

HPE ProLiant RL300 Gen11



Overview

Do you need compute that delivers high power efficiency along with high performance?

Building on HPE ProLiant as the legendary foundation, the HPE ProLiant RL300 Gen11 server delivers next-generation compute performance and power efficiency for a wide range of emerging cloud-native applications and use cases. The HPE ProLiant RL300 Gen11 server offers Ampere® Altra® and Ampere® Altra® Max processors with an industry-leading core count of up to 128 cores in a single-socket, 1U design. The HPE ProLiant RL300 Gen11 server is ideal for cloud providers, digital service providers, and digital-first enterprises running scale-out, cloud-native workloads, and who are offering digital services, media streaming, social platforms, e-commerce, financial, or online services, along with cloud-based services such as IaaS, PaaS and SaaS.

Features

More Cores, Less Wattage

The HPE ProLiant RL300 Gen11 server, with an industry-leading core count per socket, enables cloud-native providers to extract the most revenue from their highly parallel workloads, scaling up to 128 cores in a single-socket, 1U design.

Ampere processors leverage power efficient architecture to deliver performance at lower levels of power consumption, allowing providers to help eliminate underutilized rack space, expand their compute without a significant increase in energy budget, and help meet their rising sustainability goals.

Predictable Performance

The HPE ProLiant RL300 Gen11 server is designed to deliver predictable performance that is critical for cloud-native workloads, by leveraging Ampere processors with deterministic cores that operate at a constant clock speed.

Each physical core is single threaded with no simultaneous multi-threading (SMT), a secure approach that lessens the impact of problems like noisy neighbors.

Flexible Management

Building on HPE ProLiant as the legendary foundation, the HPE ProLiant RL300 Gen11 server delivers a consistent experience across the HPE ProLiant portfolio with an HPE iLO management and firmware stack that delivers robust reliability and security with silicon Root of Trust technology from HPE.

HPE is also providing the choice for customers seeking to expand their open-source strategy, by enabling OpenBMC and allowing customers who are developing their own self-managed BMC stack to pursue a secure transfer of ownership to enable OpenBMC management for the server following launch.

Technical specifications

HPE ProLiant RL300 Gen11

Processor type	Ampere
Processor family	Ampere® Altra® and Ampere® Altra® Max
Processor number	1 Processor
Processor core available	80 to 128 cores
Processor cache	64 KB L1 I-cache, 64 KB L1 D-cache per core, 1 MB L2 cache per core
Processor speed	3.0 GHz
Expansion slots	4 PCIe Gen4, for detailed descriptions refer to the QuickSpecs
Maximum memory	4.0 TB with 256 GB DDR4
Memory slots	16
Memory type	DDR4 memory, depending on model
Memory protection features	ECC protected
Network controller	2 OCP 3.0 PCIe Gen4 slots available
Storage controller	Not supported
Infrastructure management	Included - HPE iLO Standard and Advanced features
Warranty	3/3/3: Server warranty includes three years of parts, three years of labor, and three years of on-site support coverage. Additional information regarding worldwide limited warranty and technical support is available at: http://h20564.www2.hpe.com/hpsc/wc/public/home . Additional HPE support and service coverage for your product can be purchased locally. For information on availability of service upgrades and the cost for these service upgrades, refer to the HPE website at http://www.hpe.com/support .
Drive supported	10 SFF NVMe SSDs or 8 SFF NVMe SSDs or 2 M.2 NVMe SSDs optional, depending on model



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

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

Consulting services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

- HPE Complete Care Service: a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.
- HPE Tech Care Service: the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.

The [Defective Media Retention \(DMR\)](#) service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction. [Comprehensive Defective Material Retention \(CDMR\)](#) allows you to keep all data retentive components.

HPE GreenLake

[HPE GreenLake edge-to-cloud platform](#) is HPE's market-leading 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, 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](#).

Explore **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.

Ampere Altra and Altra Max (processors) is a trademark of Ampere Computing. All third-party marks are property of their respective owners.

Image may differ from the actual product
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