**

Mellanox Ethernet + RoCE Linux driver (mlnx-ofa\_kernel RPMs) supports only Ethernet mode of operation with RoCE (RDMA over Converged Ethernet) functionality for HPE Mellanox Ethernet-only adapters and HPE Mellanox VPI (Virtual Protocol Interconnect) adapters configured to operate in Ethernet mode. For customers requiring complete InfiniBand functionality or "InfiniBand + Ethernet" modes of operation on the same node, install HPE signed MLNX-OFED drivers from Linux Software Delivery Repository ([https://downloads.linux.hpe.com/SDR/project/mlnx\\_ofed\\_cx4plus/](https://downloads.linux.hpe.com/SDR/project/mlnx_ofed_cx4plus/)).

### **Fixes**

The following issues have been fixed in version 25.04-0.6.1.1:

- Buffer initialization became a performance bottleneck during the allocation of large buffers, typically when using a high number of QPs with large message sizes. The root cause was the inefficient use of `rand()`. This has been resolved by replacing it with a faster pseudo-random algorithm.
- A potential deadlock that could occur during the handling of peer memory registration failures.
- The following error occurred when switching to SwitchDev mode: "mlx5\_core 0000:03:00.0: mlx5\_cmd\_out\_err:835:(pid 24362): CREATE\_FLOW\_GROUP(0x933) op\_mod(0x0) failed, status bad parameter(0x3), syndrome (0x4065f0), err(-22); mlx5\_core 0000:03:00.0: E-Switch: Failed to create peer miss flow group err(-22)"
- A sysfs issue that occurred when accessing hardware counters from within a namespace.
- "ibstat" would fail and crash when encountering a non-RoCE/IB device, preventing it from displaying information for the remaining valid RoCE/IB devices.
- Bandwidth degradation in cases of high number of QPs, where polling only 16 CQEs per iteration may not be sufficient to process all completions in time.
- A race condition between firmware syndrome report and driver initialization during boot.
- The driver failed to load when a firmware syndrome was detected during boot.
- The `mlnx_tune -l` command did not list several operating systems that were in fact supported.
- The kernel did not define `TCA_TUNNEL_KEY_ENC_SRC_PORT`. To align offload behavior with non-offload, the OVS community introduced a commit ( `netdev-offload-tc: Fix offload of tunnel key tp_src` ) that causes offload to fail if this tunnel attribute is used. Now, any rule with a tunnel set action that includes a tunnel source port can no longer be offloaded.
- LLDP traffic from VFs or BF host PFs was not reaching the representor kernel interfaces.
- Flows where both the inner and outer destination (dst) and/or source (src) MAC addresses were

rewritten to the same value, the outer MAC address rewrite was ignored, leading to an outer MAC address of 00:00:00:00:00:00.

- Enabling sFlow with OVN caused OVS to crash.
- OVS crashed unexpectedly after DPUs repeatedly broadcast the error message “packet with own source address.”
- Changing the hw-offload setting from true to false while ports were configured led to errors reported in the OVS log.

## **Enhancements**

The following new features and changes have been included in version 25.04-0.6.1.1:

- Trust Lockdown Health Syndrome: Added a new health syndrome for trust lockdown and expose the CRR bit in the health buffer. When the CRR bit is set, it indicates that the syndrome requires a cold reset for recovery.
- A Single PTP Device per Hardware Clock: PHC is typically shared across multiple functions. Currently, the driver creates a separate PTP device for each network interface sharing the same PHC, resulting in redundancy and added complexity. To address this, a single PTP device is now created to represent the shared PHC when operating in real-time mode.
- Log IB State Transitions: Enhanced visibility into IB device state transitions by adding log messages to the kernel log (dmesg). Each time an IB device changes state, a corresponding message will be logged. For example: "mlx5\_0: Port: 1 Link DOWN".
- Optional-counters Binding Support and New Packets/bytes Counters: Previously, optional counters were available only on a per-link basis. This release introduces the ability to bind optional counters to a specific counter object, enabling users to track optional counters across a specific QP group. Support is provided for both automatic and manual binding modes. In both cases, the optional counters that are bound to the QP are those currently configured on the link at the time of binding. Additionally, four new optional counters that track RDMA ingress and egress traffic are introduced: `rdma_tx_bytes`; `rdma_tx_packets`; `rdma_rx_bytes`; `rdma_rx_packets`. This functionality is exposed to users via the `iproute2` package, which must be updated to support this feature.
- User CAPability (UCAP) API: The User CAPability (UCAP) API introduces a mechanism for creating user contexts with specific firmware privileges. It offers fine-grained control over firmware features by exposing each capability as a character device with root-level read-write access. Root processes can grant users these privileges by allowing access to the corresponding character devices. When a user context is created using a UCAP file descriptor, it inherits the associated privileges. For `mlx5`, two UCAP character devices are provided, and any user context opened with at least one of them is treated as privileged. To guarantee the execution of privileged commands, non-privileged commands are restricted when a privileged user is active on the device.

## **Supported Devices and Features**

**SUPPORTED KERNELS:** The kernels of Red Hat Enterprise Linux 9 update 5 (x86\_64) supported by this binary rpm are:

- 5.14.0-503.11.1 (x86\_64) and future update kernels.

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## Intel ice Drivers for Red Hat Enterprise Linux 9

Version: 1.17.8-1 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in Intel Firmware Package For E810, version 4.80 or later for use with these drivers.

### **Fixes**

This product fixed an issue where the 'ethtool ethx' displayed 'AUI' with AOC cable, should display 'Fibre'.

### **Enhancements**

This product now supports Red Hat Enterprise Linux 9.6. This product now supports Software Cross Timestamping feature for E810.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## Intel icea Driver for Microsoft Windows Server 2022

Version: 1.17.72.0 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in Intel Firmware Package for Columbiaville (FWPKG), version 4.80 or later, for use with this driver.

### **Fixes**

This product fixes an issue where the bugcheck D1 occurs when in the Jumbo frame scenario. This product fixes an issue where the VM traffic may not working when VF driver disabled or not installed.

### **Supported Devices and Features**

This driver supports the following HPE Intel ICEA network adapters:

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

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

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## Intel icea Driver for Microsoft Windows Server 2025

Version: 1.17.73.0 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in Intel Firmware Package for Columbiaville (FWPKG), version 4.80 or later, for use with this driver.

### **Fixes**

This product fixes an issue where the bugcheck D1 occurs when in the Jumbo frame scenario. This product fixes an issue where the VM traffic may not working when VF driver disabled or not installed.

### **Supported Devices and Features**

This driver supports the following HPE Intel ICEA network adapters:

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

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## Intel icen Driver for VMware vSphere 8.0

Version: 2025.05.00 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in Intel Firmware Package For E810 Ethernet Adapter, version 4.71 or later, for use with these drivers.

### **Fixes**

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

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## Intel 10Gbps Driver for VMware vSphere 9.0

Version: 2025.05.00 (Recommended)

### **Important Note!**

HPE recommends the firmware provided in Intel Firmware Package For E810 Ethernet Adapter, version 4.71 or later, for use with these drivers.

### **Fixes**

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

### **Supported Devices and Features**

This product supports the following network adapters:

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

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## Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2022

Version: 25.4.26768.0 (Recommended)

### **Fixes**

This product fixed an issue that could cause a BSOD during the suspend/resume process when the firmware is not functional. This product fixed an issue where "Mlx5Cmd -Stat" displayed incorrect physical location information on multi-segment PCI machines when the adapter was disabled. This product fixed an issue where Event 399 displayed incorrect information. This product fixed an issue that triggered Error events 410 and 304 when enabling or disabling pktmon on an adapter operating in VMQ/SR-IOV mode.

### **Enhancements**

Added support for the DOCA Telemetry Library on Windows.

### **Supported Devices and Features**

This driver supports the following network adapters:

- Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE
- Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE
- Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE

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## Mellanox CX5 and CX6DX Driver for Microsoft Windows Server 2025

Version: 25.4.26768.0 (Recommended)

### **Fixes**

This product fixed an issue that could cause a BSOD during the suspend/resume process when the



firmware is not functional. This product fixed an issue where "Mlx5Cmd -Stat" displayed incorrect physical location information on multi-segment PCI machines when the adapter was disabled. This product fixed an issue where Event 399 displayed incorrect information. This product fixed an issue that triggered Error events 410 and 304 when enabling or disabling pktmon on an adapter operating in VMQ/SR-IOV mode.

### **Enhancements**

Added support for the DOCA Telemetry Library on Windows.

### **Supported Devices and Features**

This driver supports the following network adapters:

- Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE
- Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE
- Mellanox MCX631432AS-ADAI Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE

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### **Intel QuickAssist Technology driver for Microsoft Windows**

Version: 2.5.0.13 (B) (Recommended)

### **Enhancements**

- Updated Supported Environments

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### **HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 8.0**

Version: 2025.09.01 (Recommended)

### **Important Note!**

- Actual Version is 7.732.04.00

### **Fixes**

- Fix a00145710en\_us: HPE MR Gen11 and Gen10 Plus Storage Controllers - Purple Screen of Death (PSOD) May Be Observed When Updating Controller Firmware Via Service Pack for ProLiant (SPP) in Remote Deployment Mode With a VMware ESXi OS

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### **HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver (64-bit) for vSphere 9.0**

Version: 2025.09.01 (Recommended)

### **Important Note!**

- Actual Version is 7.732.04.00

### **Fixes**

- Fix a00145710en\_us: HPE MR Gen11 and Gen10 Plus Storage Controllers - Purple Screen of Death (PSOD) May Be Observed When Updating Controller Firmware Via Service Pack for ProLiant (SPP) in Remote Deployment Mode With a VMware ESXi OS

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**HPE MR416i-p, MR216i-p, MR416i-a, MR216i-a Gen10 plus Controllers and MR416i-p, MR416i-o, MR216i-o, MR408i-o, MR216i-p, MR408i-p Gen11 Controllers Driver for 64-bit Red Hat Enterprise Linux 9**

Version: 07.732.03.00 (Recommended)

**Fixes**

Fix a potential mutex deadlock between reset and event handling thread. The issue may happen when there is heavy IO, device add/delete and SCSI rescan running in the same time.

**Enhancements**

Verified the UNMAP command and confirmed that the Block Limits VPD page data is correct with the latest firmware.

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**HPE MR416i-p, MR416i-a, MR216i-p, MR216i-a Gen10p Controllers and MR416i-o, MR416i-p, MR216i-o, MR216i-p, MR408i-o , MR408i-p Gen11 Controllers driver for Microsoft Windows 2025 edition**

Version: 7.732.3.0 (Recommended)

**Fixes**

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

Version: 2025.10.01 (Recommended)

**Important Note!**

- Actual ESXi8.0 driver version is 80.4862.0.104 It is strongly recommended to use controller firmware version 7.81 for SR SAS/SATA controllers and firmware version 03.01.41.032 for SR tri-mode controllers, along with Windows driver version 1016.24.0.1002, Linux driver version 2.1.36-026, and VMware ESXi driver version 4862.0.104, as this combination has been fully qualified.

**Fixes**

Fixed PSOD indicates a divide-by-zero happened. Fixed an issue where the driver's controller structure field was too small for the full ASCII firmware version. Fixed an issue where a message from a periodic check on the controller heartbeat appeared as a system error instead of an informational message. Fixed an issue where firmware versioning information was incorrect or blank on some of the controllers.

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**HPE ProLiant Gen10 Smart Array and Gen10 Plus and Gen11 Smart RAID Controller Driver for VMware vSphere 9.0 (Driver Component).**

Version: 2025.09.01 (Recommended)

**Important Note!**

- Actual ESXi9.0 driver version is 90.4862.0.104 It is strongly recommended to use controller firmware version 7.81 for SR SAS/SATA controllers and firmware version 03.01.41.032 for SR tri-mode controllers, along with Windows driver version 1016.24.0.1002, Linux driver version 2.1.36-026, and VMware ESXi driver version 4862.0.104, as this combination has been fully qualified.

### **Fixes**

Fixed PSOD indicates a divide-by-zero happened. Fixed an issue where the driver's controller structure field was too small for the full ASCII firmware version. Fixed an issue where a message from a periodic check on the controller heartbeat appeared as a system error instead of an informational message. Fixed an issue where firmware versioning information was incorrect or blank on some of the controllers.

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## **HPE Smart Array Gen10, Gen10Plus and Gen11 Controller Driver for Windows Server 2019, Windows Server 2022 and Windows Server 2025**

Version: 1016.24.0.1002 (Recommended)

### **Important Note!**

It is strongly recommended to use controller firmware version 7.81 for SR SAS/SATA controllers and firmware version 03.01.41.032 for SR tri-mode controllers, along with Windows driver version 1016.24.0.1002, Linux driver version 2.1.36-026, and VMware ESXi driver version 4862.0.104, as this combination has been fully qualified.

### **Fixes**

Fixed an issue related to the upcoming "Driver isolation" requirement for Windows@ Server 2025 security.

### **Enhancements**

Added support for NVMe admin passthru requests.

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## **MR416i-p, MR416i-a, MR216i-p, MR216i-a Gen10p Controllers and MR416i-o, MR416i-p, MR216i-o, MR216i-p, MR408i-o , MR408i-p Gen11 Controllers driver for Microsoft Windows 2022 edition**

Version: 7.732.3.0 (Recommended)

### **Fixes**

Fix an issue that system may crash when importing Logical Drive.

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## **HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2022**

Version: 14.4.393.20 (Recommended)

### **Important Note!**

Release notes: Broadcom Release notes

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link: <http://www.hpe.com/storage/spock/>

### **Enhancements**

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command: The extracted files are located: C:\Users\Administrator\Documents\Emulex\Drivers\FC-version Each kit folder has subsequent

architecture folders with subsequent OS folders. For example,  
C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2022

### **Supported Devices and Features**

- HPE SN1620E 32Gb Dual port Fibre Channel Secure Host Bus Adapter
- HPE SN1720E 64Gb Dual port Fibre Channel Secure Host Bus Adapter

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## **HPE Storage Fibre Channel Adapter Kit for the x64 Emulex Storport Driver for Microsoft Windows Server 2025**

Version: 14.4.393.20 (b) (Recommended)

### **Important Note!**

Release notes:Broadcom Release notes

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following  
link:<http://www.hpe.com/storage/spock/>

### **Enhancements**

The raw driver files can be obtained by extracting the Smart Component and then extracting the Emulex installer. Use this command:The extracted files are  
located:C:\Users\Administrator\Documents\Emulex\Drivers\FC-version Each kit folder has subsequent architecture folders with subsequent OS folders. For example,  
C:\Users\Administrator\Documents\Emulex\Drivers\FC-version\x64\win2022

### **Supported Devices and Features**

- HPE SN1620E 32Gb Dual port Fibre Channel Secure Host Bus Adapter
- HPE SN1720E 64Gb Dual port Fibre Channel Secure Host Bus Adapter

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## **HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2022**

Version: 9.4.11.20 (Recommended)

### **Important Note!**

This component is supported only on Gen12 ProLiant servers.Release Notes: HPE 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/>

### **Enhancements**

Updated to version 9.4.11.20

### **Supported Devices and Features**

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

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

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## **HPE Storage Fibre Channel Adapter Kit for the x64 QLogic Storport Driver for Microsoft Windows Server 2025**

Version: 9.4.11.20 (b) (Recommended)

### **Important Note!**

This component is supported only on Gen12 ProLiant servers. Release Notes: HPE 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/>

### **Enhancements**

Updated to version 9.4.11.20

### **Supported Devices and Features**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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## **Red Hat Enterprise Linux 9 Update 5 Server Fibre Channel Driver Kit for HPE Emulex Host Bus Adapter**

Version: 14.4.473.24 (Recommended)

### **Important Note!**

This component is supported only on Gen12 ProLiant servers.

Release notes:

Broadcom Release notes

Rewrite of same Driver version has to be performed using --reinstall option

Example: `rpm -Uvh elx-lpfc-kmp-default-<version>.<OSupdate>.x86_64.rpm --reinstall`

For more information please refer to the Knowledge Base at:

<https://www.suse.com/support/kb/doc/?id=000019640>

Updated to driver version 14.4.473.24

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link: <http://www.hpe.com/storage/spock/>

### **Enhancements**

Updated to version 14.4.473.24

### **Supported Devices and Features**

Version: 10.02.14.00-k1 (Recommended)

### **Important Note!**

This component is supported only on Gen12 ProLiant servers.<sup>1</sup> The rpm base-name for the QLogic driver has been changed to "qlgc". Upgrades from the earlier "hpqlgc" driver are supported.

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link:<http://www.hpe.com/storage/spock/>

### **Enhancements**

Updated Driver version 10.02.14.00-k1

### **Supported Devices and Features**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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### **iLO 6 Automatic Server Recovery Driver for Microsoft Windows Server 2022**

Version: 4.7.1.0 (H) (Optional)

### **Enhancements**

- Updated Supported Environments

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### **iLO 6 Automatic Server Recovery Driver for Microsoft Windows Server 2025**

Version: 4.7.2.0 (F) (Optional)

### **Enhancements**

- Updated Supported Environments

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### **iLO 6 Channel Interface Driver for Microsoft Windows Server 2022**

Version: 4.7.1.0 (H) (Optional)

### **Enhancements**

- Updated Supported Environments

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### **iLO 6 Channel Interface Driver for Microsoft Windows Server 2025**

Version: 4.7.2.0 (F) (Optional)

### **Enhancements**

- Updated Supported Environments

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### **iLO 7 Automatic Server Recovery Driver for Microsoft Windows Server 2022 and 2025**

Version: 4.8.0.0 (D) (Optional)

### **Enhancements**

- Updated Support Platform

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### **iLO 7 Channel Interface Driver for Microsoft Windows Server 2022 and 2025**

Version: 4.8.0.0 (D) (Optional)

### **Enhancements**

- Updated Supported Platform

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### **Matrox G200eH3 Video Controller Driver for Microsoft Windows Server 2019, 2022 and 2025**

Version: 9.15.1.268 (E) (Optional)

### **Enhancements**

- Updated Supported Environments

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### **Matrox G200eH5 Video Controller Driver for Microsoft Windows Server 2022 and 2025**

Version: 9.15.1.271 (C) (Optional)

### **Enhancements**

- Updated Supported Products

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### **Broadcom Firmware Package for BCM5741x adapters**

Version: 233.1.135.7 (Recommended)

### **Important Note!**

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

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

### **Fixes**

This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries. This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool. This product fixes an issue where Broadcom NXE NICs could overheat and become unrecognized when MCTP was disabled.

### **Supported Devices and Features**

This product supports the following network adapters:

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### **Broadcom Firmware Package for BCM5750x adapters**

Version: 233.1.135.7 (Recommended)

### **Important Note!**

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

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

### **Fixes**

This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries. This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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### **Broadcom Firmware Package for BCM57608 100GbE 2p Adapter**

Version: 233.1.135.7 (Recommended)

### **Important Note!**

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

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

### **Fixes**

This product fixes an issue where firmware updates failed when using the UEFI-FMP update method. This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries. This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

### **Supported Devices and Features**

This product supports the following network adapters:

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### **Broadcom Firmware Package for BCM57608 100GbE 2p OCP3 Adapter**

Version: 233.1.135.7 (Recommended)

### **Important Note!**

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

- Broadcom NetXtreme-E Driver for Microsoft Windows Server, version 233.0.148.0 or later



- HPE Broadcom NetXtreme-E Drivers for Linux, version 1.10.3-233.0.152. or later
- HPE Broadcom NetXtreme-E Drivers for VMware, version 2025.05.00 or later

### **Fixes**

This product fixes an issue where firmware updates failed when using the UEFI-FMP update method. This product fixes an issue where the AssignablePhysicalNetworkPorts hyperlink under NetworkDeviceFunctions was not expanded correctly with Redfish expand queries. This product fixes an issue where the adapter did not correctly report all supported link speeds (1G/10G/25G) via ethtool.

### **Supported Devices and Features**

This product supports the following network adapters:

---

#### **Broadcom NX1 Firmware Package for BCM5719 adapter**

Version: 20.33.41 (Recommended)

### **Important Note!**

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

### **Fixes**

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

### **Supported Devices and Features**

This product supports the following network adapter:

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

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#### **Broadcom NX1 Firmware Package for BCM5719 OCP3 adapter**

Version: 20.33.41 (Recommended)

### **Important Note!**

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

### **Fixes**

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

### **Supported Devices and Features**

This product supports the following network adapter:

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

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

Version: 4.80 (Recommended)

### **Important Note!**

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

- Intel icea Driver for Microsoft Windows Server, version 1.17.72.0 or later

- Intel ice Drivers for Linux, version 1.17.8-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Fixes**

This product fixes an issue where the Port Reset attributes are missing under RDE port Schema.This product fixes an issue where the link failed with the LCP-1250RJ3SR-KH transceiver.This product fixes an issue where the FW PLDM upgrade may failed with CVL4.71 when MCTP traffic loading is heavy.This product fixes an issue where the BSOD(0x7e) observed in Windows OS with OOB driver.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

Version: 4.80 (Recommended)

### **Important Note!**

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

- Intel icea Driver for Microsoft Windows Server, version 1.17.72.0 or later
- Intel ice Drivers for Linux, version 1.17.8-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Fixes**

This product fixes an issue where the Port Reset attributes are missing under RDE port Schema.This product fixes an issue where the link failed with the LCP-1250RJ3SR-KH transceiver.This product fixes an issue where the FW PLDM upgrade may failed with CVL4.71 when MCTP traffic loading is heavy.This product fixes an issue where the BSOD(0x7e) observed in Windows OS with OOB driver.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

Version: 4.80 (Recommended)

### **Important Note!**

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

- Intel icea Driver for Microsoft Windows Server, version 1.17.72.0 or later
- Intel ice Drivers for Linux, version 1.17.8-1 or later

- Intel icen Driver for VMware, version 2025.05.00 or later This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Fixes**

This product fixes an issue where the Port Reset attributes are missing under RDE port Schema.This product fixes an issue where the link failed with the LCP-1250RJ3SR-KH transceiver.This product fixes an issue where the FW PLDM upgrade may failed with CVL4.71 when MCTP traffic loading is heavy.This product fixes an issue where the BSOD(0x7e) observed in Windows OS with OOB driver.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

Version: 4.80 (Recommended)

### **Important Note!**

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

- Intel icea Driver for Microsoft Windows Server, version 1.17.72.0 or later
- Intel ice Drivers for Linux, version 1.17.8-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later This FW version does not support Port.Reset RDE metrics. This product will be enhance to improve the functions in the future release

### **Fixes**

This product fixes an issue where the Port Reset attributes are missing under RDE port Schema.This product fixes an issue where the link failed with the LCP-1250RJ3SR-KH transceiver.This product fixes an issue where the FW PLDM upgrade may failed with CVL4.71 when MCTP traffic loading is heavy.This product fixes an issue where the BSOD(0x7e) observed in Windows OS with OOB driver.

### **Supported Devices and Features**

This product supports the following network adapters:

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

---

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

Version: 4.80 (Recommended)

### **Important Note!**

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

- Intel icea Driver for Microsoft Windows Server, version 1.17.72.0 or later
- Intel ice Drivers for Linux, version 1.17.8-1 or later
- Intel icen Driver for VMware, version 2025.05.00 or later This FW version does not support Port.Reset

RDE metrics. This product will be enhance to improve the functions in the future release

### **Fixes**

This product fixes an issue where the Port Reset attributes are missing under RDE port Schema.This product fixes an issue where the link failed with the LCP-1250RJ3SR-KH transceiver.This product fixes an issue where the FW PLDM upgrade may failed with CVL4.71 when MCTP traffic loading is heavy.This product fixes an issue where the BSOD(0x7e) observed in Windows OS with OOB driver.

### **Supported Devices and Features**

This product supports the following network adapters:

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

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

Version: 26.45.1020 (Recommended)

### **Important Note!**

Disclaimer: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution. A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26451020/known+issues>

### **Prerequisites**

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

### **Fixes**

The following issues have been fixed in version 26.45.1020:Configuring PHY\_RATE\_MASK for 10G in NV settings incorrectly disabled 10G capabilities.RTT packets with any destination MAC address were incorrectly treated as having a valid destination MAC. The new firmware now discards RTT packets if their destination MAC does not match the port's MAC.

### **Enhancements**

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

No new features and changes have been included in version 26.45.1020.

### **Supported Devices and Features**

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

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

Version: 26.45.1020 (Recommended)

#### **Important Note!**

Disclaimer: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution. A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6lxfirmwarev26451020/known+issues>

#### **Prerequisites**

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

#### **Fixes**

The following issues have been fixed in version 26.45.1020: Configuring PHY\_RATE\_MASK for 10G in NV settings incorrectly disabled 10G capabilities. RTT packets with any destination MAC address were incorrectly treated as having a valid destination MAC. The new firmware now discards RTT packets if their destination MAC does not match the port's MAC.

#### **Enhancements**

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

No new features and changes have been included in version 26.45.1020.

### **Supported Devices and Features**

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

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## **NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16**

### **MCX75310AAS-NEAT Adapter : HPE part numbers P45641-B23 and P45641-H23**

Version: 28.45.1200 (Recommended)

#### **Important Note!**

Choose the appropriate firmware file format based on your preference and what suits your environment. Disclaimer: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution. A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues>

#### **Fixes**

The following fixes have been included in version 28.45.1200:

- Fixed DC InfiniBand functionality.

#### **Enhancements**

New features and changes included in version 28.45.1200:

- Introduced a 1ms delay for SPDM responses.

#### **Supported Devices and Features**

| HPE Part Number | NVIDIA VPI Adapter                                                                                              | PSID          |
|-----------------|-----------------------------------------------------------------------------------------------------------------|---------------|
| P45641-B23      | HPE InfiniBand NDR/Ethernet 400Gb 1-port OSFP PCIe5 x16<br>MCX75310AAS-NEAT Adapter (P45641-B23 and P45641-H23) | MT_0000001120 |

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## **NVIDIA Firmware Package (FWPKG) for HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16**

### **MCX75310AAS-HEAT Adapter : HPE part numbers P45642-B22 and P45642-H22**

Version: 28.45.1200 (Recommended)

#### **Important Note!**

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

your purchase of the HPE product or solution. A list of known issues with this release is available at:  
<https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues>

### **Prerequisites**

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

### **Fixes**

The following fixes have been included in version 28.45.1200:

- Fixed DC InfiniBand functionality.

### **Enhancements**

New features and changes included in version 28.45.1200: Introduced a 1ms delay for SPDM responses.

### **Supported Devices and Features**

| HPE Part Number | NVIDIA VPI Adapter                                                                                              | PSID          |
|-----------------|-----------------------------------------------------------------------------------------------------------------|---------------|
| P45642-B22      | HPE InfiniBand NDR200/Ethernet 200Gb 1-port OSFP PCIe5 x16 MCX75310AAS-HEAT Adapter (P45642-B22 and P45642-H22) | MT_0000001119 |

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

Version: 28.45.1200 (Recommended)

### **Important Note!**

Choose the appropriate firmware file format based on your preference and what suits your environment. Disclaimer: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution. A list of known issues with this release is available at:  
<https://docs.nvidia.com/networking/display/connectx7firmwarev28451200/known+issues>

### **Fixes**

The following fixes have been included in version 28.45.1200:

- Fixed DC InfiniBand functionality.

### **Enhancements**

New features and changes included in version 28.45.1200:

- Introduced a 1ms delay for SPDM responses.

### **Supported Devices and Features**

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

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

Version: 22.45.1020 (Recommended)

#### **Important Note!**

Disclaimer: Certain software including drivers and documents may be available from NVIDIA. If you select a URL that directs you to <http://www.nvidia.com/>, you are then leaving HPE.com. Please follow the instructions on <http://www.nvidia.com/> to download NVIDIA software or documentation. When downloading the NVIDIA software or documentation, you may be subject to NVIDIA terms and conditions, including licensing terms, if any, provided on its website or otherwise. HPE is not responsible for your use of any software or documents that you download from <http://www.nvidia.com/>, except that HPE may provide a limited warranty for NVIDIA software in accordance with the terms and conditions of your purchase of the HPE product or solution. A list of known issues with this release is available at: <https://docs.nvidia.com/networking/display/connectx6dxfirmwarev22451020/known+issues>

#### **Prerequisites**

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

#### **Fixes**

The following issues have been fixed in version 22.45.1020: PCC\_CNP\_COUNT could not be reset using the pcc\_counter.sh script in the DOCA tools. VQoS algorithm issue related to learning when an element is active and when it begins sending traffic. A race condition that would prevent the application from transmitting when VQoS was enabled. Bandwidth would drop when unbinding multiple VFs with VQoS enabled. RTT packets with any destination MAC address were incorrectly treated as having a valid destination MAC. The new firmware now discards RTT packets if their destination MAC does not match the port's MAC.

#### **Enhancements**

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

No new features and changes have been included in version 22.45.1020.

### **Supported Devices and Features**

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



|  |                        |  |
|--|------------------------|--|
|  | QSFP56 Adapter for HPE |  |
|--|------------------------|--|

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**Universal Firmware Package for Drives - MO000800KYDZK, MO001600KYDZR, MO003200KYDZT, MO006400KYDZU, VO000960KYDZH, VO001920KYDZL, VO003840KYDZN, VO001536KYDZQ and VO007680KYDZP**

Version: HPK1 (Recommended)

**Important Note!**

There is a new FW HPK5 to fix a critical issue, here is the advisory in more detail.  
o Advisory: HPE SSD - CUSTOMER ACTION REQUIRED to Prevent Potential System "No Boot" Error When SPDMA Is Enabled on Certain Models of SSDs

- Advisory: (Revision) HPE Server Platforms - Firmware Update Recommended -With Small Form Factor (SFF) NVMe Solid State Drive (SSD) Firmware Versions Prior To HPK5, the Drive May Fail and Become Inaccessible

**Fixes**

Changes and improvements made in HPK1 are to enhance receiver signals by changing the drive's internal PHY register values on Gen11 x2 direct attached system.

---

**Universal Firmware Package for Drives - MO001600KYFFF, MO003200KYFET, MO006400KYFEU, VO001920KYFFE, VO003840KYFEP, VO007680KYFEQ and VO015360KYFER**

Version: HPK2 (Recommended)

**Important Note!**

Upgrading from HPK1 to HPK2 requires power cycle.

**Fixes**

This is a maintenance release that contains code fix improvements and drive function enhancements.  
Upgrading from HPK1 to HPK2 requires power cycle.

---

**Universal Firmware Package for Drives - MO001600KZYWU, MO003200KZYXB, MO006400KZYXC, VO001920KZYWT, VO003840KZYWV and VO007680KZYXA**

Version: HPK5 (Recommended)

**Fixes**

This firmware provides bug fixes for the P5620/P5520.

---

**Universal Firmware Package for Drives - VK000960KYDPT, VK001920KYDPU, VK003840KYDPV and VK007680KYDQA**

Version: HPK5 (Recommended)

**Fixes**

This FW update contains the fix for false ILO message of temporary drive "degraded" status.

---

**Universal Firmware Package for Drives - VR000960YYXPR**

Version: HPK2 (Recommended)

**Fixes**

RSOD issue fixed. RSOD was occurred during server power-on if enable the VROC.

---

**Universal Firmware Package for Drives - VV003840KXNTH, VV007680KXNTN and VV015360KXNTP**

Version: HPK6 (Recommended)

**Fixes**

Firmware maintenance release.

---

**Universal Firmware Package for Drives - VV003840KXWBF, VV007680KXWBL and VV015360KXWBN**

Version: HPK5 (Recommended)

**Fixes**

HPK5 is a planned maintenance release that follows HPK2. This is a recommended FW release that provides bug fixes for the 4K IU Solid State Drives. Noted this FW change require a system power cycle after installation for it to take effect.

---

**Universal Firmware Package for Drives - MO000800KXPRV, MO001600KXPTR, MO003200KXPTT, MO006400KXPTU, VO000960KXPRU, VO001920KXPTN, VO003840KXPTP and VO007680KXPTQ**

Version: HPK2 (Recommended)

**Fixes**

This is a maintenance release that contains code improvements for CAP.TO and LED behavior.

---

**Universal Firmware Package for Drives - MO000800KXUJT, MO001600KXUJU, MO003200KXUJV, MO006400KXUKA, VO000960KXUJN, VO001920KXUJP, VO003840KXUJQ, VO007680KXUJR and VO015360KYGZQ**

Version: HPK2 (Recommended)

**Important Note!**

HPK2 FW adding 15.36T HPE model number and not allowing user to flash back (flash downgrade) to prevent the issue on 15.36T drive.

**Fixes**

This version of FW now supports the 15.36TB model and FW fixes of drive time-out/failures.

---

**Universal Firmware Package for Drives - MO001600KXVYH, MO003200KXVZD, MO006400KXVZE, VO001920KXVYF, VO003840KXVZA, VO007680KXVZB and VO015360KXVZC**

Version: HPK3 (Recommended)

### **Fixes**

- Fix for PCIe link length drop in AMD x2 system configuration
- Fix for drive detection after hot re-insert on Windows
- Fix for other regular FW patch release

---

### **Universal Firmware Package for Drives - MO001600KYDMU, MO003200KYDNC, MO006400KYDND, VO001920KYDMT, VO003840KYDMV, VO007680KYDNA and VO015360KYDNB**

Version: HPK6 (Recommended)

### **Fixes**

FW HPK5 may cause Uncorrectable Machine Check Exception (UMCE) to occur. It is recommended to update FW to HPK6.

---

### **Universal Firmware Package for Drives - MO001600YXUJB, MO003200YXUJC, MO006400YXUJD, VO001920YXUHU, VO003840YXUHV and VO007680YXUJA**

Version: HPK3 (Recommended)

### **Fixes**

- Fix for PCIe link length drop in AMD x2 system configuration
- Fix for drive detection after hot re-insert on Windows
- Fix for other regular FW patch release

---

### **Universal Firmware Package for Drives - MV001600LYCBT, MV003200LYCBA, MV006400LYCBB, VV015360LYHDC, VV001920LYCBR, VV003840LYCAU and VV007680LYCAV**

Version: HPK3 (Recommended)

### **Fixes**

The FW address: PCIe link drop and Other regular FW patches release.

---

### **Universal Firmware Package for Drives - MV003200KYFFK, MV006400KYFFA, MV012800KYFFB, VV003840KYFFH, VV007680KYFFL and VV015360KYFEV**

Version: HPK3 (Recommended)

### **Fixes**

This is a maintenance release that contains code fix improvements and drive function enhancements.

---

### **Universal Firmware Package for Drives - MV003200LXUJK, MV006400LXUJL, VV003840LXUJE, VV007680LXUJF and VV015360LXUJH**

Version: HPK7 (Recommended)

### **Fixes**

- Regular FW maintenance for fixing MCU, sanitize, DRAM and log page..etc.

---

**Universal Firmware Package for Drives - VR000480KXNXE, VR000960KXNZU and VS001920KXNXF**

Version: HPK4 (Recommended)

**Fixes**

Changes and improvements that have been made in the firmware HPK4 which disable MCTP over PCIe VDM over the previous firmware.

---

**Universal Firmware Package for Drives - VV001920LYDTT, VV003840LYDTU and VV007680LYDTV**

Version: HPK6 (Recommended)

**Fixes**

To eliminate the risk of gen drop issue.

---

**Universal Firmware Package for Drive - MB016000JWXKH**

Version: HPDC (Recommended)

**Fixes**

This maintenance revision improves data integrity. The risk of not upgrading to this firmware is the increased possibility of data corruption in certain error and timing conditions.

---

**Universal Firmware Package for Drives - MB006000JWZVQ and MB008000JWZVR**

Version: HPD3 (B) (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - EG000600JWJNP, EG000600JXLVV, EG001200JWJNQ, EG001200JXLWA and EG001200MXJQU**

Version: HPD9 (Recommended)

**Fixes**

Regular FW maintenance release.

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**Universal Firmware Package for Drives - EG001800JWJNR, EG001800JXLWB, EG002400JWJNT, EG002400JXLWC and EG002400MXJQT**

Version: HPDB (Recommended)

**Fixes**

- Fixes the Firmware version HPDB adds compatibility with the latest NAND generation for continuity of supply.

---

**Universal Firmware Package for Drives - MB001000JWWPV, MB002000JWWQA and MB004000JWWQB**

Version: HPD8 (Recommended)

### **Fixes**

Remove ROM flash way from this FWPKG.

---

### **Universal Firmware Package for Drives - MB002000JYDNE and MB004000JYDPB**

Version: HPD6 (Recommended)

### **Fixes**

Firmware changes aligned for future FIPS code release and one assert fix.

---

### **Universal Firmware Package for Drives - MB004000JWZVU**

Version: HPD3 (B) (Recommended)

### **Fixes**

Remove ROM flash way from this FWPKG.

---

### **Universal Firmware Package for Drives - MB006000JYDNF, MB008000JYDPC and MB010000JYDNH**

Version: HPD5 (Recommended)

### **Fixes**

Firmware changes aligned for future FIPS code release and one assert fix.

---

### **Universal Firmware Package for Drives - MB008000JWWQP and MB006000JWWQN**

Version: HPD8 (Recommended)

### **Fixes**

Remove ROM flash way from this FWPKG.

---

### **Universal Firmware Package for Drives - MB010000JWZHA, MB012000JWZHB, MB014000JWZHC and MB016000JWZHE**

Version: HPD4 (Recommended)

### **Fixes**

Remove ROM flash way from this FWPKG.

---

### **Universal Firmware Package for Drives - MB010000JYDKK, MB012000JYCJF, MB014000JYCJV, MB016000JYDKL and MB018000JYDKN**

Version: HPD6 (Recommended)

### **Fixes**

A Drive Firmware enhancement has been made for Primera 600 products to reduce the probability of infrequent, unexpected power loss on some backed drives.

---

**Universal Firmware Package for Drives - MB014000JXUCC**

Version: HPD4 (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MB016000JXLBA and MB018000JXLAU**

Version: HPD3 (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MB018000JXMTH and MB020000JXMTP**

Version: HPD3 (Recommended)

**Fixes**

- Assert fixes, current firmware improvements and bug fixes.

---

**Universal Firmware Package for Drives - MB12000JYESN, MB16000JYEVC, MB20000JYEVD**

Version: HPD1 (B) (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MB24000JYEVE**

Version: HPD1 (B) (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MO000960RXKRC, MO001920RXKRH, MO003840RXKRK, VO000960RXKRB, VO001920RXKRD and VO003840RXKRE**

Version: HPD5 (B) (Recommended)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MO000960RXRQK, MO001920RXRRH, MO003840RXRRK, VO000960RXRQL, VO001920RXRRL, VO003840RXRRN and VO007680RYEWD**

Version: HPD4 (B) (Critical)

**Fixes**

Remove ROM flash way from this FWPKG.

---

**Universal Firmware Package for Drives - MO001600PXMTN, MO003200PXMTV, MO006400PXMUA, VO001920PXMTL, VO003840PXMTR, VO007680PXMTT and VO015360PXMTU**

Version: HPD4 (Recommended)

**Fixes**

- Fix chip kill -The host IO CMD may get timed out and shows SNS=04/40/C2 Fix garbage collection checking for performance recovery.

---

**Universal Firmware Package for Drives - MO001600PXVRU, VO003840PXVRR and VO007680PXVRT**

Version: HPD3 (Recommended)

**Fixes**

- Fix chip kill -The host IO CMD may get timed out and shows SNS=04/40/C2.

---

**Universal Firmware Package for Drives - MO001600PZWSH, MO003200PZWSK, MO000800PZWSF and MO006400PZXFA**

Version: HPD4 (Critical)

**Fixes**

- This is a firmware maintenance release. It addresses a potential data loss issue, along with other bug fixes and improvements.
- For more information, refer to HPE Customer Bulletin at the following URL:  
[https://support.hpe.com/hpsc/doc/public/display?docId=a00150711en\\_us](https://support.hpe.com/hpsc/doc/public/display?docId=a00150711en_us).

---

**Universal Firmware Package for Drive - MB010000GYDKP, MB012000GYCJL, MB014000GYCJT, MB016000GYDKQ and MB018000GYDKR**

Version: HPG3 (Recommended)

**Fixes**

Regular Firmware changes included: corner case performance enhance. o Servo change that resolves issue with early heat application from Idle sweep seek terminated that may cause read errors

---

**Universal Firmware Package for Drive - MB016000GWXKK**

Version: HPG4 (Recommended)

**Fixes**

- This firmware revision improves data integrity and reliability by optimizing adjacent track refresh parameters and management of emergency power loss table structure
- The risk of not upgrading to this firmware is the increased possibility of data corruption in emergency power loss events
- Several maintenance items are included in this firmware revision that reduce the probability of hangs and provide some minor performance improvements

---

**Universal Firmware Package for Drives - MB004000GWZVT**

Version: HPG3 (Recommended)

**Fixes**

This maintenance revision improves data integrity. The risk of not upgrading to this firmware is the increased possibility of data corruption in certain error and timing conditions.

---

**Universal Firmware Package for Drives - MB012000GZVVT, MB014000GZVU, MB016000GZYVV and MB018000GYCLL**

Version: HPG4 (Recommended)

**Fixes**

Improves data integrity. The risk of not upgrading to this firmware is the increased possibility of data corruption in certain error and timing conditions. Several maintenance items are included in this firmware revision that reduce the probability of hangs and provide a minor performance improvement.

---

**Universal Firmware Package for Drives - MB12000GYESP, MB16000GYEVF and MB20000GYEVH**

Version: HPG1 (Recommended)

**Fixes**

- Fix FW assert and other regular fixes

---

**Universal Firmware Package for Drives - MK000480GZXRA, MK000960GZXRB, MK001920GZXRC and MK003840GZXRV**

Version: HPG1 (Recommended)

**Fixes**

- Fix contains optimization to increase the time for Recovery operation and few checks for maintenance

---

**Universal Firmware Package for Drives - VK000240GZXRU, VK000480GZXRF, VK000960GZXQU, VK001920GZXQV, VK003840GZXRH and VK007680GZXRT**

Version: HPG1 (Recommended)

**Fixes**

- Fix contains optimization to increase the time for Recovery operation and few checks for maintenance

---

**Universal Firmware Package for Drives - MB001000GWJAN, MB002000GWFVA and MB004000GFWB**

Version: HPG1 (Recommended)

**Fixes**

- A minor reliability enhancement involving an extra head cleaning operation o



---

**Universal Firmware Package for Drives - MB004000GWKGV**

Version: HPG1 (Recommended)

**Fixes**

This firmware fixes an issue where the drive can become inaccessible after an emergency power off, and corrects a potential verification issue during read recovery.

---

**Universal Firmware Package for Drives - MB006000GYDNL, MB008000GYDPE and MB010000GYDNN**

Version: HPG4 (Recommended)

**Fixes**

- Firmware changes aligned for FIPS code release and one assert fix

---

**Universal Firmware Package for Drives - MB018000GXMTK and MB020000GXMTQ**

Version: HPG3 (Recommended)

**Fixes**

- Improve the FW about data mismatch after SPL issued.

---

**Universal Firmware Package for Drives - MK000480GWXFF, MK000960GWXFH, MK001920GWXFK and MK003840GWXFL**

Version: HPG3 (Recommended)

**Fixes**

Improve the FW about data mismatch after SPL issued.

---

**Universal Firmware Package for Drives - MK000480GXNXB, MK000960GXNZK, MK001920GXNZL, MK003840GXNZN, VK000240GXNWU, VK000480GXNZA, VK000960GXNZB, VK001920GXNZC, VK003840GXNZD, VK007680GXNZE, VK000480SXNWV, VK001920SXNZF, MK000960SXNXC and MK001920SXNZP**

Version: HPG1 (Recommended)

**Fixes**

- Improve FW handling on capacitor charge timeout mechanism
- Change the sense code during download microcode (0E)

---

**Universal Firmware Package for Drives -**

**MK000480GYCNT ,MK000960GYCNP ,MK001920GYCNF ,MK003840GYCNQ ,VK000240GYCNU ,VK000480GYC NH ,VK000960GYCNK ,VK001920GYCNL ,VK003840GYCNN ,VK007680GYCNE ,VR000240GXPQT and VR000480GXPQU**

Version: HPG4 (Recommended)

## **Fixes**

This is a planned maintenance release covering bug fixes. This firmware includes updates to improve PLI circuit reliability.

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## **Universal Firmware Package for Drives - VK000480GZCNE, VK000960GZCNF, VK001920GZCNH and VK003840GZCNK**

Version: HPG3 (Recommended)

## **Fixes**

- Improve the FW about data mismatch after SPL

---

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

Version: 7.81 (Recommended)

## **Important Note!**

It is strongly recommended to use controller firmware version 7.81 for SR SAS/SATA controllers and firmware version 03.01.41.032 for SR tri-mode controllers, along with Windows driver version 1016.24.0.1002, Linux driver version 2.1.36-026, and VMware ESXi driver version 4862.0.104, as this combination has been fully qualified.

## **Fixes**

Fixed an issue where SEDs reverting to foreign after controller reboot due to the otherwise owned flag not being saved to the datastore. Fixed an issue where firmware crash/lockup during NDSR (Non-Disruptive Software Reset) due to a NULL pointer reference when handling a failed drive during logical drive rebuilt. Fixed an issue where master key change failure on Managed SED logical drives due to LU cache flush requests conflicting with the password update process. Fixed an issue where physical drive Predictive Failure status not reported correctly by tools and iLO. Fixed an issue where controller lockup during surface scan caused by stale internal resources when handling Unrecoverable Read Errors (UREs) in unmapped logical drive regions. Fixed an issue where uncorrectable DDR ECC errors could be reported at boot due to cache being accessed before initialization. Fixed an issue where the controller could lock up (0x3120C) when enabling MCP due to duplicate routing entries from flooded BMC requests. Fixed an issue where SATA drives could be incorrectly reported as hot-removed during spin-up by adjusting the dampen timer to align with vendor-specified TTR values. Fixed an issue where the controller could lock up (0x1E30) under high I/O workloads when configuration changes occurred simultaneously with a LUN reset. Fixed an issue where RAID 0 could hang with I/O timeouts and LUN resets during Predictive Spare Rebuild. Fixed an issue where the RAID controller could incorrectly report Online Firmware Activation as enabled. Firmware now checks support during PQI initialization and sets or clears the feature flags accordingly. Fixed an issue where Micron 6550 SED drives could fail to create a Secured Volume due to insufficient timeout during the TCG Revert process. Fixed an issue where Battery Redfish Alerts contained an incorrect OriginOfCondition pointing to a StorageController instead of the Battery resource. Fixed an issue where deleting volumes through PLDM Type 6 could cause a controller lockup if other PLDM commands were sent simultaneously.

These commands now return NOT\_READY when a long-running RDE operation is in progress. Fixed an issue where an incorrect error message was shown in HII when creating a logical drive on a locked SED, by updating the error message to correctly reflect SED encryption.

### **Enhancements**

Added SSD life expectancy monitoring. Added support to securely transfer encryption keys in remote key management mode. Enhanced drive writes cache status reporting in HII.

---

## **Firmware Package - HPE MR216i-o Gen11 Tri Mode Controller**

Version: 52.32.3-6333 (Recommended)

### **Important Note!**

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

### **Prerequisites**

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

### **Fixes**

- Fix a00143124en\_us Advisory: HPE MR Gen11 Controller - MR Gen11 Controllers on HPE Gen11 Servers May Fail to Generate "WriteCacheDataLoss" in the IML
- Fix a00148035en\_us Advisory: HPE MR Gen11 Controllers - The Bay And Box NVMe Drive Location Is Not Displayed in the One-Time Boot Menu
- Fix an issue that Read/Write transfers over 128KB on LTO fail in Linux OS
- Fix an issue that Backup Exec doesn't work with LTO
- Fix an issue that controller might be dropped by the iLO in server boot up when there are 240 Logical Drives are configured Fix a rare issue that server health shows critical temporally when remove drive continuously.o Fix an issue that Request Sense command causes task management on the drive where sanitization is in progress. Fix an issue that Redfish PATCH StorageController[ControllerRates] silently sets random values when the value beyond 255 is used.o Fix an issue that incorrect controller error event may be logged when controller is configured as passthrough and do vm reboot Fix an issue that active width, current speed are wrong in Redfish Fabric port when two backplanes connected to same storage port.o Fix a rare issue that NVMe drive link status may fail after reboot
- Fix a rare issue that controller may assert when there are multiple drives removed and inserted in a short time
- Fix an issue that sanitize percentage does not progress on SATA drives if there is SATA passthrough command running
- Fix an issue that sanitize percentage does not progress on NVMe drives
- Fix a rare issue that IO timeout and device reset may occur with stress test of Read/Write and Non-Read/Write commands

### **Enhancements**

- DMTF PLDM Redfish Device Enablement enhancements
  - Redfish Volume Transformation Support

- POST #Volume.ChangeRAIDLayout: RAID Layout Change. Change in the RAID Layout is achieved by providing the target RAIDType and the list of the drives in the input JSON body.
- POST #Volume.ChangeRAIDLayout: Resize. ChangeRAIDLayout can be used to resize the volume by adding new Unconfigured Good drives without changing the RAIDType. In such cases RAIDType must not be provided in the input JSON body but the full drive list must be provided accordingly.
- PATCH Volume[CapacityBytes]: This operation is used for resizing the volume when there is unused size available in the volume. There is no scope for adding any new drives here
- POST #Volume.CheckConsistency: This operation starts Consistency Check operation on the volume. No input is expected for this operation.
- Redfish Metrics GET Support
- StorageControllerMetrics: UncorrectableECCErrorCount, CorrectableECCErrorCount, CorrectableParityErrorCount, StateChangeCount
- PortMetrics: SAS.InvalidDwordCount, SAS.LossOfDwordSynchronizationCount, SAS.RunningDisparityErrorCount, PCIeErrors.CorrectableErrorCount, PCIeErrors.FatalErrorCount, PCIeErrors.NonFatalErrorCount
- Each counter can hold a value up to 65535. Once the counter reaches the maximum value the value is not reset.
- Metrics are cleared when user performs Controller NVRAM clear or Redfish ResetToDefaults.ResetAll.

Add support for users to clear NVRAM using MRSA and storcli Factory Repurpose operation.

- Clear NVRAM operation is not allowed if there is any configuration present on the controller or if there is any pinned cache.
- After clearing NVRAM, controller FW performs Online Controller Reset (OCR). If for some reason OCR cannot be performed, then the user will be notified to perform a system reboot.
- The Clear NVRAM operation is equivalent to Redfish ResetToDefaults.ResetAll operation functionally.

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

Version: 02.11.01 (Recommended)

### **Important Note!**

This Firmware package contains following firmware versions:Adapter Speed MBI Firmware UEFI Boot Bios  
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter 32Gb 02.11.01 09.15.05 7.39 0.0 HPE SN1700Q  
SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter 32Gb 02.11.01 09.15.05 7.39 0.0 HPE SN1700Q  
64Gb Dual Port Fibre Channel Host Bus Adapter 64Gb 02.11.01 09.15.05 7.39 0.0 HPE SN1700Q 64Gb  
Single Port Fibre Channel Host Bus Adapter 64Gb 02.11.01 09.15.05 7.39 Fixed the following:BitLocker  
recovery is triggered during POST due to an option ROM verification failure on the Marvell adapter,  
preventing system to boot to Windows OS.

### **Fixes**

Fixed the following:BitLocker recovery is triggered during POST due to an option ROM verification failure on the Marvell adapter, preventing system to boot to Windows OS.

## **Enhancements**

This Firmware package contains following firmware versions:Adapter Speed MBI Firmware UEFI Boot Bios  
HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter 32Gb 02.11.01 09.15.05 7.39 0.0 HPE  
SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter 32Gb 02.11.01 09.15.05 7.39 0.0 HPE SN1700Q  
64Gb Dual Port Fibre Channel Host Bus Adapter 64Gb 02.11.01 09.15.05 7.39 0.0 HPE SN1700Q 64Gb  
Single Port Fibre Channel Host Bus Adapter 64Gb 02.11.01 09.15.05 7.39 0.0

## **Supported Devices and Features**

- HPE SN1610Q 32Gb Single Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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## **Firmware Package - UBM10 Backplane PIC PLDM Firmware**

Version: 1.04 (Recommended)

## **Important Note!**

Flash FWPKG Component on Web Standalone mode PLDM FWPKG component can be supported  
installation of UBM10 firmware when Backplane direct attached the the server.

## **Prerequisites**

For Gen11 servers, iLO 6 version 1.10 or later is required.o For Gen12 servers iLO 6 version 1.62 or later is  
required

## **Enhancements**

Remove the 0xC2 address to allow iLO to handle the MCTP discovery workaround.

---

## **Firmware Package - UBM4 Backplane PIC PLDM Firmware for Gen10P/Gen11/Gen12 servers usage**

Version: 1.24 (G) (Recommended)

## **Important Note!**

Flash FWPKG Component on Web Standalone mode

- PLDM FWPKG component only supports installation of UBM4 firmware when attached to HPE  
SR416/SR932(Firmware version 3.01.14.062 or later is need) or HPE MR216/416/408  
controllers(Firmware version 52.22.3-4650 or later is need)
- PLDM FWPKG component can be supported installation of UBM4 firmware when direct attached the the  
server

## **Prerequisites**

- iLO 6 version 1.62 or later is required for Gen12 servers
- iLO 6 version 1.10 or later is required for Gen11 servers
- iLO 5 version 2.72 or later is required for Gen10 Plus servers

## **Enhancements**

Support Gen12 servers.

---

## Firmware Package - UBM6 Backplane PIC PLDM Firmware for Gen10/Gen10P/Gen11/Gen12 servers usage

Version: 1.04 (C) (Recommended)

### **Important Note!**

- PLDM FWPKG component only supports installation of UBM6 firmware when attached to HPE SR416i/SR932 controllers(Firmware version 3.01.09.056 or later is need) or HPE Smart Array controllers (Firmware version 5.32 or later is need) or HPE MR216/416/408 controllers(Firmware version 52.22.3-4650 or later is need)
- PLDM FWPKG component can be supported installation of UBM6 firmware when direct attached the the server

### **Prerequisites**

- iLO 6 version 1.62 or later is required for Gen12 servers
- iLO 6 version 1.10 or later is required for Gen11 servers
- iLO 5 version 2.72 or later is required for Gen10P servers

### **Enhancements**

Support SY480 Gen12 server.

---

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

Version: 2025.09.01 (Recommended)

### **Important Note!**

- Actual ESXi Version is 6.50.11.0

### **Fixes**

Fixed the "Parity Initialization Method" information displayed for non-parity RAID levels.Fixed an issue where users were unable to clear the controller's configuration when a foreign volume was present.Fixed an issue where a foreign-owned SED drive was being listed for array creation.Fixed an issue where the last failure reason was not listing on physical drives.Fixed an issue where SSAScripting failed to create an encrypted volume while in express local mode.Fixed an issue where an error/warning message was not being generated correctly while expanding a RAID 1+0 volume.Fixed an issue where a duplicate entry for the physical drive was displayed.

---

## Smart Storage Administrator (SSA) CLI Smart Component for ESXi 9.0 for Gen10/Gen10 Plus/Gen11 Controllers

Version: 2025.09.01 (Recommended)

### **Important Note!**

- Actual ESXi Version is 6.50.11.0

### **Fixes**

Fixed the "Parity Initialization Method" information displayed for non-parity RAID levels.Fixed an issue

where users were unable to clear the controller's configuration when a foreign volume was present.Fixed an issue where a foreign-owned SED drive was being listed for array creation.Fixed an issue where the last failure reason was not listing on physical drives.Fixed an issue where SSAScripting failed to create an encrypted volume while in express local mode.Fixed an issue where an error/warning message was not being generated correctly while expanding a RAID 1+0 volume.Fixed an issue where a duplicate entry for the physical drive was displayed.

### **Enhancements**

- Added support for VMware ESXi 9.0

---

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

Version: 2025.08.01 (Recommended)

### **Important Note!**

- Actual ESXi Version is 007.3212.0000.0000

### **Enhancements**

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

---

## **HPE MegaRAID Storage Administrator StorCLI for VMware9.0 (For Gen10P and Gen11 Controllers)**

Version: 2025.08.01 (Recommended)

### **Important Note!**

- Actual ESXi Version is 007.3212.0000.0000

### **Enhancements**

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

---

## **HPE QLogic Fibre Channel driver component for VMware vSphere 8.0**

Version: 2025.05.01 (Recommended)

### **Important Note!**

This component is supported only on Gen12 ProLiant servers.Release Notes: HPE QLogic Adapters Release Notes webpages, plus an HPE specific CPXXXX.xml file. This driver is only supported on VMware ESXi 8.0u3.

### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link:<http://www.hpe.com/storage/spock/>

### **Enhancements**

Driver version 5.4.85.0 This driver is only supported on VMware ESXi 8.0u3

### **Supported Devices and Features**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

---

### **HPE QLogic Fibre Channel driver component for VMware vSphere 9.0**

Version: 2025.05.01 (Recommended)

#### **Important Note!**

This component is supported only on Gen12 ProLiant servers. This component is intended to be used by HPE applications. It is a zip that contains the same driver deliverable available from the vmware.com and the HPE vibsddepot.hpe.com webpages, plus an HPE specific CPXXXXX.xml file. This driver is only supported on VMware ESXi 9.0.

#### **Prerequisites**

Please consult SPOCK for a list of supported configurations available at the following link: <http://www.hpe.com/storage/spock/>

#### **Enhancements**

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

### **Supported Devices and Features**

- HPE SN1610Q 32Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Dual Port Fibre Channel Host Bus Adapter
- HPE SN1700Q 64Gb Single Port Fibre Channel Host Bus Adapter

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### **Agentless Management Service (iLO 5, iLO 6 and iLO 7) for Red Hat Enterprise Linux 9 Server**

Version: 4.3.0 (Recommended)

#### **Prerequisites**

amsd only supported on HPE Gen10/Gen10 Plus and later Server Generations. o amsd provides information to the iLO 5, iLO 6 and iLO 7 service providing SNMP support For HPE servers with iLO 7: Ensure that the iLO Virtual NIC(VNIC) feature is enabled. Please refer to the HPE iLO User Guide for VNIC configuration procedure.

#### **Fixes**

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

#### **Enhancements**

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

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### **Agentless Management Service for Microsoft Windows x64**

Version: 4.40.0.0 (Recommended)



### **Important Note!**

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.

IMPORTANT: The SNMP service community name and permission must also be setup. This is not done by "EnableSma.bat".  
o 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%.  
Test trap generated from AMS Control Panel Applet requires iLO6 firmware version 1.1 and newer. When in iLO6 high security mode (e.g. FIPS mode), MD5 authentication protocol will not be shown.

### **Prerequisites**

For HPE servers with iLO7: Ensure that the iLO Virtual NIC(VNIC) feature is enabled. Please refer to the HPE iLO User Guide for VNIC configuration procedure.

### **Fixes**

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

### **Enhancements**

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

---

## **HPE MegaRAID Storage Administrator for RHEL8, RHEL9 and SLES15 (HPE MRSA for Gen10P and Gen11 Controllers)**

Version: 8.12.52.0 (Recommended)

### **Prerequisites**

- because MRSA startup script is based on SysV/init script and insserv adds as a bridge between SysV/init script and systemctl. From RHEL 8+ the Desktop ICON Launching property is disabled by default. Please use either yum or DNF to install gnome-tweak-tool and Enable the Desktop Shortcut feature to launch MRSA. The chkconfig package is not present in RHEL 9 by default. This package is required to auto start MRSA service on system boot. Please install chkconfig package before installing the MRSA.

### **Fixes**

- Fix MRSA issue in a00150411en\_us Advisory: HPE Compute MR Controllers - HPE MR Storage Administrator (MRSA) Launch Issue and Storage Command Line Interface (StorCLI) Installation Warning Message Observed With Red Hat Enterprise Linux Server 10

### **Enhancements**

Change the backplane bay count information to the actual bay that is connected to controller.  
o Add support for users to clear NVRAM using Factory Repurpose operation

- Re-order MRSA GUI buttons
  - Move the Rebuild button to the top before Make Online button
  - Add the Rebuild button in the Offline Drive warning session
- Change the recommended action for Degraded Volume to "Make sure all the participating drives are

connected and rebuild is complete".

---

## **HPE MegaRAID Storage Administrator for Windows 64-bit (HPE MRSA for Gen10 Plus and Gen11 Controllers)**

Version: 8.12.52.0 (Recommended)

### **Enhancements**

- Change the backplane bay count information to the actual bay that is connected to controller.o Add support for users to clear NVRAM using Factory Repurpose operation
- Re-order MRSA GUI buttons
  - Move the Rebuild button to the top before Make Online button
  - Add the Rebuild button in the Offline Drive warning session
- Change the recommended action for Degarded Volume to "Make sure all the participating drives are connected and rebuild is complete".

---

## **HPE MegaRAID Storage Administrator StorCLI for Windows 64-bit (for Gen10P and Gen11 Controllers)**

Version: 7.3212.0.0 (Recommended)

### **Enhancements**

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

---

## **Smart Storage Administrator (SSA) CLI for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers**

Version: 6.50.11.0 (Recommended)

### **Fixes**

Fixed the "Parity Initialization Method" information displayed for non-parity RAID levels.Fixed an issue where users were unable to clear the controller's configuration when a foreign volume was present.Fixed an issue where a foreign-owned SED drive was being listed for array creation.Fixed an issue where the last failure reason was not listing on physical drives.Fixed an issue where SSAScripting failed to create an encrypted volume while in express local mode.Fixed an issue where an error/warning message was not being generated correctly while expanding a RAID 1+0 volume.Fixed an issue where a duplicate entry for the physical drive was displayed.

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## **Smart Storage Administrator (SSA) for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers**

Version: 6.50.11.0 (Recommended)

### **Fixes**

Fixed the "Parity Initialization Method" information displayed for non-parity RAID levels.Fixed an issue where users were unable to clear the controller's configuration when a foreign volume was present.Fixed an issue where a foreign-owned SED drive was being listed for array creation.

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## Smart Storage Administrator Diagnostic Utility (SSADU) CLI for Windows 64-bit for Gen10/Gen10 Plus/Gen11 Controllers

Version: 6.50.11.0 (Recommended)

### **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).

### **Fixes**

Fixed the "Parity Initialization Method" information displayed for non-parity RAID levels. Fixed an issue where users were unable to clear the controller's configuration when a foreign volume was present. Fixed an issue where a foreign-owned SED drive was being listed for array creation. Fixed an issue where the last failure reason was not listing on physical drives. Fixed an issue where SSAScripting failed to create an encrypted volume while in express local mode. Fixed an issue where an error/warning message was not being generated correctly while expanding a RAID 1+0 volume. Fixed an issue where a duplicate entry for the physical drive was displayed.