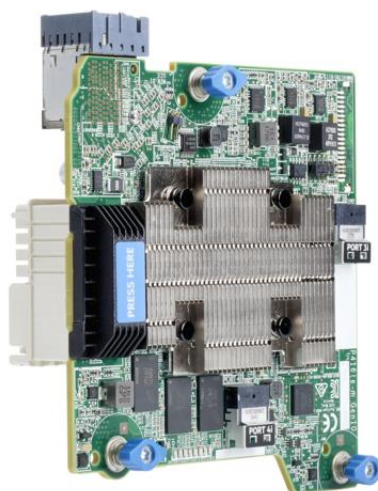


HPE SMART ARRAY P416IE-M SR GEN10 (8 INT 8 EXT LANES/2GB CACHE) 12G SAS MEZZANINE CONTROLLER (804428- B21)

**Smart Array Controllers and Smart Host
Bus Adapters**



OVERVIEW

Are you looking for an enterprise-level controller to maximize performance and storage capacity and to connect to the HPE Synergy D3940 Gen10 Storage Module?

The HPE Smart Array P416ie-m SR Gen10 Controller, supporting 12 Gb/s SAS and PCIe 3.0, provides enterprise-class storage performance, reliability, security and efficiency needed to address your evolving data storage needs. It has eight internal SAS lanes and eight external SAS lanes, allowing connection to the SAS or SATA drives in the Synergy compute module and to the drives inside the HPE Synergy D3940. This controller supports Mixed Mode operations of RAID and HBA simultaneously, and offers encryption for data-at rest on any drive.

The HPE Smart Array Gen10 controllers are supported by the HPE Smart Storage Battery, which supports multiple devices and is sold separately.

FEATURES

Increased Performance for Faster Data Insights

The HPE Smart Array P416ie-m SR Gen10 Controller is an enterprise-class controller that increases performance in messaging, database, or general server applications and delivers 12 Gb/s SAS connectivity on HPE Synergy Gen10 Compute Modules when connected to 12 Gb/s internal storage devices.

Increases performance with 2 GB Flash-Backed Write Cache and reduces latency in write-intensive applications that require heavy logging such as databases.

Enhances performance in storage environments where data is read repeatedly from a large number of SSDs by using HPE SSD Smart Path to create a faster I/O path between the controller and SSD.

Accelerate access to data by up to 4X in HDD environments by caching hot data onto SSDs with HPE Smart Array SR SmartCache (optional license).

Built-in Reliability and Security

The HPE Smart Array P416ie-m SR Gen10 Controller protects data-at-rest on any drive attached to the controller with HPE Smart Array SR Secure Encryption (optional license).

Complies with regulations for sensitive data, such as HIPAA and Sarbanes-Oxley with HPE Smart Array SR Secure Encryption—IUT with expected FIPS 140-2 Level 1 validation complete in 2018.

Preserve data integrity with HPE SmartSSD Wear Gauge, which alerts you to potential drive issues before a drive fails.

Long-term data retention with 2 GB Flash-Backed Write Cache for improved data reliability.

Improved Efficiency and Storage Management

The HPE Smart Array P416ie-m SR Gen10 Controller has increased flexibility with Mixed Mode which operates in RAID and HBA simultaneously.



Delivers data migration between Synergy Compute Modules and the HPE Synergy D3940 Storage Module.

Technical specifications

HPE Smart Array P416ie-m SR Gen10 (8 Int 8 Ext Lanes/2GB Cache) 12G SAS Mezzanine Controller

Product Number	804428-B21
Transfer rate	12Gb/s SAS per lane 6Gb/s SATA per lane PCI Express 3.0 x8 lane width
Form factor	Mezzanine card
Ports	Internal: 8 SAS lanes across 2 x4 Slim SAS ports External: 8 SAS lanes
Cache	2 GB Flash-Backed Write Cache
RAID levels	0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM
Servers supported	HPE Synergy 480 Gen10 Compute Module HPE Synergy 660 Gen10 Compute Module
Additional features	HPE Smart Array SR Secure Encryption (optional license) HPE Smart Array SR SmartCache (optional license)
Supported disk enclosure	HPE Synergy D3940 Gen10 Storage Modules
Warranty	The warranty for this device is 3-years parts only.



For additional technical information, available models and options, please reference the [QuickSpecs](#)

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Operational Services from HPE Pointnext Services

[HPE Pointnext Tech Care](#) provides fast access to product-specific experts, an AI-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

[HPE Pointnext Complete Care](#) is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

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- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- Greenlake Management Services
- Retire and sanitize
- IT Training and personal development

Other related services

[HPE Education Services](#) delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE GREENLAKE

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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

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.

Image may differ from the actual product
[PSN1010026924VNEN](#), May, 2022.