

HPE APOLLO 2000 GEN10 PLUS

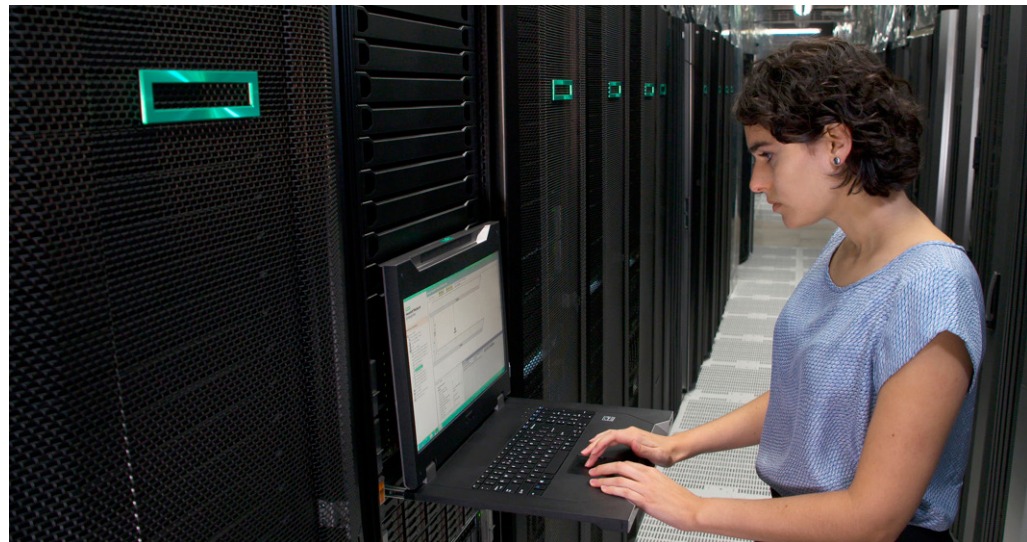
Customized storage and compute for HPC applications

Key components of HPE Apollo 2000 Gen10 Plus system

Two unique configurations are shown here a typical example with no storage and low storage.

In Table 1, HPE Apollo 2000 Gen10 Plus System is configured with the HPE Apollo n2400 Gen10 Plus Chassis with no drives and utilizes M.2 storage for OS boot. This chassis is ideal for utilizing the high-wattage AMD EPYC processors up to 240W.

In Table 2, the configuration is representative of typical HPC applications with 8 small form factor (SFF) HDDs in the HPE Apollo n2600 Gen10 Plus Chassis. In this solution, two SFF SAS HDDs are allocated per server.



SOLUTION DESCRIPTION

HPE Apollo 2000 Gen10 Plus System is a dense, multi-server platform that packs incredible performance and workload flexibility into a small data center space, while delivering the efficiencies of a shared infrastructure. It is designed to provide a bridge to scale-out architecture for traditional data centers, so enterprise and SME customers can achieve the space-saving value of density-optimized infrastructure in a cost-effective and non-disruptive manner.

HPE Apollo 2000 Gen10 Plus offers a density-optimized, shared infrastructure with a flexible scale-out architecture to support a variety of workloads, from remote site systems to large high-performance computing (HPC) clusters and everything in between. HPE iLO 5 provides built-in firmware-level server security with Silicon Root of Trust from HPE. It can be deployed cost-effectively, starting with a single 2U, shared infrastructure chassis, and configured with a variety of storage options to meet the configuration needs of a wide variety of scale-out workloads.

VALUE PROPOSITION

HPE Apollo 2000 Gen10 Plus System has the following benefits:

- Supports up to four individually serviceable 1U, half width servers per 2U chassis for increased density and system uptime.
- Flexible infrastructure offers multiple storage options, eight memory channels with 3200 MT/s, PCIe Gen4, and support for over 240W processors for enhanced application performance.
- Supports up to two, full family of second-generation AMD EPYC processors, which includes the 7Fx2 models.
- Choice of three power supply capacities to best match unique data center power strategies.
- Comprehensive manageability at the node, cluster, and rack with HPE Performance Cluster Manager (HPCM).
- Only HPE offers industry-standard server with firmware anchored into the silicon with HPE iLO 5 and Silicon Root of Trust.

Solution brief

TABLE 1. Standard diskless configuration of HPE Apollo 2000 Gen10 Plus System

Quantity	SKU	Description	Notes
4	P21163-B21	HPE ProLiant XL225n Gen10 Plus 1U Node Configure-to-order Server	1U half-width server
4	P26688-B21	AMD EPYC 7F72 (3.3GHz/24-core/240W) Kit	This chassis can support up to 240W without the need for assisted cooling
4	P26688-L21	AMD EPYC 7F72 (3.3GHz/24-core/240W) FIO Kit	
8	P24188-H21	HPE 480GB NVMe x4 RI M.2 22110 DS SSD	Allows for OS boot without using a valuable PCIe slot
64	P14398-B21	HPE 16GB 2Rx4 DDR4-3200AA-R Kit	8 DIMMs or 128 GB per server
4	P23665-H21	HPE IB HDR100/EN 100Gb 1p QSFP56 Adptr	InfiniBand adapter
2	P24681-B21	HPE 3000W 200-277VAC Plat Ht Plg PS	
2	P24672-B21	HPE SDG300 - C20 250V 16Amp Black 0.5m Jumper Cord	
1	P20284-B21	HPE n2x00 Gen10+ 3000W PIB	Power interface board to support the 3000W PS
1	P30036-B21	HPE Apollo n2400 Gen10P CTO Chassis	Zero drives supported in this chassis with modified bezels for efficient airflow through the system
1	822731-B21	HPE 2U Shelf-Mount Adjustable Rail Kit	Rack mount rail kit
4	P20292-B21	HPE NS204i-t Gen10+ NVMe Boot Cntrl	Enables OS boot
4	P20261-B21	HPE XL22xn G10+ LP CPU1 Right Riser Kit	Provides 2x16 PCI slots
1	P20279-B21	HPE n2x00 Gen10+Fan Mod Kit	Kit includes two additional dual rotor fans

TABLE 2. Standard storage configuration of HPE Apollo 2000 Gen10 Plus System

Quantity	SKU	Description	Notes
4	P21163-B21	HPE ProLiant XL225n Gen10 Plus 1U Node Configure-to-order Server	1U half-width server
4	P24256-B21	AMD EPYC 7542 (2.9GHz/32-core/225W) Kit	
4	P24256-L21	AMD EPYC 7542 (2.9GHz/32-core/225W) FIO Kit	
64	P14398-B21	HPE 16GB 2Rx4 DDR4-3200AA-R Kit	8 DIMMs or 128 GB per server
8	872481-B21	1.8TB SAS 10K SFF SC 512e DS HDD	Two drives are allocated per server. This configuration uses SAS drives but SATA and up to 8 NVMe drives are also supported.
4	P20271-B21	HPE XL22xn Gen10+ E208ip/P408ip cable kit	
4	804392-B21	HPE Smart Array E208i-p SR Gen10 Ctrlr	Supports 12 Gb/s SAS and RAID 0, 1, 5, and 10
4	P23665-H21	HPE IB HDR100/EN 100Gb 1p QSFP56 Adptr	InfiniBand adapter
2	Q7F59A	HPE C15 US 250V 10Amp 0.76m Black Jumper Cord	
2	876935-B21	HPE 1800W-2200W FS Plat Ht Plg PS Kit	
1	P20283-B21	HPE n2x00 Gen10+ Flex Slot PIB	Power interface board to support the 1800W-2200W PS
2	P20288-B21	HPE n2600 Gen10+ 4SFF U3 Prem HDD/SSD FIO BP Kit	This backplane allows for HDD support.
1	P19878-B21	HPE Apollo n2600 Gen10+ SFF CTO Chassis	2U chassis
1	822731-B21	HPE 2U Shelf-Mount Adjustable Rail Kit	Rack mount rail kit
4	P20260-B21	HPE XL22xn Gen10+ LP Left Riser Kit	Provides 2x16 PCIe slots
4	P20261-B21	HPE XL22xn G10+ LP CPU1 Right Riser Kit	Provides 2x16 PCIe slots
1	P20279-B21	HPE n2x00 Gen10+Fan Mod Kit	Kit includes two additional dual rotor fans ¹

¹ There are limiting operating temperatures associated with this configuration. For more details, visit: techhub.hpe.com/us/en/enterprise/docs/index.aspx?doc=/eginfolib/servers/Apollo2000Systems/XL225nServer/index.html

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These two configurations may require some additional cables and kits to complete the solution. Contact your HPE representative for more information.

RESOURCE

[HPE Apollo 2000 Gen10 Plus QuickSpecs](#)

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