



# **HPE SMART ARRAY P816I-A SR GEN10 (16 INT LANES/4GB CACHE/SMARTCACHE) 12G SAS MODULAR LH CONTROLLER (869083- B21)**

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



## **OVERVIEW**

Are you looking for an enterprise-level controller to maximize performance and storage capacity without occupying a PCI

Express (PCIe) expansion slot?

The HPE Smart Array P816i-a 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. This controller has sixteen internal SAS lanes, allowing connection to SAS or SATA drives, supports Mixed Mode operations of RAID and HBA simultaneously, and offers encryption for data-at-rest on any drive. The Smart Array P816i-a SR Gen10 Controller is ideal for maximizing performance while supporting advanced RAID levels with 4 GB Flash-Backed Write Cache (FBWC). This type-a modular controller occupies a dedicated storage slot without occupying a PCIe expansion slot.

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

## FEATURES

### Increased Performance for Applications

The HPE Smart Array P816i-a SR Gen10 Controller is an enterprise-class RAID controller that increases performance in messaging, database, or general server applications and delivers 12 Gb/s SAS connectivity on HPE ProLiant Gen10 Servers when connected to 12 Gb/s internal storage devices.

Increases performance with 4 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 in HDD environments by caching hot data onto SSDs with HPE Smart Array SR SmartCache (included feature).

### Built-in Reliability and Security

The HPE Smart Array P816i-a SR Gen10 Controller protects data-at-rest on any drive attached to the controller with HPE Smart Array SR Secure Encryption (optional license).

Comply with regulations for sensitive data, such as HIPAA and Sarbanes-Oxley with HPE Smart Array SR Secure Encryption—FIPS 140-2 Implementation Under Test 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 4 GB Flash-Backed Write Cache for improved



data reliability.

### Improved Efficiency and Storage Management

The HPE Smart Array P816i-a SR Gen10 Controller has increased flexibility with Mixed Mode which operates in RAID and HBA simultaneously and eliminates the expense of having to purchase another controller.

Rapidly configure simple RAID volumes on servers with the UEFI storage configuration tool, which also facilitates scripting support to configure an array via iLO through RESTful interface.

Quickly set up, configure, and manage drives attached to the controller with HPE Smart Storage Administrator (SSA), an intuitive interface used to create RAID volumes, manage advanced controller features, and deploy Smart Array solutions.

## Technical specifications

### HPE Smart Array P816i-a SR Gen10 (16 Int Lanes/4GB Cache/SmartCache) 12G SAS Modular LH Controller

<b>Product Number</b>	869083-B21
<b>Transfer rate</b>	12Gb/s SAS per lane 6Gb/s SATA per lane PCI Express 3.0 x8 lane width
<b>Form factor</b>	Type-a modular controller
<b>Ports</b>	Internal: 16 SAS lanes across 4 x4 Mini-SAS ports
<b>Cache</b>	4 GB Flash-backed write cache
<b>RAID levels</b>	0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM
<b>Servers supported</b>	HPE ProLiant DL360 Gen10 HPE ProLiant DL560 Gen10
<b>Additional features</b>	HPE Smart Array SR SmartCache (included with this controller) HPE Smart Array SR Secure Encryption (optional license)
<b>Warranty</b>	The warranty for this device is 3-years parts only.



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

## HPE POINTNEXT SERVICES

[HPE Pointnext Services](#) brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

### 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.

**HPE Integration and Performance Services** help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- 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.

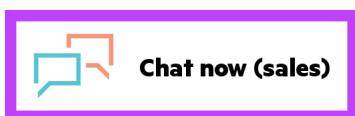
## HPE GREENLAKE

[HPE Greenlake](#) is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

**Make the right purchase decision.**  
Contact our presales specialists.

[Find a partner](#)



**Share now**



**Get updates**



© Copyright 2022 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

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  
[PSN1010026704LTEN](#), May, 2022.