Overview

HPE H241 Smart Host Bus Adapter

The HPE H241 Smart Host Bus Adapter is a 2 x4 external port HBA that provides customers with the flexibility and speed they have come to expect from HPE. The H241 Smart HBA is ideal for external connectivity to tape drives, shared storage, and external JBODs providing support for both 12G SAS and 6G SATA HDDs and SSDs. The H241 Smart HBA can also provide high performance for SSDs that do not require data protection. This SAS HBA is ideal for driving cost-effective and reliable scalability in today's data centers. The H241 Smart Host Bus Adapter provides flexibility to run in HBA mode or simple RAID mode. When operating in simple RAID mode, it provides RAID 0, RAID 1, and RAID 5 with optional HPE Secure Encryption capabilities. Unlike the HPE Smart Array Controllers, the H241 does not offer any acceleration or support cache modules.



Model

Host Bus Adapter HPE H241 12Gb 2-ports Ext Smart Host Bus Adapter

726911-B21

Kit contents

- HPE H241 Smart Host Bus Adapter
- Low profile controller bracket

Standard Features

Key Features

- Storage interface (SAS/SATA)
 - o 8 physical links across 2 x4 external ports
 - o 12Gb/s SAS, 6Gb/s SATA technology
 - Mix-and-match SAS and SATA drives to the same controller
 - Support for SAS tape drives, SAS tape autoloaders and SAS tape libraries
- PCI Express Gen3 x8 link
- RAID 0, 1, 5, 10
- Simple RAID or HBA mode
- Legacy and UEFI boot operation
- Up to 200 physical drives
- Up to 64 logical drives
- HPE Secure Encryption (optional license)
- Seamless upgrades to other HPE Smart Array P-series controllers
- PCI Express standard plug-in card
 - O Dimensions: 5.3 x 3.56 x 1.23 in (13.46 x 9.04 x 3.12 cm)

Ports

External: 8 SAS/SATA physical links across 2 x4 external ports

Performance

- 12Gb/s SAS (1200 MB/s theoretical bandwidth per physical lane)
- 6Gb/s SATA (600 MB/s theoretical bandwidth per physical lane)
- PCI Express Gen3 x8 link width

HPE Secure Encryption

HPE Secure Encryption is a Smart Array controller-based data encryption solution for ProLiant Gen9 servers that protects sensitive, mission critical data. This is an enterprise-class encryption solution for data at rest on any bulk storage attached to the HPE Smart Array controllers including data on the cache memory of the controller. HPE Secure Encryption is an optional license per server requiring encryption enablement (see Related Options for more information on the license).

The solution is available for both local and remote key management mode deployments. Local Key Management Mode is focused on single server deployment where there is one Master key per controller that is managed by the user. Remote Key Management Mode is for enterprise wide deployments from just a few servers to thousands of servers.

For more information please visit https://www.hpe.com/us/en/product-catalog/detail/pip.6532260.html

Warranty

The warranty for this device is 1 year parts only.

Warranty Upgrade Options

- Response Upgrade on-site response from next business day to same day 4 hours
- Coverage Extend hours of coverage from 9 hours x 5 days to 24 hours x 7 days
- Duration Select duration of coverage for a period of 1, 3, or 5 years
- Warranty upgrade options can come in the form of Care Packs, which are sold at the HPE System level this product attaches too

Compatibility

0	0	4
Server	Supp	ort

HPE ProLiant DL20 Gen9	HPE ProLiant ML10 Gen9
HPE ProLiant DL60 Gen9	HPE ProLiant ML30 Gen9
HPE ProLiant DL80 Gen9	HPE ProLiant ML110 Gen9
HPE ProLiant DL120 Gen9	HPE ProLiant ML150 Gen9
HPE ProLiant DL160 Gen9	HPE ProLiant ML350 Gen9
HPE ProLiant DL180 Gen9	HPE ProLiant XL230a Gen9
HPE ProLiant DL360 Gen9	HPE ProLiant XL230b Gen9
HPE ProLiant DL380 Gen9	HPE ProLiant XL250a Gen9
HPE ProLiant DL560 Gen9	HPE ProLiant XL260a Gen9
HPE ProLiant DL580 Gen9	HPE ProLiant XL270d Gen9
	HPE ProLiant XL450 Gen9

Disk Enclosure Support

HPE D2600 Disk Enclosure	HPE D6000 Disk Enclosure
HPE D2700 Disk Enclosure	HPE D6020 Disk Enclosure
HPE D3600 Disk Enclosure	
HPE D3700 Disk Enclosure	HPE MSA 2040 SAN Storage

Operating Systems Microsoft Windows Server

Microsoft Windows Hyper-V Server

VMware vSphere ESXi

Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES)

Oracle Solaris Oracle Linux Canonical Ubuntu

CentOS Wind River Citrix XenServer

NOTE: For a complete and up-to-date list of certified and supported OS versions for HPE Smart Array controllers, please refer to the HPE Smart Array Operating System Support Matrix at: http://www.hpe.com/h20195/v2/GetPDF.aspx/4AA6-

6550ENW.pdf

NOTE: For more information on HPE's Certified and Supported ProLiant Servers for OS and Virtualization Software, please visit our Support Matrix at:

http://www.hpe.com/info/ossupport

Storage Management **Software Suite**

HPE Smart Storage Administrator (HPE SSA)

Comprehensive management for HPE Smart Storage products with advanced scripting and diagnostic features and simplified and intuitive interface and functionality. For more information please visit: http://www.hpe.com/servers/ssa

HPE Systems Insight Manager

Powerful server and server options/storage manager tool with configuration/diagnostic utilities

HPE Storage Management Utility

Offers the simplest method for configuring the storage system via Initial System Configuration Wizard

Service and Support

HPE Support Services

Protect your business beyond warranty with HPE Support Services HPE Pointnext provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation. From the onset of your transformation journey, Advisory and Transformational Services focus on designing the transformation and creating a solution roadmap. Professional Services specializes in creative configurations with flawless and on-time implementation, and on-budget execution. Finally, operational services provides innovative new approaches like Flexible Capacity and Datacenter Care, to keep your business at peak performance. HPE is ready to bring together all the pieces of the puzzle for you, with an eye on the future, and make the complex simple.

Recommended Support

HPE Proactive Care* with 24x7 coverage, three year Support Service

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years proactive reporting and advice with our 24x7 coverage, four hour hardware response time when there is a problem. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers.

https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf

HPE Proactive Care* with 6 hour call-to-repair commitment, three year Support **Service**

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. This Service combines three years' proactive reporting and advice with our highest level of hardware support - HPE's 24x7, six hour hardware call-to-repair. HPE is the only leading manufacturer who makes this level of coverage available as a standard service offering for your most valuable servers. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.) running on your HPE servers.

https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf

*HPE Proactive Care and HPE Proactive Care Advanced require that the customer connect their devices to make the most of these services and receive all the deliverables.

HPE Education Services

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment. http://www.hpe.com/ww/learn

HPE Support Center The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers.

Learn more http://www.hpe.com/support/hpesc

Service and Support

HPE's 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 HPE warranty, HPE Support Service or HPE contractual support agreement.

*HPE Support Center Mobile App is subject to local availability

Parts and materials HPE 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 guick-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 HPE due to malfunction.

Related Services

HPE Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

https://www.hpe.com/h20195/V2/GetPDF.aspx/5981-9356EN.pdf

HPE Installation and Startup Service provides for the installation and startup of HPE technology including BladeSystems, C-Class enclosure, HPE ProLiant c-Class and Integrity server blades, storage blades, SAN switch blades, HPE Virtual Connect modules (Ethernet and Fibre Channel), Ethernet network interconnects, and InfiniBand, as well as the installation of one supported operating system type (Windows® or Linux).

NOTE: The Smart Array P408i-a SR Gen10 Controller is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

 Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS batteries over 12KVA. See the specific high value options that require additional support HERE.

Recommended and Recommended

Extended Products Offering the best combination of performance, value and availability, Recommended Options have been selected by HPE experts to provide the right technology for a

Service and Support

range of workloads and market segments. Fully integrated into the ProLiant management and security experience, Recommended Options provide the best fit with timely availability.

Extended

Extended Options provide an extended catalog of products tailored for customers in specific markets or with specific workloads, requiring the utmost in performance or value. Fully integrated into the ProLiant management and security experience, Extended Options represent great value and performance but typically have a longer lead-time.

This controller is a Recommended Option.

Additional Service Information

http://www.hpe.com/services

Related Options

Secure Encryption

HPE Smart Array SR HPE Smart Array Secure Encryption/Data at Rest Encryption/per Server Entitlement E-LTU

Q2F26AAE

NOTE: HPE Smart Array SR Secure Encryption licensing is based on the number of servers requiring encryption for direct attached storage. **NOTE:** For more information visit:

http://www.hpe.com/servers/secureencryption

Options

HPE External Cable Cable options to be used with HP D3600 and D3700 Disk **Enclosures**

HP External 0.5m (1ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable	691968-B21
HPE External 1.0m (3ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable	716195-B21
HP External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable	716197-B21
HPE External 4.0m (13ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cabl	716199-B21
Cable options to be used with D6000 and D6020 Disk Enclosures	
HP 0.5m External Mini SAS High Density to Mini SAS Cable	691971-B21
HPE 1.0m External Mini SAS High Density to Mini SAS Cable	716189-B21
HPE 2.0m External Mini SAS High Density to Mini SAS Cable	716191-B21
HPE 4.0m External Mini SAS High Density to Mini SAS Cable	716193-B21
HP 6.0m External Mini SAS High Density to Mini SAS Cable	733045-B21

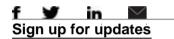
Environment friendly Products and Approach - End-of life Management and Recycling

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.

The EU WEEE Directive (2012/19/EU) 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.

Summary of Changes

Date	Version History	Action	Description of Change	
5-Feb-2018	Version 6	Changed	Replaced Secure Encryption SKU (C9A82AAE) with Q2F26AAE. Updated Service and Support.	
23-Oct-2017	Version 5	Changed	Care Pack naming and Service and Support- Parts and Materials updated.	
19-Aug-2016	Version 4	Changed	Overview, Standard Features, Compatibility, and Related Options were revised.	
11-Dec-2015	Version 3	Removed	Support for MSA 2040 was removed from QuickSpecs.	
01-Dec-2014	Version 2	Changed	Related Options section was revised.	
09-Sep-2014	Version 1	New	Initial version	



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

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