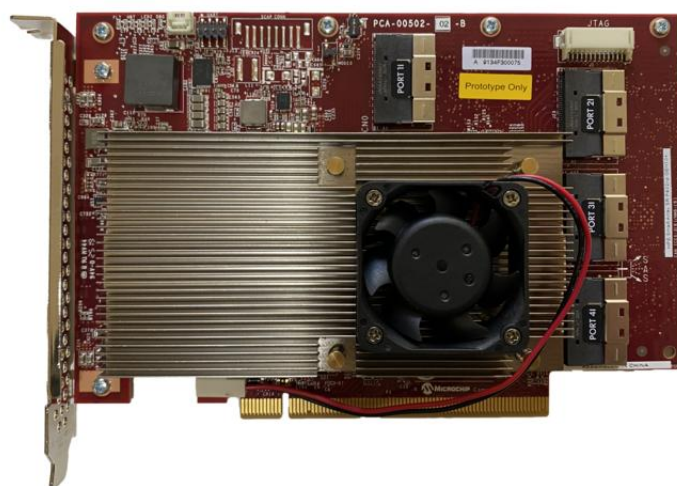


MICROCHIP SMARTRAIT SR416I-A X16 LANES 4GB CACHE NVME/SAS 24G CONTROLLER FOR HPE GEN10 PLUS (P12688- B21)

Storage RAID Controllers



WHAT'S NEW

- High-speed 144b DDR4 8 GB cache with integrated cache protection to accelerate RAID and cache performance in the SR932i-p.

OVERVIEW

Do your SMB and enterprise-level applications require a flexible controller with increased performance reliability, security, and efficiency to address your evolving data storage needs?

- Impressive RAID 5 Write Performance: Up to 12 GB/s throughput and up to 850K IOPs with the SR932i-p.
- Integrated Switchtec™ PCIe switch enabling increased performance and reduced latency access to NVMe storage devices for HBA and RAID modes.
- Supports Hardware Root of Trust.

The Microchip SmartRAID Controllers for HPE Gen10 Plus supports 12 Gb/s SAS and PCIe 4.0 for increased performance while supporting advanced RAID levels with up to 8 GB flash-backed write cache (FBWC). These tri-mode (SAS/SATA/NVMe) controllers operate in Mixed Mode which combines RAID and HBA operations simultaneously, giving you improved deployment flexibility. The Microchip SmartRAID for HPE Gen10 Plus controller portfolio provides the ability to support internally attached drives, allowing integration with existing hardware. These controllers also feature HPE SmartRAID SR Secure Encryption for data-at-rest using Controller-Based Encryption(CBE) for SAS, SATA and NVMe devices which improves reliability.

FEATURES

Industry's Highest Performance RAID Controller

The Microchip SmartRAID Controllers for HPE Gen10 Plus features up to 46 GB/s bi-directional throughput and up to 3.5M IOPs.

Impressive RAID 5 Transactional Performance

Up to 12 GB/s throughput and up to 850K IOPs via high-speed 144b DDR4 8 GB cache with integrated cache protection.

Increase RAID Controller Density

The Microchip SmartRAID Controllers for HPE Gen10 Plus is a type-a Flexible/Modular Controller and does not occupy a PCIe Expansion Slot.

Supports up to 32 direct-connected NVMe/SAS/SATA storage devices.

Fully-utilized online capacity expansion and RAID level migration, a dynamic caching algorithm, and hot-plug drive support.

Integrated Switchtec PCIe Switch

The Microchip SmartRAID Controllers for HPE Gen10 Plus feature increased performance and reduced latency access to NVMe storage devices for HBA and RAID modes.

With the HPE Silicon Root of Trust integration, this product is designed with enhanced security and a controller-based encryption feature.

Utilize secure boot support for the uEFI host BIOS and Smart Storage Administrator GUI and CLI utilities for configuration, management and diagnosis of SmartRAID controllers.

Controller-based Encryption feature.



Technical specifications**Microchip SmartRAID SR416i-a x16 Lanes 4GB Cache NVMe/SAS 24G Controller for HPE Gen10 Plus**

Product Number (SKU)	P12688-B21
Transfer rate	Up to 24 GB/s of bi-directional throughput and up to 3.5M IOPs
Form factor	Type-a flexible/modular controller (does not occupy a PCIe Expansion Slot)
Ports	16 onternal tri-mode ports (SlimSAS SFF-9402 connectors supporting U.2 and U.3) supporting up to 16 direct-connected SAS/SATA/NVMe devices
Cache	4 GB 72b DDR4-3200 MHz with integrated cache protection using HPE Smart Storage Battery solution
RAID levels	RAID 0, 1, 1 ADM, 10, 10 ADM, 5, 6, 50, 60
Servers supported	Refer to Microchip SmartRAID Controllers for Gen10 Plus Controllers QuickSpec for detail.
Additional features	See Microchip SmartRAID Controllers for HPE Gen10 Plus QuickSpecs for additional detail.
Supported disk enclosure	N/A
Certifications	EMC, CE, CNS, CT, FC, IC, KC, VC, EMC Doc, CE, C-tick, FCC, KCC, VCCI, BSMI, UL, EN 60950 and 62368, AU_NZ LoA and SDoC, RoHs, TW and EU
Product Dimensions (metric)	99.1 mm x 111.8 mm
Weight	120 g
Warranty	3 year parts only



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

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Access expertise at every step of your IT journey with [HPE Pointnext Services](#). [Advisory Services](#) focuses on your business outcomes and goals, to design your transformation and build a roadmap tuned to your unique challenges. Our [Professional](#) and [Operational Services](#) help speed up time-to-production and keep your IT stable and reliable.

Operational Services from HPE Pointnext Services

- [HPE Datacenter Care](#) helps modernize and simplify IT operations. Partner with an assigned account team, access technical expertise, an enhanced call experience gives you priority access, choose hardware and software support, implement proactive monitoring to help stay ahead of issues, and access HPE IT best practices and IP.
- [HPE Proactive Care](#) offers an enhanced call experience and helps reduce problems with personalized proactive reports and advice. This also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.). [Read more](#)
- [HPE Foundation Care](#) helps when there is a problem and has a choice of response levels. Collaborative software support is included and provides troubleshooting help for ISVs running on your server. [Read more.](#)

Other related services

[Defective Media Retention](#) is optional and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

[HPE Service Credits](#) offers a menu of technical services, access additional resources, and specialist skills.

[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.

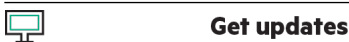
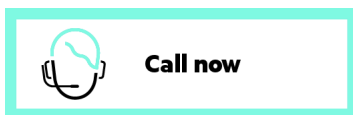
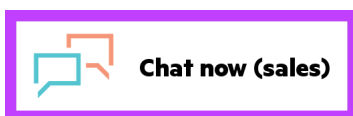
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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

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
[PSN1013314975CZEN](#), April, 2021.