



**Hewlett Packard**  
Enterprise

# INTEL OPTANE 128GB PERSISTENT MEMORY 100 SERIES FOR HPE (835804- B21)

## Persistent Memory



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### WHAT'S NEW

- Intel Optane persistent memory for HPE 200 series in 128 GB, 256 GB, and 512 GB capacities with two operating modes. Memory Mode and App Direct Mode determine which capabilities are available.

### OVERVIEW

Do you need a data center infrastructure that can manage vast amounts of data, while lowering overall TCO?

Intel® Optane™ persistent memory for HPE is ideal for enterprise customers who need to consume and quickly manage vast amounts of data while running structured data management, analytics or virtualized workloads. Intel Optane persistent memory for HPE affordably expands memory

capacity and adds low-latency access to persistent data, combining the best of memory and storage traits into one transformative product, while lowering overall TCO.

Intel Optane persistent memory for HPE brings massive data sets closer to the CPU for faster time to insight. It increases data center resiliency and takes database restart times from hours down to minutes or seconds. This allows access to use cases that were previously unavailable with traditional storage. Data can now be stored locally and accessed remotely to provide fast, high-capacity, immediate, consistent in-memory databases.

## FEATURES

### **Single Technology Configured as Large Server Memory or Fast Storage Data Center Complexity**

Intel Optane persistent memory for HPE can move, store, and process larger data sets closer to the processor.

App Direct Mode – both byte and block addressing supported.

DIMM form factor installed in a server memory slot.

Up to 1.6x more virtual machines while in memory mode. [1]

Up to 3x more performance than NVMe SSDs. [2]

### **Cost-effective Dense Memory for Larger Compute Needs**

Intel Optane persistent memory for HPE is more affordable than the equivalent DRAM.

Offers higher capacity than what is achievable with DRAM alone.

Up to 2x the capacity of DDR4 server memory. [3]

Available in 3 different capacities –128 GB, 256 GB, 512 GB.

Configurations with lower \$/GB than DRAM-only configs.

### **Transform Critical Data Centric Workloads**

Intel Optane persistent memory for HPE boosts the performance of data-intensive applications.

Enables more compute capability for memory-intensive applications.

Delivers more server instances, improves service scalability and ownership costs for virtualization workloads.



### Take Advantage of HPE Reliability Features in both Memory Mode and App Direct Mode

HPE provides an advanced error correcting code (ECC) feature, making it possible to correct memory errors that might go uncorrected and cause unplanned downtime.

Advanced ECC memory is the default memory protection mode for HPE servers.

Smart Data Integrity Check during boot in App Direct Mode.

Increased patrol scrub interval, especially for Memory Mode.

More aggressive HPE SmartMemory recovery algorithm.

## Technical specifications

## Intel Optane 128GB persistent memory 100 Series for HPE

<b>Product Number</b>	835804-B21
<b>NVDIMM type</b>	3D XPoint Technology
<b>NVDIMM capacity</b>	128 GB
<b>DIMM native speed (MT/s)</b>	2666 MT/s
<b>Non-volatile media</b>	3D XPoint
<b>Backup power source</b>	N/A
<b>Maximum number of NVDIMMs</b>	2S (12) and 4S (24)
<b>Compatible DIMM types</b>	RDIMM and LRDIMM
<b>Product Dimensions (metric)</b>	13.34 cm x 0.81 cm x 3.13 cm
<b>Weight</b>	53 ± 2 g



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](#).

[1] Cost-effective virtualized OLTP SQL server performance with Intel Optane persistent memory for HPE Performance Brief. <http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=a00069717enw>

[2] HPE Internal Lab Testing: Up to 3x more read performance than NVMe SSDs quant is based on HPE testing of Intel Optane persistent memory 100 series for HPE on HPE ProLiant servers. Test was conducted in June 2019.

[3] Intel Optane persistent memory offers 3 different capacities –128 GB, 256 GB, 512 GB. Individual DIMMs of DDR4 DRAM max out at 256 GB.

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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.

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