

Powerful, scalable compute for data management from HPE and AMD

Help maximize data storage management and performance



HPE ProLiant Gen11 servers with 4th and 5th Generation AMD EPYC™ processors drive data-intensive workloads with industry-leading performance, security, and scalability.

Accelerating data-driven business in today's hybrid world

In today's hybrid world, data is being generated in huge volumes at an unprecedented rate. Managing this data efficiently and securely is critical to harnessing its value to drive business productivity and decision-making. To do that, companies must eliminate data silos while simplifying and automating data pipelines. Keeping up with data growth requires an infrastructure that can be deployed and efficiently scaled where and when it is needed. And as the value of data continues to increase, strong security is essential.

These demands call for a modern compute infrastructure engineered for the unique requirements of data management workloads. With the HPE ProLiant DL345 Gen11 and HPE ProLiant DL385 Gen11 servers powered by the 4th and 5th Generation AMD EPYC™ processors, Hewlett Packard Enterprise brings you a compute solution that delivers optimal performance, storage capacity, I/O bandwidth, and memory to handle the full range of your data management needs.

Data management solutions built on HPE ProLiant Gen11 servers powered by the latest AMD EPYC™ processors provide a powerful, secure, and scalable foundation for data-intensive workloads, including:

Decision-support systems

- Support nonclustered decision-support systems by scaling large databases more efficiently
- Accelerate insights from enterprise-wide data through
- Record-breaking performance with 4th and 5th Generation AMD EPYC processors

Databases

- Database operations can be achieved more efficiently when more data is stored close to the CPU
- With 128 PCIe5 lanes in a 1-socket server, the AMD EPYC processors perform high-speed I/O operations with greater storage in a 2U server



Exceptional compute performance with flexible storage options

HPE ProLiant DL345 Gen11 and HPE ProLiant DL385 Gen11 servers with AMD EPYC processors bring a new level of high-performance, scalable compute options for data management workloads. The HPE ProLiant DL345 Gen11 server offers a scalable 2U solution that delivers high-performance and flexible storage across SAS/SATA/NVMe at 1P economics. The new HPE ProLiant DL385 Gen11 server is an accelerator-optimized 2U 2P solution that delivers exceptional compute performance, upgraded high-speed data transfer rate, and memory depth.

With 4th and 5th Generation AMD EPYC processors, these HPE ProLiant Gen11 servers raise the bar for data management workload performance with next-generation 5 nm technology and support for up to 160 cores per socket (up to 320 cores for two-processor servers), translating into a more efficient database and less strain when dealing with numerous queries and multiple application requests.

These new servers also offer next-level energy-efficient DDR5 memory, further boosting performance, along with the latest PCI Express 5.0 bus, doubling data transfer rates and the number of lanes, for improved bandwidth and performance. In fact, high PCIe5 lane counts deliver 4x the I/O throughput of other competitive processors.¹ Moreover, extremely effective cooling solutions, lower and optimized power consumption components, and new power supply units make HPE ProLiant Gen11 servers a new low-carbon footprint standard for enterprise data centers.

Simplified management, world-class security

Management and security are also strengthened to protect vital data assets, thanks to HPE iLO 6, now integrated into every HPE ProLiant Gen11 server. With HPE iLO 6, you can securely configure, monitor, and update HPE ProLiant Gen11 servers from anywhere. Additionally, HPE iLO 6 provides automation and streamlines IT operations with HPE OneView management.

Further strengthening security is Zero Trust Security posture from HPE that spans the HPE ProLiant Gen11 servers at every level. For example, HPE iLO 6 supports DTMF's Security Protocol and Data Model (SPDM) specifications, including Redfish-based Secure boot database management. These security capabilities augment the silicon root of trust from HPE, embedded on every HPE ProLiant Gen11 server, which anchors each server to an HPE ASIC—even before the server is built. This creates an immutable fingerprint for the AMD Secure Processor that must be matched exactly before the server will boot. And with our secure supply chain, you can be confident that server security starts with corruption-free manufacturing by auditing the integrity of every component, including hardware and firmware.

¹ One AMD EPYC 9004 CPU with 128 PCIe5 lanes plus up to 8 PCIe3 lanes and has 4x the I/O capacity of Intel® Xeon® Scalable Ice Lake CPUs with a maximum 64 PCIe4 lanes per PCIe5, which operates at 32 GT/s and a 3.94 GB/s transfer rate where PCIe4 only operates at 16 GT/s and 1.97 GB/s transfer.





HPE ProLiant Gen11 servers with 4th and 5th Generation AMD EPYC processors solve your most pressing data management challenges

- Data governance across disaggregated systems and distributed datastores
- Data integration of multiple, varied data sources and formats to support different business applications
- Data innovation, enabled by unlocking data silos for greater information sharing, analytics, and decision support opportunities
- Process automation with seamless workflow orchestration to reduce human error and integrate data
- Robust security with data grading and classification to thwart data breaches and protect IP

Elevate your compute experience with HPE GreenLake

HPE offers the flexibility to purchase and run HPE ProLiant Gen11 servers on-premises or through the HPE GreenLake cloud platform. With HPE GreenLake, you get pay-as-you-go convenience and public cloud flexibility with the privacy, performance, and control of your environment.*

Additionally, you can take advantage of HPE GreenLake for Compute Ops Management to streamline compute management, securely and seamlessly. The solution offers real-time views of your entire server estate and rapid, bulk actions to quickly provision additional data management workloads. You can also count on automated firmware updates with an as-a-service model that provides a consistent experience that is up-to-date with new features.

Take your data management capabilities to the next level with HPE and AMD

Data management workloads demand consistent performance, scalable storage, and security—everything you can expect from HPE ProLiant Gen11 servers with 4th and 5th Gen AMD EPYC™ processors. You get industry-leading processing speeds and seamless expansion capabilities, along with deployment flexibility, energy efficiency, and rock-solid security. To take your data management capabilities to the next level, look no further than HPE and AMD.

* May be subject to minimums or reserve capacity may apply

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