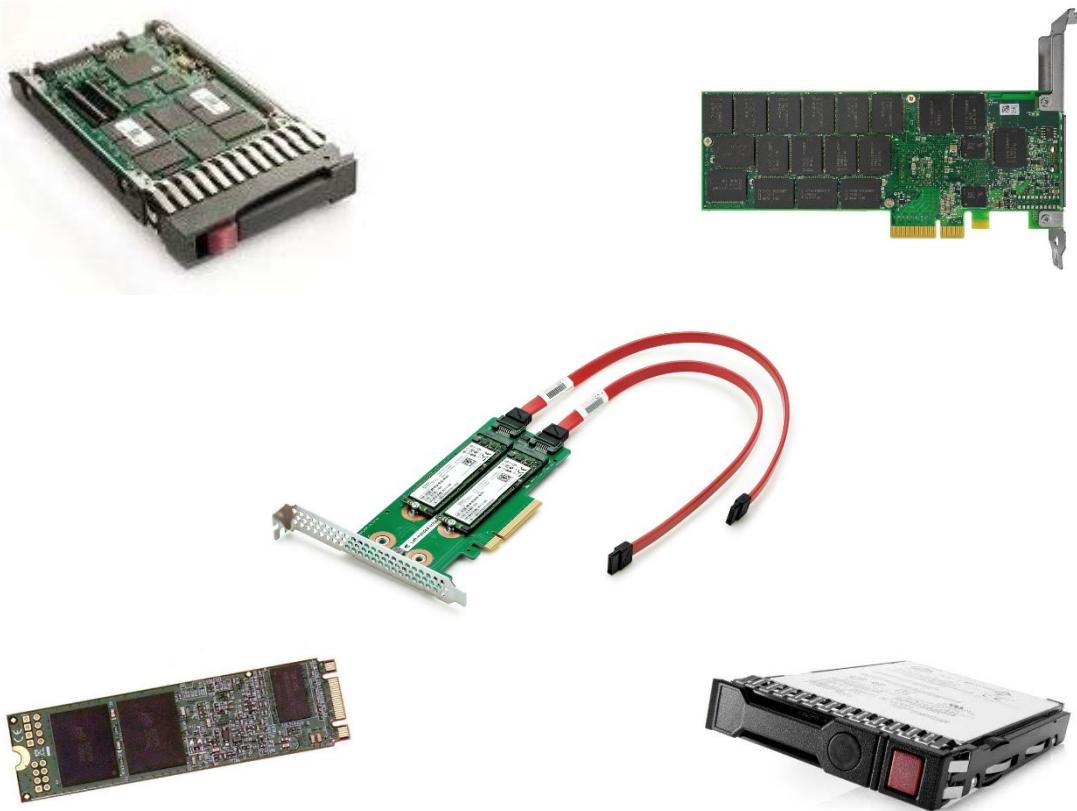


### Overview

#### HPE Solid State Disk Drives (SSD & Accelerators)

HPE Solid State Drives (SSDs) & Accelerators are based upon industry leading NAND Flash technology, which delivers exceptional performance and endurance to support a growing broad spectrum of demanding applications with varying workload performance requirements.

These storage devices offer better I/O latency & more power efficient solutions when compared with traditional rotating (HDD) media, while also fitting seamlessly into existing HPE server & storage infrastructures, and are available in a number of form factors including: Small Form Factor (SFF), Large Form Factor (LFF), M.2, and PCIe/NVME Add-In-Cards (AIC) & modules.



### What's New?

New Solid State Drives:

- 872344-B21 HPE 480GB SATA 6G MU SFF SC DS SSD
- 872346-B21 HPE 480GB SATA 6G MU LFF SCC DS SSD
- 872348-B21 HPE 960GB SATA 6G MU SFF SC DS SSD
- 872350-B21 HPE 960GB SATA 6G MU LFF SCC DS SSD
- 872352-B21 HPE 1.92TB SATA 6G MU SFF SC DS SSD
- 872355-B21 HPE 400GB SATA 6G WI SFF SC DS SSD
- 872357-B21 HPE 400GB SATA 6G WI LFF SCC DS SSD
- 872359-B21 HPE 800GB SATA 6G WI SFF SC DS SSD
- 872361-B21 HPE 800GB SATA 6G WI LFF SCC DS SSD
- 872363-B21 HPE 1.6TB SATA 6G WI SFF SC DS SSD
- 872365-B21 HPE 1.6TB SATA 6G WI LFF SCC DS SSD
- 869374-B21 HPE 150GB SATA 6G RI SFF SC DS SSD

## Overview

- 869376-B21 HPE 240GB SATA 6G RI SFF SC DS SSD
  - 869378-B21 HPE 480GB SATA 6G RI SFF SC DS SSD
  - 869380-B21 HPE 480GB SATA 6G RI LFF SCC DS SSD
  - 869382-B21 HPE 480GB SATA 6G RI LFF LPC DS SSD
  - 869384-B21 HPE 960GB SATA 6G RI SFF SC DS SSD
  - 869386-B21 HPE 1.6TB SATA 6G RI SFF SC DS SSD
  - 869388-B21 HPE 1.6TB SATA 6G RI LFF SCC DS SSD
- 
- Digitally Signed Firmware – Prevent unauthorized access to your data with integrated HPE Digitally Signed Firmware (DS); providing the security and assurance that drive firmware comes from a trusted source and protects against malicious attacks
  - Additional enhancements to the HPE Solid-State Drive Selector Tool – an online tool to assist customers and sales teams with determining the best SSD fit for specific requirements <http://ssd.hpe.com/>

## Overview

### SSD & Accelerator Portfolio

#### Meeting the storage needs of today & the challenges of tomorrow!

As noted within the “dashboard” table below, HPE SSDs & Accelerator products are categorized according by both workload and interface type.

There are three workload types - **Read Intensive (RI)**, **Mixed-Use (MU)**, and **Write Intensive (WI)**; examples for each these workloads are provided under the supporting vertically oriented headings in the table, which are based upon the application/processing environment in which SSD/Accelerator will be utilized.

The **RI**, **MU**, & **WI** vertical workload columns are then horizontally cross-tabbed according to the desired interface (**SAS, SATA, & PCIe/NVMe**), effectively forming a 3x3 selection grid. An example of using this grid is depicted below in thicker black border, in which a **MU** workload and **SATA** interface are required. In this scenario the selection produces a **SATA MU**.

Using this grid along with our [Online SSD Selector Tool](#) you will be able to quickly determine what SSD/Accelerator products are available to meet your needs, as well as to compare their specific capacity, performance attributes, and server compatibility.

### HPE SSDs & Workload Accelerator Portfolio

#### Read Intensive (RI)

##### Driven Workloads:

- Read Caching
- Web Servers
- Social Media
- Boot/Swap
- Analytics
- Scientific
- Cloud Computing
- Bulk Storage
- Active Archiving
- Email
- Database
- Security
- Batch

#### Mixed-Use (MU)

##### Driven Workloads:

- Balances resources for both business intelligence and business transaction processing.

#### Write Intensive (WI)

##### Driven Workloads:

- OLTP/Financial
- Business Intelligence
- Big Data Analytics
- Virtualization
- Scientific
- Collaboration Infrastructure
- Enterprise Business Processes
- Data Warehousing
- ERP
- Networking
- Cloud Computing
- Database

Read Intensive (RI)	Mixed Use (MU)	Write Intensive (WI)
Read Performance	Balanced R/W Performance	Write Performance
Endurance: =<1 DWPD	Endurance: >1 & <10 DWPD	Endurance: =>10 DWPD

#### Drive Interface Type

<b>PCIe/NVMe</b> 2.5" SFF, Add-in & Mezz Cards	Best Latency / Good Price	Best Latency	Best Write Performance & Latency
<b>12Gb SAS</b> 2.5" SFF	Low Price / Good Behind Expanders	Good Behind Expanders	Good Behind Expanders
<b>6Gb SATA</b> 2.5" SFF, M.2, & Enablement Kits	Lowest Price	Good Price	SATA Direct Connect

**NOTE:** DWPD (Drive Writes Per Day) ->Full drive writes per day for 5 years. Based on 100% Random Writes (KiB).

**NOTE:** HPE Enterprise SSDs deliver: Full data path error detection, surprise power loss protection and Smart SSD Wear Gauge support.

## Overview

### What's New?

#### Introducing the HPE Solid State Drive (SSD) Selector Tool

Select the right SSD for your HPE Server

- Ideal for customers, HPE Sales, and HPE Channel Partners
- Recommends the best SSDs for specific customer needs and budget
- Search by SKU or Server model
- Easily compare results by price or performance
- Simple web-based tool, user-friendly interface
- Reduces time and eliminates complexity
- Desktop and mobile friendly

Now available at <http://ssd.hpe.com>

## Overview

<b>What is a SSD?</b>	An enduring data storage device utilizing NAND (negative-AND) semiconductor technology to store and access data which is volatile without the aid of an auxiliary power source.
<b>SSD Quality</b>	Today's businesses are seeing larger, more complex applications, coupled with an increasing amount of mission-critical and transaction processing data demand. In this environment, storage has become a critical component, significantly defining requirements for both systems reliability and performance. This is why HPE drives undergo a rigorous qualification process to ensure functionality and eliminate firmware and O/S incompatibilities.
<b>Integration</b>	Many issues customers have with third party drives are "simple" integration issues. When buying from another supplier, there is no guarantee that a drive has been correctly set for proper operation with ProLiant servers and storage systems. These incompatibilities can create problems in configuration, can rob your system of performance, or at their worst, can cause you to lose data. HPE drives are specifically designed and tested for flawless operation in your HPE equipment. The integration of solid state drives in HPE systems means that associated components are right for your ProLiant server.
<b>Support Matrix</b>	Please see the following URL for the latest list of supported servers and enclosures: <b><a href="https://www.hpe.com/us/en/servers.html">https://www.hpe.com/us/en/servers.html</a></b>
<b>Product Category</b>	HPE Enterprise SSDs are available in three categories based on workload level: Read Intensive (RI), Mixed Use (MU), and Write Intensive (WI). These categories indicate the number of drive writes per day (DWPD1) that you can expect from the drive. (DWPD is the maximum number of 4K host writes to the entire drive capacity of the SSD per day over a five-year period.
<b>Maximum Usage Limitations</b>	NAND Flash devices use semiconductor technology that has a finite number of data that can be written to the device, defined as the Maximum Usage Limit, commonly called "Write Endurance".  Write Endurance - is measured while running 100% random 4KiB writes across the entire SSD.  Drive Writes Per Day (DWPD) - Workload environment is based on 100% random 4KiB writes for five (5) years, which is the maximum amount of data that can be written to the device before reaching the device's write endurance limit.  HPE Solid State Drives (SSDs) are equipped with tools that can report the amount of lifetime remaining. Introducing HPE SMARTSSD Wear Gauge™. To take advantage of SMARTSSD Wear Gauge™, Smart Array Firmware version 5.0 or greater is required and HPE Array Configuration Utility (ACU) or HPE Diagnostic Utility (ADU) must be running.  Simple Network Management Protocol (SNMP) Storage Agents for both Microsoft® Windows® and Linux provide status and condition updates through traps, OS event logs and the HPE System Management Homepage: <b><a href="https://www.hpe.com/us/en/product-catalog/detail/pip.hp-system-management-homepage-software.344313.html">https://www.hpe.com/us/en/product-catalog/detail/pip.hp-system-management-homepage-software.344313.html</a></b>

The HPE SMARTSSD Wear Gauge™ requires a Smart Array or Smart HBA controller listed below.

- HPE Smart Array PX1X Controller Series or newer
- HPE Smart HBA PX4XController Series
- HPE Dynamic Smart Array BX2XiController Series or newer
- HPE Dynamic Smart Array B320i Controller

HPE Direct Connect to the HPE Smart Array B110i SATA RAID Controller is not supported in this tool.

## Standard Features

### Data Retention

Data Retention is the period of time for retaining the data in the NAND once the maximum rated endurance level has occurred. These SSD's are rated for 3 months if no power is applied once the SSD has reached maximum rated write endurance.

### Warranty

SSD & Accelerator Standard 3/0/0 warranty; Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit: This is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage.

**NOTE:** In cases where an M.2 SSD is used in conjunction with a Server Cartridge the Warranty includes 3-Year Parts, 3-Year Labor, 3-Year (3/3/3) Onsite support for that option only.

## Service and Support

### Service and Support

#### HPE Technology Services for Industry Standard Servers

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability powered by a rich portfolio of consulting and support services designed to add value to our core products and solutions connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

#### Protect your business beyond warranty with HPE Support Services

HPE support services offer complete care and support expertise with committed response choices that are designed to meet your IT and business needs.

**NOTE:** HPE Solid State Drives are supported as a part of the HPE Server Infrastructure. No separate Support Services are needed to be purchased.

### Connect your devices to HPE

Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Achieve up to 77%<sup>1</sup> reduction in down time, near 100%<sup>2</sup> diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7 monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization.

All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support.

1. IDC Whitepaper
2. HPE CSC Reports 2014-2015

### HPE Support Center

Personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers. Learn more <http://www.hp.com/go/hpsc>.

HPE Support Center Mobile App allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Support Services or HPE contractual support agreement.

**NOTE:** HPE Support Center Mobile App above is subject to local availability.

### Parts and materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

### Warranty / Service Coverage

For ProLiant servers and storage systems, the service on the main product covers HP-branded hardware options not designated by Hewlett Packard Enterprise as requiring separate coverage, that are qualified for the server, purchased at the same time or afterward and internal to the enclosure. These items will be covered at the same service level and for the same coverage period as the server

## Service and Support

unless the maximum supported lifetime and/or the maximum usage limitation has been reached.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. It does not apply Disk or SSD/Flash Drives that have not failed. SSD/Flash Drives that are specified by Hewlett Packard Enterprise as consumable parts and/or that have reached maximum supported lifetime and/or the maximum usage limits as set forth in the manufacturer's operating manual, the product QuickSpecs, or the technical data sheet are not eligible for the defective media retention service feature option.

**Subject to:** Maximum supported lifetime: This is a period in years set to equal the warranty for the specific drive. After this period no further service coverage will be available for the drive. Maximum usage limit: This is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for services coverage.

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### For more information

To learn more on services for HPE ESSN Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit:

<https://www.hpe.com/us/en/product-catalog/servers/proliant-servers.html> or

<https://www.hpe.com/us/en/integrated-systems/bladesystem.html>

## Technical Specifications

### SSD Selection

To streamline the configuration process for HPE ProLiant Gen9 servers and to provide the best product availability, HPE recommends SSDs from the list located here: <http://www.hpe.com/products/recommend>

Best product availability is limited to US, Canada, and Latin America at this time.

To further assist with configuration, HPE also offers an SSD Selector Tool located here: <http://ssd.hpe.com>

### PCIe/NVMe – Interface (Capacity, Workload, Carrier...)

Option Kit SKU	Short Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Server Gen Supported (Select Platforms)
<b>736936-B21</b>	HPE 400GB NVMe x4 WI SFF SC SSD	400	WI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>736939-B21</b>	HPE 800GB NVMe x4 WI SFF SCN SSD	800	WI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>764892-B21</b>	HPE 1.6TB NVMe x4 WI SFF SCN SSD	1,600	WI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>764894-B21</b>	HPE 2TB NVMe x4 WI SFF SCN SSD	2,000	WI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>764904-B21</b>	HPE 400GB NVMe x4 RI SFF SCN SSD	400	RI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>764906-B21</b>	HPE 1.2TB NVMe x4 RI SFF SCN SSD	1,200	RI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>764908-B21</b>	HPE 2TB NVMe x4 RI SFF SCN SSD	2,000	RI	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>765034-B21</b>	HPE 400GB NVMe x4 MU SFF SCN SSD	400	MU	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>765036-B21</b>	HPE 800GB NVMe x4 MU SFF SCN SSD	800	MU	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>765038-B21</b>	HPE 1.6TB NVMe x4 MU SFF SCN SSD	1,600	MU	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>765044-B21</b>	HPE 2TB NVMe x4 MU SFF SCN SSD	2,000	MU	PCIe / PCIe NVMe	SFF	Hot Plug	SCN	Yes	MLC	Gen9
<b>775666-B21</b>	HPE 1.0TB PCIe x4 MU HH Card	1,000	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen7,8,9
<b>775668-B21</b>	HPE 1.3TB PCIe x4 MU HH Card	1,300	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen7,8,9
<b>775670-B21</b>	HPE 2.6TB PCIe x4 MU HH Card	2,600	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen7,8,9
<b>775672-B21</b>	HPE 5.2TB PCIe x4 MU FH Card	5,200	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen7,8,9
<b>794603-B21</b>	HPE 1.2TB PCIe x4 RI Mezz Card	1,200	RI	PCIe / PCIe NVMe	MC	N/A	N/A	No	MLC	Gen8,9
<b>794605-B21</b>	HPE 1.6TB PCIe x4 RI Mezz Card	1,600	RI	PCIe / PCIe NVMe	MC	N/A	N/A	No	MLC	Gen8,9
<b>803195-B21</b>	HPE 800GB PCIe x4 WI HH Card	800	WI	PCIe / PCIe NVMe	AIC	N/A	N/A	Yes	MLC	Gen9
<b>803197-B21</b>	HPE 1.6TB PCIe x4 WI HH Card	1,600	WI	PCIe / PCIe NVMe	AIC	N/A	N/A	Yes	MLC	Gen9
<b>803200-B21</b>	HPE 800GB PCIe x4	800	MU	PCIe / PCIe	AIC	N/A	N/A	Yes	MLC	Gen9

## Technical Specifications

	MU HH Card			NVMe						
<b>803202-B21</b>	HPE 1.6TB PCIe x4 MU HH Card	1,600	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	Yes	MLC	Gen9
<b>803204-B21</b>	HPE 2.0TB PCIe x4 MU HH Card	2,000	MU	PCIe / PCIe NVMe	AIC	N/A	N/A	Yes	MLC	Gen9
<b>831733-B21</b>	HPE 1.3TB PCIe x4 RI HH Card	1,300	RI	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen8,9
<b>831735-B21</b>	HPE 1.6TB PCIe x4 RI HH Card	1,600	RI	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen9
<b>831737-B21</b>	HPE 3.2TB PCIe x4 RI HH Card	3,200	RI	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen8
<b>831739-B21</b>	HPE 6.4TB PCIe x4 RI HH Card	6,400	RI	PCIe / PCIe NVMe	AIC	N/A	N/A	No	MLC	Gen8

**NOTE:** Please use HPE Selector Tool <http://ssd.hpe.com/> to determine server compatibility.

## Technical Specifications

### PCIe/NVMe – Interface (Speeds & Feeds)

Option Kit SKU	Endurance DWPD	MAX Seq. Reads Throughput (MiB/s)	MAX Seq. Writes Throughput (MiB/s)	Random Read Average Latency uSec (4KiB,Q1)	Random Write Average Latency uSec (4KiB,Q1)	Random Read IOPS (4KiB, Q=16)	Random Write IOPS (4KiB, Q=16)	MAX Random Read IOPS (4KiB)	MAX Random Write IOPS (4KiB)	4KiB Random 70% Read / 30% Write, Queue 32 Performance (IOPS) VI-1	4KiB Random 50% Read / 50% Write, Queue 32 Performance (IOPS) VI-2
<b>736936-B21</b>	10	2,600	1,000	90	20	150,000	80,000	474,000 @Q128	80,000 @Q4	103,000	94,000
<b>736939-B21</b>	10	2,600	1,700	95	20	155,000	99,000	474,000 @Q128	99,000 @Q4	138,000	125,000
<b>764892-B21</b>	10	2,600	1,700	100	20	142,000	150,000	474,000 @Q128	150,000 @Q16	148,000	140,000
<b>764894-B21</b>	10	2,600	1,400	100	20	145,000	170,000	474,000 @Q128	170,000 @Q16	170,000	165,000
<b>764904-B21</b>	0.3	2,200	950	90	40	150,000	26,500	445,000 @Q128	26,500 @Q1	55,000	48,000
<b>764906-B21</b>	0.3	2,500	1,200	95	45	141,000	23,500	460,000 @Q128	23,500 @Q1	58,000	48,000
<b>764908-B21</b>	0.3	2,500	1,600	95	35	145,000	29,000	470,000 @Q128	29,000 @Q1	72,000	57,000
<b>765034-B21</b>	3	2,000	475	95	27	130,000	39,500	325,000 @Q128	39,500 @Q4	61,000	53,000
<b>765036-B21</b>	3	2,400	900	100	24	140,000	53,000	440,000 @Q128	53,000 @Q4	84,000	74,000
<b>765038-B21</b>	3	2,400	1,400	100	21	145,000	64,000	465,000 @Q128	67,000 @Q4	111,000	100,000
<b>765044-B21</b>	3	2,600	1,600	100	23	145,000	64,000	450,000 @Q128	64,000 @Q4	117,000	100,000
<b>775666-B21</b>	3	2,200	1,350	110	23	81,000	155,000	135,000 @Q128	155,000 @Q16	105,000	100,000
<b>775668-B21</b>	3	2,500	1,350	110	23	83,000	143,000	150,000 @Q128	143,000 @Q16	111,000	105,000
<b>775670-B21</b>	3	2,550	1,450	110	23	86,000	168,000	235,000 @Q128	168,000 @Q16	129,000	130,000
<b>775672-B21</b>	3	2,050	1,150	110	23	73,000	133,000	184,000 @Q128	133,000 @Q16	113,000	115,000
<b>794603-B21</b>	0.6	2,200	1,300	115	28	81,000	83,000	165,000 @Q64	83,000 @Q16	80,000	80,000
<b>794605-B21</b>	0.6	2,400	1,500	115	28	83,000	83,000	190,000 @Q64	83,000 @Q16	98,000	85,000
<b>803195-B21</b>	10	2,600	1,700	92	22	160,000	99,000	474,000 @Q128	99,000 @Q4	138,000	125,000
<b>803197-B21</b>	10	2,600	1,700	95	17	150,000	152,000	474,000 @Q128	152,000 @Q16	150,000	145,000
<b>803200-B21</b>	3	2,450	880	100	22	140,000	54,000	450,000 @Q128	54,000 @Q4	85,000	75,000
<b>803202-B21</b>	3	2,500	1,400	95	21	135,000	66,000	465,000 @Q128	66,000 @Q4	111,000	100,000
<b>803204-B21</b>	3	2,575	1,625	95	21	150,000	64,000	465,000 @Q128	64,000 @Q4	117,000	105,000
<b>831733-B21</b>	0.6	2,150	1,300	95	23	95,000	105,000	175,000 @Q256	105,000 @Q16	102,000	90,000
<b>831735-B21</b>	0.6	2,500	1,600	95	23	98,000	112,000	205,000 @Q256	115,000 @Q32	112,000	95,000
<b>831737-B21</b>	0.6	2,500	1,750	100	22	86,000	115,000	245,000 @Q256	125,000 @Q64	118,000	115,000
<b>831739-B21</b>	0.6	2,100	1,600	95	21	71,500	78,500	245,000 @Q256	78,500 @Q16	105,000	95,000

**NOTE:** Reference column VI-1 when comparing RI SSDs, & column VI-2 for comparing MU & WI SSDs.

## Technical Specifications

Option Kit SKU	Power Idle Time	Power Random Read	Power Random Write	Power Sequential Read	Power Sequential Write	Power Random R/W	Height
<b>736936-B21</b>	4.00	8.57	9.64	8.32	11.31	6.66	15mm
<b>736939-B21</b>	4.00	8.87	17.71	9.29	11.20	7.80	15mm
<b>764892-B21</b>	4.00	11.04	9.69	13.57	8.80	20.10	15mm
<b>764894-B21</b>	4.14	10.43	15.51	10.08	22.52	7.70	15mm
<b>764904-B21</b>	4.00	8.14	8.28	7.55	10.00	7.81	15mm
<b>764906-B21</b>	4.00	8.62	6.45	8.04	12.41	8.63	15mm
<b>764908-B21</b>	4.14	10.34	10.22	9.17	18.53	10.37	15mm
<b>765034-B21</b>	4.00	6.88	7.88	6.87	7.55	5.98	15mm
<b>765036-B21</b>	4.00	8.84	9.99	8.37	12.03	7.33	15mm
<b>765038-B21</b>	4.00	11.04	9.41	8.76	17.56	6.95	15mm
<b>765044-B21</b>	4.14	11.71	10.46	9.90	20.58	7.64	15mm
<b>775666-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Half Height/Half length
<b>775668-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Half Height/Half length
<b>775670-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Half Height/Half length
<b>775672-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Full Height/Half length
<b>794603-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Mezz
<b>794605-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Mezz
<b>803195-B21</b>	4.00	8.87	17.71	9.29	11.20	7.80	Half Height/Half length
<b>803197-B21</b>	4.00	9.69	13.57	8.80	20.10	7.07	Half Height/Half length
<b>803200-B21</b>	4.00	8.84	9.99	8.37	12.03	7.33	Half Height/Half length
<b>803202-B21</b>	4.00	11.04	9.41	8.76	17.56	6.95	Half Height/Half length
<b>803204-B21</b>	4.14	11.71	10.46	9.90	20.58	7.64	Half Height/Half length
<b>831733-B21</b>	21.00	21.00	21.00	21.00	21.00	21.00	Half Height/Half Length
<b>831735-B21</b>	21.00	21.00	21.00	21.00	21.00	21.00	Half Height/Half Length
<b>831737-B21</b>	21.00	21.00	21.00	21.00	21.00	21.00	Half Height/Half Length
<b>831739-B21</b>	25.00	25.00	25.00	25.00	25.00	25.00	Full Height/Half length

### Inbox NVMe Drivers

Inbox NVMe drivers for the operating systems listed below have been tested on HPE NVMe SSDs and Workload Accelerators. Check the specifications for the HPE server of interest to determine if it supports one of these Operating Systems.

- Windows Server 2012R2
- Red Hat Enterprise Linux Server 6.5
- Red Hat Enterprise Linux Server 7.0
- SUSE Linux Enterprise Server 12
- Ubuntu 14.04
- VMWare vSphere 6.1

## Technical Specifications

### SAS – Interface (Capacity, Workload, Carrier...)

Option Kit SKU	Short Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Server Gen Supported (Select Platforms)
<b>762261-B21</b>	HPE 800GB SAS RI SFF SC SSD	800	RI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>762263-B21</b>	HPE 1.6TB SAS RI SFF SC SSD	1,600	RI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>762270-B21</b>	HPE 800GB SAS RI LFF SCC SSD	800	RI	SAS	LFF	Hot Plug	SCc	No	MLC	Gen8,9
<b>762272-B21</b>	HPE 1.6TB SAS RI LFF SCC SSD	1,600	RI	SAS	LFF	Hot Plug	SCc	No	MLC	Gen8,9
<b>779162-B21</b>	HPE 200GB SAS WI SFF ST SSD	200	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>779164-B21</b>	HPE 200GB SAS WI SFF SC SSD	200	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>779166-B21</b>	HPE 400GB SAS WI SFF ST SSD	400	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>779168-B21</b>	HPE 400GB SAS WI SFF SC SSD	400	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>779170-B21</b>	HPE 800GB SAS WI SFF ST SSD	800	WI	SAS	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>779172-B21</b>	HPE 800GB SAS WI SFF SC SSD	800	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>779176-B21</b>	HPE 1.6TB SAS WI SFF SC SSD	1,600	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>797289-B21</b>	HPE 400GB SAS WI LFF LP SSD	400	WI	SAS	LFF	Hot Plug	LPc	No	MLC	Gen9
<b>797291-B21</b>	HPE 800GB SAS WI LFF LP SSD	800	WI	SAS	LFF	Hot Plug	LPc	No	MLC	Gen9
<b>797299-B21</b>	HPE 800GB SAS RI LFF LP SSD	800	RI	SAS	LFF	Hot Plug	LPc	No	MLC	Gen9
<b>797301-B21</b>	HPE 1.6TB SAS RI LFF LP SSD	1,600	RI	SAS	LFF	Hot Plug	LPc	No	MLC	Gen9
<b>802576-B21</b>	HPE 200GB SAS WI SFF ST SSD	200	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802578-B21</b>	HPE 200GB SAS WI SFF SC SSD	200	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802580-B21</b>	HPE 400GB SAS WI SFF ST SSD	400	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802582-B21</b>	HPE 400GB SAS WI SFF SC SSD	400	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802584-B21</b>	HPE 800GB SAS WI SFF ST SSD	800	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802586-B21</b>	HPE 800GB SAS WI SFF SC SSD	800	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>802888-B21</b>	HPE 1.92TB SAS RI SFF ST SSD	1,920	RI	SAS	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>802891-B21</b>	HPE 1.92TB SAS RI SFF SC SSD	1,920	RI	SAS	SFF	Hot Plug	SC	No	MLC	Gen8,9
<b>816562-B21</b>	HPE 480GB SAS RI	480	RI	SAS	SFF	Hot Plug	SC	No	TLC	Gen8,9

## Technical Specifications

	SFF SC SSD									
<b>816568-B21</b>	HPE 960GB SAS RI SFF SC SSD	960	RI	SAS	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816572-B21</b>	HPE 1.92TB SAS RI SFF SC SSD	1,920	RI	SAS	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816576-B21</b>	HPE 3.84TB SAS RI SFF SC SSD	3,840	RI	SAS	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>822555-B21</b>	HPE 400GB SAS MU SFF SC SSD	400	MU	SAS	SFF	Hot Plug	SC	No	TLC	Gen9
<b>822559-B21</b>	HPE 800GB SAS MU SFF SC SSD	800	MU	SAS	SFF	Hot Plug	SC	No	TLC	Gen9
<b>822563-B21</b>	HPE 1.6TB SAS MU SFF SC SSD	1,600	MU	SAS	SFF	Hot Plug	SC	No	TLC	Gen9
<b>822567-B21</b>	HPE 3.2TB SAS MU SFF SC SSD	3,200	MU	SAS	SFF	Hot Plug	SC	No	TLC	Gen9
<b>846430-B21</b>	HPE 800GB SAS WI SFF SC SSD	800	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen9
<b>846432-B21</b>	HPE 1.6TB SAS WI SFF SC SSD	1,600	WI	SAS	SFF	Hot Plug	SC	No	MLC	Gen9
<b>846434-B21</b>	HPE 800GB SAS MU SFF SC SSD	800	MU	SAS	SFF	Hot Plug	SC	No	MLC	Gen9
<b>846436-B21</b>	HPE 1.6TB SAS MU SFF SC SSD	1,600	MU	SAS	SFF	Hot Plug	SC	No	MLC	Gen9

**NOTE:** Please use HPE Selector Tool <http://ssd.hpe.com/> to determine server compatibility.

## Technical Specifications

### SAS – Interface (Speeds & Feeds)

Option Kit SKU	Endurance DWPD	MAX Seq. Reads Throughput (MiB/s)	MAX Seq. Writes Throughput (MiB/s)	Random Read Average Latency uSec (4KiB,Q1)	Random Write Average Latency uSec (4KiB,Q1)	Random Read IOPS (4KiB, Q=16)	Random Write IOPS (4KiB, Q=16)	MAX Random Read IOPS (4KiB)	MAX Random Write IOPS (4KiB)	4KiB Random 70% Read / 30% Write, Queue 32 Performance (IOPS) VI-1	4KiB Random 50% Read / 50% Write, Queue 32 Performance (IOPS) VI-2
<b>762261-B21</b>	1	1,000	390	130	60	91,000	28,000	115,000 @Q64	28,000 @Q16	65,000	50,000
<b>762263-B21</b>	0.3	1,000	390	130	60	96,000	25,000	115,000 @Q64	28,000 @Q16	65,000	47,500
<b>762270-B21</b>	1	1,000	385	130	60	91,000	28,000	112,000 @Q64	28,000 @Q16	65,000	50,000
<b>762272-B21</b>	0.3	1,000	385	130	60	96,000	25,000	112,000 @Q64	28,000 @Q16	65,000	47,500
<b>779162-B21</b>	10	1,000	510	105	37	103,000	54,000	132,000 @Q64	54,000 @Q16	73,000	80,000
<b>779164-B21</b>	10	1,000	510	105	37	103,000	54,000	132,000 @Q64	54,000 @Q16	73,000	51,000
<b>779166-B21</b>	10	1,000	700	105	37	103,000	68,000	132,000 @Q64	68,000 @Q16	89,000	85,000
<b>779168-B21</b>	10	1,000	700	105	37	103,000	68,000	132,000 @Q64	68,000 @Q16	89,000	74,000
<b>779170-B21</b>	10	1,000	565	125	37	103,000	68,000	132,000 @Q64	68,000 @Q16	87,000	60,000
<b>779172-B21</b>	10	1,000	565	125	37	103,000	68,000	132,000 @Q64	68,000 @Q16	87,000	98,000
<b>779176-B21</b>	10	1,000	565	125	45	103,000	69,000	132,000 @Q64	69,000 @Q16	95,000	84,000
<b>797289-B21</b>	10	1,000	700	105	37	103,000	68,000	132,000 @Q64	68,000 @Q16	89,000	80,000
<b>797291-B21</b>	10	1,000	565	125	37	103,000	68,000	132,000 @Q64	68,000 @Q16	87,000	80,000
<b>797299-B21</b>	1	1,000	390	130	60	91,000	28,000	115,000 @Q64	28,000 @Q16	65,000	50,000
<b>797301-B21</b>	1	1,000	390	130	60	96,000	25,000	115,000 @Q64	28,000 @Q16	65,000	47,500
<b>802576-B21</b>	25	1,000	660	105	35	107,000	88,000	134,000 @Q64	88,000 @Q16	98,000	80,000
<b>802578-B21</b>	25	1,000	660	105	35	107,000	88,000	134,000 @Q64	88,000 @Q16	98,000	60,000
<b>802580-B21</b>	25	1,000	660	105	35	107,000	89,000	134,000 @Q64	89,000 @Q16	110,000	98,000
<b>802582-B21</b>	25	1,000	660	105	35	107,000	89,000	134,000 @Q64	89,000 @Q16	110,000	105,000
<b>802584-B21</b>	25	1,000	580	120	45	92,000	82,000	134,000 @Q64	82,000 @Q16	103,000	85,000
<b>802586-B21</b>	25	1,000	580	120	45	92,000	82,000	134,000 @Q64	82,000 @Q16	103,000	87,000
<b>802888-B21</b>	0.3	1,000	510	120	41	102,000	34,000	134,000 @Q64	34,000 @Q4	73,000	56,500
<b>802891-B21</b>	1.9	1,000	510	120	41	102,000	34,000	134,000 @Q64	34,000 @Q4	73,000	56,500
<b>816562-B21</b>	1	940	515	120	55	108,000	17,500	150,000 @Q64	17,500 @Q1	46,000	32,000
<b>816568-B21</b>	1	940	900	120	40	110,000	30,000	150,000 @Q64	30,000 @Q4	58,000	50,500
<b>816572-B21</b>	1	940	925	120	40	110,000	36,500	150,000 @Q64	36,500 @Q4	66,000	58,000
<b>816576-B21</b>	1	940	975	120	40	110,000	24,000	150,000 @Q64	24,000 @Q1	53,000	42,500
<b>822555-B21</b>	3	950	510	120	45	108,000	49,000	150,000 @Q64	49,000 @Q4	65,000	65,000
<b>822559-B21</b>	3	950	815	120	45	110,000	74,500	150,000 @Q64	74,500 @Q16	76,000	93,000

## Technical Specifications

<b>822563-B21</b>	3	950	915	125	50	95,000	73,000	150,000 @Q64	73,000 @Q16	83,000	69,000
<b>822567-B21</b>	3	950	950	125	50	93,000	53,000	150,000 @Q64	53,000 @Q4	70,000	87,500
<b>846430-B21</b>	10	1,080	580	125	60	104,000	68,000	<b>120,000@Q32</b>	68,000 @Q16	98,000	105,000
<b>846432-B21</b>	10	1,080	520	120	50	100,000	66,000	<b>120,000@Q32</b>	68,000 @Q32	98,000	63,000
<b>846434-B21</b>	3	1,080	580	125	60	91,500	65,500	<b>120,000@Q32</b>	67,500 @Q32	90,000	93,000
<b>846436-B21</b>	3	1,080	565	130	60	88,500	65,500	<b>100,000@Q32</b>	66,000 @Q32	80,000	75,000

**NOTE:** Reference column VI-1 when comparing RI SSDs, & column VI-2 for comparing MU & WI SSDs.

## Technical Specifications

### SAS – Interface (Power & Height)

Option Kit SKU	Power Idle Time	Power Random Read	Power Random Write	Power Sequential Read	Power Sequential Write	Power Random R/W	Height
<b>762261-B21</b>	1.91	3.65	3.65	5.13	5.69	3.65	15mm
<b>762263-B21</b>	2.22	5.05	5.05	6.66	6.68	5.05	15mm
<b>762270-B21</b>	1.91	3.65	3.65	5.13	5.69	3.65	15mm
<b>762272-B21</b>	2.22	5.05	5.05	6.66	6.68	5.05	15mm
<b>779162-B21</b>	2.02	3.24	3.24	4.04	6.85	3.24	15mm
<b>779164-B21</b>	1.83	3.58	3.58	4.83	6.97	3.58	15mm
<b>779166-B21</b>	2.09	3.31	3.31	5.23	8.67	3.31	15mm
<b>779168-B21</b>	1.88	3.49	3.49	5.36	7.83	3.49	15mm
<b>779170-B21</b>	2.03	3.49	3.49	4.80	8.52	3.49	15mm
<b>779172-B21</b>	1.98	3.81	3.81	6.11	8.35	3.81	15mm
<b>779176-B21</b>	2.07	3.40	3.40	5.63	8.59	3.40	15mm
<b>797289-B21</b>	2.09	3.31	3.31	5.23	8.67	3.31	15mm
<b>797291-B21</b>	2.03	3.49	3.49	4.80	8.52	3.49	15mm
<b>797299-B21</b>	1.91	3.65	3.65	5.13	5.69	3.65	15mm
<b>797301-B21</b>	2.22	5.05	5.05	6.66	6.68	5.05	15mm
<b>802576-B21</b>	2.02	3.24	3.24	4.04	6.85	3.24	15mm
<b>802578-B21</b>	2.02	3.24	3.24	4.04	6.85	3.24	15mm
<b>802580-B21</b>	2.09	3.31	3.31	5.23	8.67	3.31	15mm
<b>802582-B21</b>	2.09	3.31	3.31	5.23	8.67	3.31	15mm
<b>802584-B21</b>	2.03	3.49	3.49	4.80	8.52	3.49	15mm
<b>802586-B21</b>	2.03	3.49	3.49	4.80	8.52	3.49	15mm
<b>802888-B21</b>	2.26	3.48	3.48	5.46	5.87	3.48	15mm
<b>802891-B21</b>	2.26	3.48	3.48	5.46	5.87	3.48	15mm
<b>816562-B21</b>	3.16	3.36	3.36	4.21	3.78	3.36	15mm
<b>816568-B21</b>	3.65	4.03	4.03	4.95	4.66	4.03	15mm
<b>816572-B21</b>	3.12	3.57	3.57	4.24	3.90	3.57	15mm
<b>816576-B21</b>	3.36	3.82	3.82	4.62	4.36	3.82	15mm
<b>822555-B21</b>	3.35	3.66	3.66	4.44	4.44	3.66	15mm
<b>822559-B21</b>	3.51	3.81	3.81	4.77	4.46	3.81	15mm
<b>822563-B21</b>	3.24	3.55	3.55	4.52	4.19	3.55	15mm
<b>822567-B21</b>	3.48	3.76	3.76	4.79	4.56	3.76	15mm
<b>846430-B21</b>	5.41	5.98	5.98	9.30	10.60	5.98	15mm
<b>846432-B21</b>	5.21	6.20	6.20	9.53	10.65	6.20	15mm
<b>846434-B21</b>	5.41	5.98	5.98	8.80	10.61	6.02	15mm
<b>846436-B21</b>	5.21	6.20	6.20	8.90	10.70	6.28	15mm

**NOTE:** Please use HPE Selector Tool <http://ssd.hpe.com/> to determine server compatibility.

## Technical Specifications

### SATA – Interface (Capacity, Workload, Carrier...)

Option Kit SKU	Short Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Server Gen Supported (Select Platforms)
<b>764923-B21</b>	HPE 120GB SATA RI SFF SC SSD	120	RI	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>764925-B21</b>	HPE 240GB SATA RI SFF SC SSD	240	RI	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>764927-B21</b>	HPE 480GB SATA RI SFF SC SSD	480	RI	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>764929-B21</b>	HPE 800GB SATA RI SFF SC SSD	800	RI	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>775588-B21</b>	HPE 64GB SATA RI 2242 Dual M.2 Kit	64	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>777262-B21</b>	HP 120GB SATA RI M.2 2280 SSD	120	RI	SATA	M.2	Hot Plug	SC	Yes	MLC	Gen9
<b>777264-B21</b>	HP 340GB SATA RI M.2 2280 SSD	340	RI	SATA	M.2	Hot Plug	SC	Yes	MLC	Gen9
<b>777894-B21</b>	HPE 120GB SATA RI HH Dual M.2 Kit	120	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>785233-B21</b>	HPE 64GB SATA RI 2242 Dual M.2 Kit	64	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>788028-B21</b>	HPE 120GB SATA RI 2280 M.2 Kit	120	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>804575-B21</b>	HPE 80GB SATA RI SFF SC SSD	80	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804578-B21</b>	HPE 80GB SATA RI LFF SCC SSD	80	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804581-B21</b>	HPE 120GB SATA RI SFF SC SSD	120	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804584-B21</b>	HPE 120GB SATA RI LFF SCC SSD	120	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804587-B21</b>	HPE 240GB SATA RI SFF SC SSD	240	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804590-B21</b>	HPE 240GB SATA RI LFF SCC SSD	240	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804593-B21</b>	HPE 480GB SATA RI SFF SC SSD	480	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804596-B21</b>	HPE 480GB SATA RI LFF SCC SSD	480	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804599-B21</b>	HPE 800GB SATA RI SFF SC SSD	800	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804602-B21</b>	HPE 800GB SATA RI LFF SCC SSD	800	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804605-B21</b>	HPE 1.6TB SATA RI SFF SC SSD	1,600	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804608-B21</b>	HPE 1.6TB SATA RI LFF SCC SSD	1,600	RI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9
<b>804613-B21</b>	HPE 200GB SATA MU SFF SC SSD	200	MU	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen8,9
<b>804616-B21</b>	HPE 200GB SATA MU LFF SCC SSD	200	MU	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen8,9

## Technical Specifications

<b>804625-B21</b>	HPE 800GB SATA MU SFF SC SSD	800	MU	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8,9
<b>804628-B21</b>	HPE 800GB SATA MU LFF SCC SSD	800	MU	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>804631-B21</b>	HPE 1.6TB SATA MU SFF SC SSD	1,600	MU	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8
<b>804634-B21</b>	HPE 1.6TB SATA MU LFF SCC SSD	1,600	MU	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>804639-B21</b>	HPE 200GB SATA WI SFF SC SSD	200	WI	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8
<b>804642-B21</b>	HPE 200GB SATA WI LFF SCC SSD	200	WI	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>804665-B21</b>	HPE 400GB SATA WI SFF SC SSD	400	WI	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8,9
<b>804668-B21</b>	HPE 400GB SATA WI LFF SCC SSD	400	WI	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>804671-B21</b>	HPE 800GB SATA WI SFF SC SSD	800	WI	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8,9
<b>804674-B21</b>	HPE 800GB SATA WI LFF SCC SSD	800	WI	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>804677-B21</b>	HPE 1.2TB SATA WI SFF SC SSD	1,200	WI	SATA	SFF	Hot Plug	SC	Yes	eMLC	Gen8,9
<b>804680-B21</b>	HPE 1.2TB SATA WI LFF SCC SSD	1,200	WI	SATA	LFF	Hot Plug	SCc	Yes	eMLC	Gen8,9
<b>816879-B21</b>	HPE 120GB SATA RI SFF SC SSD	120	RI	SATA	LFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816883-B21</b>	HPE 120GB SATA RI LFF SCC SSD	120	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816889-B21</b>	HPE 240GB SATA RI SFF SC SSD	240	RI	SATA	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816893-B21</b>	HPE 240GB SATA RI LFF SCC SSD	240	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816899-B21</b>	HPE 480GB SATA RI SFF SC SSD	480	RI	SATA	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816903-B21</b>	HPE 480GB SATA RI LFF SCC SSD	480	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816909-B21</b>	HPE 960GB SATA RI SFF SC SSD	960	RI	SATA	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816913-B21</b>	HPE 960GB SATA RI SFF SC SSD	960	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816919-B21</b>	HPE 1.92TB SATA RI SFF SC SSD	1,920	RI	SATA	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816923-B21</b>	HPE 1.92TB SATA RI LFF SCC SSD	1,920	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816929-B21</b>	HPE 3.84TB SATA RI SFF SC SSD	3,840	RI	SATA	SFF	Hot Plug	SC	No	TLC	Gen8,9
<b>816933-B21</b>	HPE 3.84TB SATA RI LFF SCC SSD	3,840	RI	SATA	LFF	Hot Plug	SCc	No	TLC	Gen8,9
<b>816965-B21</b>	HPE 120GB SATA MU SFF SC SSD	120	MU	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>816969-B21</b>	HPE 120GB SATA MU LFF SCC SSD	120	MU	SATA	LFF	Hot Plug	SCc	No	eMLC	Gen8,9
<b>816975-B21</b>	HPE 240GB SATA MU SFF SC SSD	240	MU	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>816979-B21</b>	HPE 240GB SATA MU LFF SCC SSD	240	MU	SATA	LFF	Hot Plug	SCc	No	eMLC	Gen8,9

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<b>816985-B21</b>	HPE 480GB SATA MU SFF SC SSD	480	MU	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>816989-B21</b>	HPE 480GB SATA MU LFF SCC SSD	480	MU	SATA	LFF	Hot Plug	SCc	No	eMLC	Gen8,9
<b>816995-B21</b>	HPE 960GB SATA MU SFF SC SSD	960	MU	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9

**NOTE:** Please use HPE Selector Tool <http://ssd.hpe.com/> to determine server compatibility.

## Technical Specifications

### SATA – Interface (Capacity, Workload, Carrier...)

Option Kit SKU	Short Description	Capacity	Workload Type	Interface Type	Form Factor	Plug Type	Carrier Type	Digitally Signed Firmware (DS)	Flash Type	Server Gen Supported (Select Platforms)
<b>816999-B21</b>	HPE 960GB SATA MU LFF SCC SSD	960	MU	SATA	LFF	Hot Plug	SCc	No	eMLC	Gen8,9
<b>817011-B21</b>	HPE 1.92TB SATA MU SFF SC SSD	1,920	MU	SATA	SFF	Hot Plug	SC	No	eMLC	Gen8,9
<b>817015-B21</b>	HPE 1.92TB SATA MU LFF SCC SSD	1,920	MU	SATA	LFF	Hot Plug	SCc	No	eMLC	Gen8,9
<b>831725-B21</b>	HPE 800GB SATA MU LFF SCC SSD	800	WI	SATA	LFF	Hot Plug	LPc	Yes	eMLC	Gen9
<b>832414-B21</b>	HPE 480GB SATA MU SFF SC SSD	480	MU	SATA	SFF	N/A	SC	Yes	eMLC	Gen8
<b>832417-B21</b>	HPE 480GB SATA MU LFF SCC SSD	480	MU	SATA	LFF	N/A	SCc	Yes	eMLC	Gen8,9
<b>835563-B21</b>	HPE 340GB SATA RI M.2 Kit	340	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>835565-B21</b>	HPE 340GB SATA RI Dual M.2 Kit	340	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>846495-B21</b>	HPE 120GB SATA RI M.2 Kit - Blades	120	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>846497-B21</b>	HPE 120GB SATA RI Dual M.2 Kit - Blades	120	RI	SATA	M.2e	N/A	N/A	No	MLC	Gen9
<b>868814-B21</b>	HPE 240GB SATA 6G RI SFF SC SSD	240	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>868818-B21</b>	HPE 480GB SATA 6G RI SFF SC DS SSD	480	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>868822-B21</b>	HPE 960GB SATA 6G RI SFF SC DS SSD	960	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>868826-B21</b>	HPE 1.92TB SATA 6G RI SFF SC DS SSD	1,920	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>868830-B21</b>	HPE 3.8TB SATA 6G RI SFF SC DS SSD	3,800	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869056-B21</b>	HPE 480GB SATA 6G RI LFF LPc DS SSD	480	RI	SATA	LFF	Hot Plug	LPc	Yes	MLC	Gen9 & 10
<b>869058-B21</b>	HPE 1.92TB SATA 6G RI LFF LPc DS SSD	1,920	RI	SATA	LFF	Hot Plug	LPc	Yes	MLC	Gen9 & 10
<b>869374-B21</b>	HPE 150GB SATA 6G RI SFF SC DS SSD	150	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869376-B21</b>	HPE 240GB SATA 6G RI SFF SC DS SSD	240	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869378-B21</b>	HPE 480GB SATA 6G RI SFF SC DS SSD	480	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869380-B21</b>	HPE 480GB SATA 6G RI SFF SCC DS SSD	480	RI	SATA	SFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>869382-B21</b>	HPE 480GB SATA 6G RI LFF LPC DS	480	RI	SATA	LFF	Hot Plug	LPc	Yes	MLC	Gen9 & 10

## Technical Specifications

	SSD									
<b>869384-B21</b>	HPE 960GB SATA 6G RI SFF SC DS SSD	960	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869386-B21</b>	HPE 1.6TB SATA 6G RI SFF SC DS SSD	1,600	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>869388-B21</b>	HPE 1.6TB SATA 6G RI SFF SCC DS SSD	1,600	RI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>871768-B21</b>	HPE 960GB SATA 6G RI SFF SC SSD	960	RI	SATA	SFF	Hot Plug	SC	No	MLC	Gen9
<b>871770-B21</b>	HPE 1.92TB SATA 6G RI SFF SC SSD	1,920	RI	SATA	SFF	Hot Plug	SC	No	MLC	Gen9
<b>872344-B21</b>	HPE 480GB SATA 6G MU SFF SC DS SSD	480	MU	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872346-B21</b>	HPE 480GB SATA 6G MU LFF SCC DS SSD	480	MU	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>872348-B21</b>	HPE 960GB SATA 6G MU SFF SC DS SSD	960	MU	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872350-B21</b>	HPE 960GB SATA 6G MU LFF SCC DS SSD	960	MU	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>872352-B21</b>	HPE 1.92TB SATA 6G MU SFF SC DS SSD	1,920	MU	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872355-B21</b>	HPE 400GB SATA 6G WI SFF SC DS SSD	400	WI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872357-B21</b>	HPE 400GB SATA 6G WI LFF SCC DS SSD	400	WI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>872359-B21</b>	HPE 800GB SATA 6G WI SFF SC DS SSD	800	WI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872361-B21</b>	HPE 800GB SATA 6G WI LFF SCC DS SSD	800	WI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>872363-B21</b>	HPE 1.6TB SATA 6G WI SFF SC DS SSD	1,600	WI	SATA	SFF	Hot Plug	SC	Yes	MLC	Gen9 & 10
<b>872365-B21</b>	HPE 1.6TB SATA 6G WI LFF SCC DS SSD	1,600	WI	SATA	LFF	Hot Plug	SCc	Yes	MLC	Gen9 & 10
<b>872853-B21</b>	HPE 240GB SATA 6G RI SFF SC SSD	240	RI	SATA	SFF	Non-Hot Plug	SC	No	MLC	Gen9
<b>872855-B21</b>	HPE 480GB SATA 6G RI SFF SC SSD	480	RI	SATA	SFF	Hot Plug	SC	No	MLC	Gen9

**NOTE:** Please use HPE Selector Tool <http://ssd.hpe.com/> to determine server compatibility.

## Technical Specifications

### SATA – Interface (Speeds & Feeds)

Option Kit SKU	Endurance DWPD	MAX Seq. Reads Throughput (MiB/s)	MAX Seq. Writes Throughput (MiB/s)	Random Read Average Latency uSec (4KiB,Q1)	Random Write Average Latency uSec (4KiB,Q1)	Random Read IOPS (4KiB, Q=16)	Random Write IOPS (4KiB, Q=16)	MAX Random Read IOPS (4KiB)	MAX Random Write IOPS (4KiB)	4KiB Random 70% Read / 30% Write, Queue 32 Performance (IOPS) VI-1	4KiB Random 50% Read / 50% Write, Queue 32 Performance (IOPS) VI-2
<b>764923-B21</b>	0.3	430	205	140	42	58,000	24,000	72,000@ Q32	24,000 @Q4	28,000	22,500
<b>764925-B21</b>	0.3	420	325	140	37	58,000	35,000	72,000@ Q32	35,000 @Q4	30,500	25,000
<b>764927-B21</b>	0.3	420	390	140	40	58,000	35,000	72,000@ Q32	35,000 @Q4	29,000	27,000
<b>764929-B21</b>	0.3	420	335	150	45	58,000	26,000	72,000@ Q32	26,000 @Q4	31,000	25,000
<b>775588-B21</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>777262-B21</b>	0.3	450	150	120	85	69,000	12,000	72,000@ Q32	12,000 @Q1	28,000	21,500
<b>777264-B21</b>	0.3	455	320	120	70	71,000	14,500	72,000@ Q32	14,500 @Q1	32,000	25,000
<b>777894-B21</b>	0.8	450	150	120	85	69,000	12,000	72,000@ Q32	12,000 @Q1	28,000	21,500
<b>785233-B21</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>788028-B21</b>	0.8	450	150	120	85	69,000	12,000	72,000@ Q32	12,000 @Q1	28,000	21,500
<b>804575-B21</b>	0.3	370	105	110	120	61,000	8,400	64,000@ Q32	8,400@ Q1	21,500	13,500
<b>804578-B21</b>	0.3	370	105	110	120	61,000	8,400	64,000@ Q32	8,400@ Q1	21,500	13,500
<b>804581-B21</b>	0.3	480	135	110	185	61,500	5,400	64,000@ Q32	5,400@ Q1	15,000	10,500
<b>804584-B21</b>	0.3	480	135	110	185	61,500	5,400	64,000@ Q32	5,400@ Q1	15,000	10,500
<b>804587-B21</b>	0.3	480	265	110	100	61,500	10,200	64,000@ Q32	10,200 @Q4	26,500	17,000
<b>804590-B21</b>	0.3	480	265	110	100	61,500	10,200	64,000@ Q32	10,200 @Q4	26,500	17,000
<b>804593-B21</b>	0.3	480	445	110	70	61,500	15,500	64,000@ Q32	15,500 @Q4	33,000	24,500
<b>804596-B21</b>	0.3	480	445	110	70	61,500	15,500	64,000@ Q32	15,500 @Q4	33,000	24,500
<b>804599-B21</b>	0.3	480	465	110	70	61,500	15,500	64,000@ Q32	15,500 @Q4	33,000	24,500
<b>804602-B21</b>	0.3	480	465	110	70	61,500	15,500	64,000@ Q32	15,500 @Q4	33,000	24,500
<b>804605-B21</b>	0.3	480	430	110	70	61,500	15,000	64,000@ Q32	15,000 @Q4	31,500	24,000
<b>804608-B21</b>	0.3	480	430	110	70	61,500	15,000	64,000@ Q32	15,000 @Q4	31,500	24,000
<b>804613-B21</b>	3	535	220	110	85	64,000	12,000	71,000@ Q32	12,000 @Q1	26,000	21,000
<b>804616-B21</b>	3	535	220	110	85	64,000	12,000	71,000@ Q32	12,000 @Q1	26,000	21,000
<b>804625-B21</b>	3	535	380	110	50	64,000	24,000	71,000@ Q32	24,000 @Q4	45,000	35,000
<b>804628-B21</b>	3	535	380	110	50	64,000	24,000	71,000@ Q32	24,000 @Q4	45,000	35,000
<b>804631-B21</b>	3	535	360	115	50	64,000	23,000	71,000@ Q32	23,000 @Q4	44,000	34,000
<b>804634-B21</b>	3	535	360	115	50	64,000	23,000	71,000@ Q32	23,000 @Q4	44,000	34,000
<b>804639-B21</b>	10	540	300	110	35	64,500	42,000	72,000@ Q32	42,000 @Q4	54,000	50,000

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<b>804642-B21</b>	10	540	300	110	35	64,500	42,000	72,000@ Q32	42,000 @Q4	54,000	50,000
<b>804665-B21</b>	10	540	380	110	35	64,500	48,000	72,000@ Q32	48,000 @Q16	60,000	55,000
<b>804668-B21</b>	10	540	380	110	35	64,500	48,000	72,000@ Q32	48,000 @Q16	60,000	55,000
<b>804671-B21</b>	10	540	370	110	35	64,500	46,500	72,000@ Q32	46,500 @Q16	60,000	55,000
<b>804674-B21</b>	10	540	370	110	35	64,500	46,500	72,000@ Q32	46,500 @Q16	60,000	55,000
<b>804677-B21</b>	10	540	370	110	35	64,500	45,000	72,000@ Q32	45,000 @Q16	60,000	54,000
<b>804680-B21</b>	10	540	370	110	35	64,500	45,000	72,000@ Q32	45,000 @Q16	60,000	54,000
<b>816879-B21</b>	0.8	375	125	120	180	67,000	5,500	75,000@ Q32	5,500@ Q1	16,000	10,500
<b>816883-B21</b>	0.8	375	125	120	180	67,000	5,500	75,000@ Q32	5,500@ Q1	16,000	10,500
<b>816889-B21</b>	0.8	530	275	120	95	65,000	10,500	75,000@ Q32	10,500 @Q1	28,500	20,000
<b>816893-B21</b>	0.8	530	275	120	95	65,000	10,500	75,000@ Q32	10,500 @Q1	28,500	20,000
<b>816899-B21</b>	0.8	530	465	120	55	63,000	17,000	75,000@ Q32	17,000 @Q1	44,500	32,000
<b>816903-B21</b>	0.8	530	465	120	55	63,000	17,000	75,000@ Q32	17,000 @Q1	44,500	32,000
<b>816909-B21</b>	0.8	535	485	120	50	62,000	19,000	75,000@ Q32	19,000 @Q1	51,000	36,000
<b>816913-B21</b>	0.8	535	485	120	50	62,000	19,000	75,000@ Q32	19,000 @Q1	51,000	36,000
<b>816919-B21</b>	0.8	535	480	115	50	63,000	20,000	75,000@ Q32	20,000 @Q1	52,000	37,500
<b>816923-B21</b>	0.8	535	480	115	50	63,000	20,000	75,000@ Q32	20,000 @Q1	52,000	37,500
<b>816929-B21</b>	0.8	535	480	115	50	63,000	20,000	75,000@ Q32	20,000 @Q1	52,000	37,500
<b>816933-B21</b>	0.8	535	480	115	50	63,000	20,000	75,000@ Q32	20,000 @Q1	52,000	37,500
<b>816965-B21</b>	3	510	475	100	85	68,000	12,000	75,000@ Q32	12,000 @Q1	33,500	21,500
<b>816969-B21</b>	3	510	475	100	85	68,000	12,000	75,000@ Q32	12,000 @Q1	33,500	21,500
<b>816975-B21</b>	3	535	495	100	50	69,000	19,300	75,000@ Q32	19,300 @Q1	54,000	35,000
<b>816979-B21</b>	3	535	495	100	50	69,000	19,300	75,000@ Q32	19,300 @Q1	54,000	35,000
<b>816985-B21</b>	3	535	495	100	38	67,000	26,500	75,000@ Q32	26,500 @Q1	57,000	48,000
<b>816989-B21</b>	3	535	495	100	38	67,000	26,500	75,000@ Q32	26,500 @Q1	57,000	48,000
<b>816995-B21</b>	3	535	500	100	36	67,000	27,500	75,000@ Q32	27,500 @Q1	57,000	50,000

## Technical Specifications

### SATA – Interface (Speeds & Feeds)

Option Kit SKU	Endurance DWPD	MAX Seq. Reads Throughput (MiB/s)	MAX Seq. Writes Throughput (MiB/s)	Random Read Average Latency uSec (4KiB,Q1)	Random Write Average Latency uSec (4KiB,Q1)	Random Read IOPS (4KiB, Q=16)	Random Write IOPS (4KiB, Q=16)	MAX Random Read IOPS (4KiB)	MAX Random Write IOPS (4KiB)	4KiB Random 70% Read / 30% Write, Queue 32 Performance (IOPS) VI-1	4KiB Random 50% Read / 50% Write, Queue 32 Performance (IOPS) VI-2
<b>816999-B21</b>	3	535	500	100	36	67,000	27,500	75,000@ Q32	27,500 @Q1	57,000	50,000
<b>817011-B21</b>	3	535	500	100	36	67,000	29,500	75,000@ Q32	29,500 @Q1	58,000	53,000
<b>817015-B21</b>	3	535	500	100	36	67,000	29,500	75,000@ Q32	29,500 @Q1	58,000	53,000
<b>831725-B21</b>	10	540	370	110	35	64,500	46,500	72,000@ Q32	46,500 @Q16	60,000	55,000
<b>832414-B21</b>	3	535	380	110	45	64,000	26,000	71,000@ Q32	26,000 @Q4	45,000	36,000
<b>832417-B21</b>	3	535	380	110	45	64,000	26,000	71,000@ Q32	26,000 @Q4	45,000	36,000
<b>835563-B21</b>	0.3	455	320	120	70	71,000	14,500	72,000@ Q32	14,500 @Q1	32,000	25,000
<b>835565-B21</b>	0.3	455	320	120	70	71,000	14,500	72,000@ Q32	14,500 @Q1	32,000	25,000
<b>846495-B21</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>846497-B21</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>868814-B21</b>	0.8	370	300	120	105	66,000	9,800	73,000@ Q32	9,800 @Q4	21,500	16,000
<b>868818-B21</b>	0.8	530	490	120	58	66,000	17,000	75,500@ Q32	17,000 @Q1	37,500	27,500
<b>868822-B21</b>	0.8	530	490	120	41	64,000	24,500	75,500@ Q32	24,500 @Q4	53,000	40,000
<b>868826-B21</b>	0.8	530	490	120	38	61,500	26,000	73,500@ Q32	26,000 @Q1	56,000	44,000
<b>868830-B21</b>	0.8	530	490	120	36	63,500	27,500	75,500@ Q32	27,500 @Q1	58,000	46,500
<b>869056-B21</b>	0.8	530	490	120	58	66,000	17,000	75,500@ Q32	17,000 @Q1	37,500	27,500
<b>869058-B21</b>	0.8	530	490	120	38	61,500	26,000	73,500@ Q32	26,000 @Q1	56,000	44,000
<b>869374-B21</b>	0.4	190	180	145	145	41,000	6,500	45,000@ Q32	6,500 @Q1	14,500	11,500
<b>869376-B21</b>	0.5	325	290	145	70	55,000	15,000	59,000@ Q32	15,000 @Q4	26,500	23,000
<b>869378-B21</b>	0.5	410	350	145	75	55,000	15,000	59,000@ Q32	15,000 @Q4	30,000	23,500
<b>869380-B21</b>	0.5	410	350	145	75	55,000	15,000	59,000@ Q32	15,000 @Q4	30,000	23,500
<b>869382-B21</b>	0.5	410	350	145	75	55,000	15,000	59,000@ Q32	15,000 @Q4	30,000	23,500
<b>869384-B21</b>	0.6	420	315	155	80	55,000	14,000	59,000@ Q32	14,000 @Q4	30,000	22,000
<b>869386-B21</b>	0.5	420	340	155	76	55,000	15,000	59,000@ Q32	15,000 @Q4	30,000	23,500
<b>869388-B21</b>	0.5	420	340	155	76	55,000	15,000	59,000@ Q32	15,000 @Q4	30,000	23,500
<b>871768-B21</b>	0.6	540	480	120	65	59,000	16,500	72,000@ Q32	16,500 @Q1	50,000	30,000
<b>871770-B21</b>	0.6	530	445	125	70	55,000	15,000	65,000@ Q32	15,000 @Q1	48,500	27,000
<b>872344-B21</b>	3.5	510	475	110	50	63,000	20,000	69,000@ Q32	20,000 @Q4	43,000	32,000
<b>872346-B21</b>	3.5	510	475	110	50	63,000	20,000	69,000@ Q32	20,000 @Q4	43,000	32,000

## Technical Specifications

<b>872348-B21</b>	3.5	510	475	110	40	62,000	26,500	69,000@ Q32	26,500 @Q4	53,500	43,000
<b>872350-B21</b>	3.5	510	475	110	40	62,000	26,500	69,000@ Q32	26,500 @Q4	53,500	43,000
<b>872352-B21</b>	3.5	500	475	110	38	61,500	28,500	69,000@ Q32	28,500 @Q4	50,500	47,500
<b>872355-B21</b>	10	510	475	110	37	63,000	46,500	69,000@ Q32	46,500 @Q4	61,000	60,000
<b>872357-B21</b>	10	510	475	110	37	63,000	46,500	69,000@ Q32	46,500 @Q4	61,000	60,000
<b>872359-B21</b>	10	510	475	110	37	62,000	51,500	69,000@ Q32	51,500 @Q4	61,000	60,000
<b>872361-B21</b>	10	510	475	110	37	62,000	51,500	69,000@ Q32	51,500 @Q4	61,000	60,000
<b>872363-B21</b>	10	500	475	110	37	61,500	54,500	69,000@ Q32	54,500 @Q4	61,000	60,000
<b>872365-B21</b>	10	500	475	110	37	61,500	54,500	69,000@ Q32	54,500 @Q4	61,000	60,000
<b>872853-B21</b>	0.5	540	275	120	120	62,000	8,400	72,000@ Q32	8,400@ Q1	29,000	16,500
<b>872855-B21</b>	0.6	540	480	120	65	60,000	15,500	72,000@ Q32	15,500 @Q1	45,000	30,000

**NOTE:** Reference column VI-1 when comparing RI SSDs, & column VI-2 for comparing MU & WI SSDs.

## Technical Specifications

### SATA – Interface (Power & Height)

Option Kit SKU	Power Idle Time	Power Random Read	Power Random Write	Power Sequential Read	Power Sequential Write	Power Random R/W	Height
<b>764923-B21</b>	1.08	1.94	1.94	2.25	2.92	1.94	15mm
<b>764925-B21</b>	1.18	2.16	2.16	2.34	4.37	2.16	15mm
<b>764927-B21</b>	1.19	2.34	2.34	2.70	4.56	2.34	15mm
<b>764929-B21</b>	1.24	3.26	3.26	2.69	4.92	3.26	15mm
<b>775588-B21</b>	9.00	9.00	9.00	9.00	9.00	9.00	M.2
<b>777262-B21</b>	0.82	1.33	1.33	1.36	1.62	1.33	M.2
<b>777264-B21</b>	1.64	1.91	1.91	1.85	2.15	1.91	M.2
<b>777894-B21</b>	0.82	1.33	1.33	1.33	1.36	1.33	7mm
<b>785233-B21</b>	9.00	9.00	9.00	9.00	9.00	9.00	15mm
<b>788028-B21</b>	0.82	1.33	1.33	1.36	1.62	1.33	M.2
<b>804575-B21</b>	1.17	2.36	2.36	2.57	2.59	2.36	15mm
<b>804578-B21</b>	1.17	2.36	2.36	2.57	2.59	2.36	15mm
<b>804581-B21</b>	1.09	2.57	2.57	2.58	2.82	2.57	15mm
<b>804584-B21</b>	1.09	2.57	2.57	2.58	2.82	2.57	15mm
<b>804587-B21</b>	1.24	3.21	3.21	2.68	3.81	3.21	15mm
<b>804590-B21</b>	1.24	3.21	3.21	2.68	3.81	3.21	15mm
<b>804593-B21</b>	1.22	4.37	4.37	2.76	4.75	4.37	15mm
<b>804596-B21</b>	1.22	4.37	4.37	2.76	4.75	4.37	15mm
<b>804599-B21</b>	1.18	3.83	3.83	2.82	5.01	3.83	15mm
<b>804602-B21</b>	1.18	3.83	3.83	2.82	5.01	3.83	15mm
<b>804605-B21</b>	1.26	4.37	4.37	3.02	5.78	4.37	15mm
<b>804608-B21</b>	1.26	4.37	4.37	3.02	5.78	4.37	15mm
<b>804613-B21</b>	1.21	2.90	2.90	2.86	3.79	2.90	15mm
<b>804616-B21</b>	1.21	2.90	2.90	2.86	3.79	2.90	15mm
<b>804625-B21</b>	1.19	3.36	3.36	3.01	6.03	3.36	15mm
<b>804628-B21</b>	1.19	3.36	3.36	3.01	6.03	3.36	15mm
<b>804631-B21</b>	1.20	0.39	0.39	0.34	6.69	0.39	15mm
<b>804634-B21</b>	1.20	0.39	0.39	0.34	6.69	0.39	15mm
<b>804639-B21</b>	1.03	2.02	2.02	2.85	4.36	2.02	15mm
<b>804642-B21</b>	1.03	2.02	2.02	2.85	4.36	2.02	15mm
<b>804665-B21</b>	1.08	2.17	2.17	2.99	5.81	2.17	15mm
<b>804668-B21</b>	1.08	2.17	2.17	2.99	5.81	2.17	15mm
<b>804671-B21</b>	1.16	2.25	2.25	3.24	6.06	2.25	15mm
<b>804674-B21</b>	1.16	2.25	2.25	3.24	6.06	2.25	15mm
<b>804677-B21</b>	1.17	2.40	2.40	3.41	6.75	2.40	15mm
<b>804680-B21</b>	1.17	2.40	2.40	3.41	6.75	2.40	15mm
<b>816879-B21</b>	1.26	2.20	2.20	2.38	2.17	2.20	15mm
<b>816883-B21</b>	1.26	2.20	2.20	2.38	2.17	2.20	15mm
<b>816889-B21</b>	1.26	2.34	2.34	2.68	2.71	2.34	15mm
<b>816893-B21</b>	1.26	2.34	2.34	2.68	2.71	2.34	15mm
<b>816899-B21</b>	1.26	2.79	2.79	2.70	3.52	2.79	15mm
<b>816903-B21</b>	1.26	2.79	2.79	2.70	3.52	2.79	15mm
<b>816909-B21</b>	1.28	2.80	2.80	2.82	3.64	2.80	15mm
<b>816913-B21</b>	1.28	2.80	2.80	2.82	3.64	2.80	15mm
<b>816919-B21</b>	1.29	2.87	2.87	3.10	3.98	2.87	15mm

## Technical Specifications

<b>816923-B21</b>	1.29	2.87	2.87	3.10	3.98	2.87	15mm
<b>816929-B21</b>	1.41	3.05	3.05	3.29	4.24	3.05	15mm
<b>816933-B21</b>	1.41	3.05	3.05	3.29	4.24	3.05	15mm
<b>816965-B21</b>	1.25	2.18	2.18	2.49	2.47	2.18	15mm
<b>816969-B21</b>	1.25	2.18	2.18	2.49	2.47	2.18	15mm
<b>816975-B21</b>	1.27	2.15	2.15	2.48	2.45	2.15	15mm
<b>816979-B21</b>	1.27	2.15	2.15	2.48	2.45	2.15	15mm
<b>816985-B21</b>	1.32	2.31	2.31	2.50	2.45	2.31	15mm
<b>816989-B21</b>	1.32	2.31	2.31	2.50	2.45	2.31	15mm
<b>816995-B21</b>	1.27	2.45	2.45	2.57	2.48	2.45	15mm

## Technical Specifications

### SATA – Interface (Power & Height)

Option Kit SKU	Power Idle Time	Power Random Read	Power Random Write	Power Sequential Read	Power Sequential Write	Power Random R/W	Height
<b>816999-B21</b>	1.27	2.45	2.45	2.57	2.48	2.45	15mm
<b>817011-B21</b>	1.28	2.62	2.62	2.81	2.67	2.62	15mm
<b>817015-B21</b>	1.28	2.62	2.62	2.81	2.67	2.62	15mm
<b>831725-B21</b>	1.16	2.25	2.25	3.24	6.06	2.25	15mm
<b>832414-B21</b>	1.18	2.60	2.60	3.06	5.12	2.60	15mm
<b>832417-B21</b>	1.18	2.60	2.60	3.06	5.12	2.60	15mm
<b>835563-B21</b>	1.64	1.91	1.91	1.85	2.15	1.91	M.2
<b>835565-B21</b>	1.64	1.91	1.91	1.85	2.15	1.91	M.2
<b>846495-B21</b>	TBD	TBD	TBD	TBD	TBD	TBD	M.2
<b>846497-B21</b>	TBD	TBD	TBD	TBD	TBD	TBD	M.2
<b>868814-B21</b>	1.24	2.34	2.34	2.68	2.71	2.34	15mm
<b>868818-B21</b>	1.26	2.79	2.79	2.70	3.52	2.79	15mm
<b>868822-B21</b>	1.28	2.80	2.80	2.82	3.64	2.80	15mm
<b>868826-B21</b>	1.29	2.87	2.87	3.10	3.98	2.87	15mm
<b>868830-B21</b>	1.41	3.05	3.05	3.29	4.24	3.05	15mm
<b>869056-B21</b>	1.26	2.79	2.79	2.70	3.52	2.79	15mm
<b>869058-B21</b>	1.29	2.87	2.87	3.10	3.98	2.87	15mm
<b>869374-B21</b>	0.72	2.06	2.06	2.24	2.55	2.06	15mm
<b>869376-B21</b>	0.71	2.17	2.17	2.66	3.02	2.17	15mm
<b>869378-B21</b>	0.67	2.44	2.44	2.91	3.33	2.44	15mm
<b>869380-B21</b>	0.67	2.44	2.44	2.91	3.33	2.44	15mm
<b>869382-B21</b>	0.75	2.42	2.42	3.10	3.58	2.42	15mm
<b>869384-B21</b>	0.75	2.42	2.42	3.10	3.58	2.42	15mm
<b>869386-B21</b>	0.69	2.83	2.83	3.26	3.69	2.83	15mm
<b>869388-B21</b>	0.69	2.83	2.83	3.26	3.69	2.83	15mm
<b>871768-B21</b>	0.70	2.50	2.50	1.92	3.52	2.50	7mm
<b>871770-B21</b>	0.74	2.59	2.59	2.32	4.17	2.59	7mm
<b>872344-B21</b>	1.23	2.51	2.51	2.59	2.83	2.51	15mm
<b>872346-B21</b>	1.23	2.51	2.51	2.59	2.83	2.51	15mm
<b>872348-B21</b>	1.23	2.66	2.66	2.69	2.84	2.66	15mm
<b>872350-B21</b>	1.23	2.66	2.66	2.69	2.84	2.66	15mm
<b>872352-B21</b>	1.23	2.59	2.59	2.71	2.84	2.59	15mm
<b>872355-B21</b>	1.23	2.17	2.17	2.19	2.33	2.17	15mm
<b>872357-B21</b>	1.23	2.17	2.17	2.19	2.33	2.17	15mm
<b>872359-B21</b>	1.23	2.66	2.66	2.66	2.68	2.66	15mm
<b>872361-B21</b>	1.23	2.66	2.66	2.66	2.68	2.66	15mm
<b>872363-B21</b>	1.25	2.66	2.66	2.71	2.87	2.65	15mm
<b>872365-B21</b>	1.28	2.65	2.65	2.71	2.87	2.65	15mm
<b>872853-B21</b>	0.51	1.98	1.98	1.89	2.73	1.98	7mm
<b>872855-B21</b>	0.52	2.09	2.09	1.80	3.37	2.09	7mm

## Technical Specifications

The following charts are provided to assist in decoding the SSD & Accelerators short & long product descriptions accompanying each SKU; additional details can also be found within the Carrier Key Decoder & the Previous To Current Workload Naming Conversion tables within this document.

### SSD SKU Decoder

#### Long Name

HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Carriers	Wty	Special Features	Drive Type
HPE	120-960GB 1.6-12.8TB	SATA/SAS 6G/12G	Write Intensive Mixed Use Read Intensive	SFF (2.5IN) LFF (3.5IN)	SC Smart Carrier SCN Smart Carrier NVMe SCM Smart Carrier M.2 SCC Smart Carrier Converter ST Standard STC Standard Converter LP Low Profile LPC Low Profile Converter QR Quick Release RW Raw Drive	3yr Wty 1yr Wty	DS Digitally Signed Firmware SED Self Encrypting Drive TBD Low Power	SSD

*In priority order where 1<sup>st</sup> is closest to Drive Type*

### SSD SKU Decoder

#### Short Name

HPE 3.84TB SATA RI SFF SC DS SSD

Brand	Storage Capacity	Interface Type	Workload	Form Factor Type	Carriers	Special Features	Drive Type
HPE	120-960GB 1.6-12.8TB	SATA/SAS	WI MU RI	SFF LFF	SC Smart Carrier SCN Smart Carrier NVMe SCM Smart Carrier M.2 SCC Smart Carrier Converter ST Standard STC Standard Converter LP Low Profile LPC Low Profile Converter QR Quick Release RW Raw Drive	DS Digitally Signed Firmware SED Self Encrypting Drive	SSD

*In priority order where 1<sup>st</sup> is closest to drive type*

### NVMe SSDs SKU Decoder

#### Long Name

HPE 1TB NVMe x4 Lanes Read Intensive SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Carriers	Wty	Special Features	Drive Type
HPE	400-960GB 1-8TB	NVMe/ x4 Lanes	Write Intensive Mixed Use Read Intensive	SFF (2.5IN) HHHL/FHHL	SCN Smart Carrier NVMe	3yr Wty 1yr Wty	DS Digitally Signed Firmware DP Dual Port	SSD

*In priority order where 1<sup>st</sup> is closest to Drive Type*

## Technical Specifications

### NVMe SSDs SKU Decoder

#### Short Name

HPE 1TB NVMe x4 RI SFF SCN DS SSD

Brand	Storage Capacity	Interface Type	Workload	Form Factor Type	Carriers	Special Features	Drive Type
HPE	120-960GB 1.6-12.8TB	NVMe x4	WI MU RI	SFF HH FH	SCN Smart Carrier NVMe	DS Digitally Signed Firmware DP Dual Port	SSD
<i>In priority order where 1<sup>st</sup> is closest to Drive Type</i>							

### M.2 SSDs SKU Decoder

#### Long Name

HPE 960GB NVMe x4 Lanes Read Intensive M.2 2280 3yr Wty Digitally Signed Firmware SSD

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Wty	Special Features	Drive Type
HPE	400-960GB 1-8TB	NVMe x4 Lanes/ SATA 6Gb	Write Intensive Mixed Use Read Intensive	M.2/ 2280/22110	3yr Wty 1yr Wty	DS Digitally Signed Firmware	SSD

### M.2 SSDs SKU Decoder

#### Short Name

HPE 960GB NVMe x4 Lanes RI M.2 2280 DS SSD

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Special Features	Drive Type
HPE	400-960GB 1-8TB	NVMe x4 / SATA 6Gb	WI MU RI	M.2/ 2280/22110	DS Digitally Signed Firmware	SSD

### M.2 Kits SKU Decoder

#### Long Name

HPE 340GB SATA Read Intensive HHHL 3yr Wty Dual M.2 Kit

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Wty	Special Features	Drive Type
HPE	150-960GB 1.92TB	SATA/ NVMe	Write Intensive Mixed Use Read Intensive	HHHL FHHL UFF	3yr Wty 1yr Wty	Dual Quad Blank=Single	M.2 Kit

## Technical Specifications

### M.2 Kits SKU Decoder

Short Name

HPE 340GB SATA RI HH Dual M.2 Kit

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Special Features	Drive Type
HPE	150-960GB 1.92TB	SATA/ NVMe	WI MU RI	HH FH UFF	Dual Quad Blank=Single	M.2 Kit

### Wkld Accelerators SKU Decoder

Long Name

HPE 1.6TB PCIe x4 Lanes Read Intensive HHHL 3yr Wty Digitally Signed Firmware Card

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Wty	Special Features	Drive Type
HPE	400-960GB 1-8TB	PCIe x4 Lanes	Write Intensive Mixed Use Read Intensive	HHHL FHHL Mezz	3yr Wty 1yr Wty	Digitally Signed Firmware	Card

### Wkld Accelerators SKU Decoder

Short Name

HPE 1.6TB PCIe x4 RI HH DS Card

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Special Features	Drive Type
HPE	400-960GB 1-8TB	PCIe x4	WI MU RI	FH/HH Mezz	DS (Digitally Signed Firmware)	Card

### Previous To Current Workload Naming Conversion

Please use the table below for comparing older SSD models to the newer workload based schema.

Previous Workload	Current Workload Alignment
(ME) Mainstream Endurance	(WI) Mixed-Use (>10 DWPD)
(HE) High Endurance	(WI) Write Intensive (>25 DWPD)
(VE) Value Endurance	(RI) Read Intensive
(LE) Light Endurance	(MU) Mixed Use

### Carrier Key Decoder

HPE Solid State Drives (SSDs) utilize a wide variety of carriers, which houses the SSD and also enables a specific chassis fit to support a broad range of HPE server and storage products.

## Technical Specifications

The table below summarizes the various form factors, plug types, and carrier attributes noted earlier in this document within SSD SKU Decoder.

Carriers				
Form Factor	HP/NHP	Smart/Non-Smart	Carrier Name (Abbreviation)	SFF/LFF
SFF Carrier	Hot Plug	Smart	Smart Carrier ( <b>SC</b> )	SFF
			Smart Carrier NVMe ( <b>SCN</b> )	SFF
			Smart Carrier M.2 ( <b>SCM</b> )	SFF
	Non-Hot Plug	Non-Smart	Standard ( <b>ST</b> )	SFF
			Quick Release ( <b>QR</b> )	SFF
			Smart Carrier ( <b>SC</b> )	LFF
LFF Carrier	Hot Plug	Smart	Smart Carrier Converter ( <b>SCC</b> )	LFF
			Low Profile ( <b>LP</b> )	LFF
			Low Profile Converter ( <b>LPC</b> )	LFF
	Non-Hot Plug	Non-Smart	Standard ( <b>ST</b> )	LFF
			Quick Release ( <b>QR</b> )	LFF
			Raw SFF HDD/SSD ( <b>RW</b> )	SFF
No Carrier	Non-Hot Plug	Non-Smart	Raw LFF HDD ( <b>RW</b> )	LFF
			M.2	N/A
			PCIe Card	N/A

## Supporting Helpful Links

<http://www.hpe.com/info/rackandpower>

<http://www.hpe.com/info/poweradvisor>

<http://www.hpe.com/info/infrastructurearchitect>

<https://www.hpe.com/us/en/storage/entry-level.html>

Also:

**Take control of your data - A guide to understanding storage technologies**

<http://www.hpe.com/h20195/V2/getpdf.aspx/4AA4-7667ENW.pdf?ver=1.0>

**Environment-friendly Products and Approach** **End-of-life Management and Recycling** Hewlett Packard Enterprise offers end-of-life product return, trade-in, and recycling programs, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

[http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-IPA\\_krKiM](http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-IPA_krKiM)

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

[http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-IPA\\_krKiM](http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-IPA_krKiM)

## Summary of Changes

Date	Version History	Action	Description of Change
17-Feb-2017	From Version 1 to 2	Changed	Technical Specifications were revised.
13-Feb-2017	Version 1	Added	New QuickSpecs.



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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

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