Hewlett Packard Enterprise

Brochure

THE AS-A-SERVICE BUILDING BLOCKS FOR DIGITAL TRANSFORMATION

HPE Superdome Flex Server Family

Check if the document is available in the language of your choice.

- Handle SAP HANA®, Oracle, SQL Server, and Epic user demand while delivering real-time analytics
- Comb through massive IoT and AI datasets at the edge or in the core
- Tackle complex HPC problems holistically as a standalone workhorse or within petascale clusters

HPE SUPERDOME FLEX FAMILY

Customer experience is the new battleground for businesses and it's where digital transformation is separating the winners from the losers. Engaging, understanding, and keeping the modern buyer depends greatly on the digital customer experience you offer. It is therefore not surprising that worldwide spending to enable digital transformation will exceed $1 trillion[1] in 2020.

If digital transformation initiatives are falling behind, you're not alone—but the gap is widening, as remote workforces, virtual engagements, and online-everything further shape digital interaction. Holding on to legacy IT systems won't close the gap. Cloud projects and the search for the perfect deployment model add complexity to the mix—but remember cloud is a means, not the answer. It's better to pursue a cloud experience independent of location. That's why companies continue to re-evaluate their cloud plans and adopt hybrid models as the go-forward strategy.

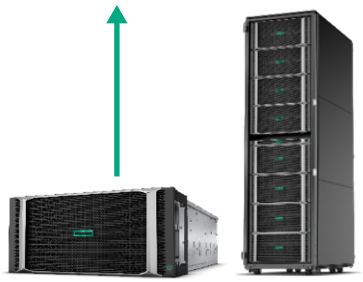
Digital transformation encompasses modernization of both applications and the entire infrastructure supporting them. It includes new methodologies to extract value from vast amounts of data, such as in-memory analytics, Internet of Things (IoT) data processing, and artificial intelligence (AI) that converge new data with existing from business-critical and high-performance computing workloads. Applications with different requirements in size, performance, connectivity, and availability often needed to run on discreet, monolithic servers, leading to silos and administrative complexity, as well as cost premiums to ensure server capacity.

With data growing like never before, databases are strained to cope with business demands. In addition, critical transactional workloads demand a reliable platform that delivers the highest levels of uptime. However a portion of those transactional workloads is still running in older, proprietary systems, and customers need to modernize to take advantage of today's apps and data, and to lower operational costs. So the challenge compounds: handle unprecedented data flows and maintain business continuity while modernizing critical infrastructure so you can respond quickly and efficiently to business change—and accelerate digital transformation.

To address these challenges, Hewlett Packard Enterprise introduced the widely adopted HPE Superdome Flex—a breakthrough server for diverse, data-intensive, and converging workloads, with a modular, building-block architecture for cost-efficient growth. Now, the HPE Superdome Flex family is expanding with the introduction of HPE Superdome Flex 280, a new as-a-service building block for digital transformation. These platforms will help you stay ahead of your competitors as you accelerate analytics and create real-time business insights. And because they are built for your most critical applications, and designed from the ground up to achieve the highest service levels, you can have peace of mind that your business will be always on.

[1] Worldwide Semiannual Digital Transformation Spending Guide, IDC, May 2020

HPE Superdome Flex family



HPE Superdome Flex

- For midsize to large enterprise environments
- 4–32 sockets as a single system
- Scale in 4-socket increments
- Features **2nd generation** Intel® Xeon® Scalable processors, cost-efficient Gold or premium Platinum
- Designed to provide 768 GB to 48 TB shared memory. Choice of high performance DRAM only, or a combination of DRAM and HPE Persistent Memory
- Up to 128 PCIe standup cards

HPE Superdome Flex 280

- For small to midsize enterprise environments
- 2–8 sockets as a single system
- Scale in 2-socket increments
- Features **3rd generation** Intel Xeon Scalable processors, cost-efficient Gold or premium Platinum
- Designed to provide 64 GB to 24 TB of shared memory using DRAM only or in combination with Intel® Optane™ Persistent Memory 200 series for HPE
- Up to 32 PCIe 3.0 cards

FIGURE 1. Modular, future-ready design scales easily and economically for businesses of any size

GROW AT YOUR OWN PACE WITH OPTIMUM FLEXIBILITY

The unique modular design of the HPE Superdome Flex family allows you to start small, and grow at your own pace—without sacrificing performance. Seamless scalability gives you the compute power you need, no matter how much data you have or how fast it is growing. This flexible architecture helps you avoid overprovisioning and disruptive upgrades, with all the cost and complexity those carry.

HPE Superdome Flex starts at 4 sockets and scales to 32 sockets in 4-socket increments as a single system. It features 2nd generation Intel Xeon Scalable processors and starts at 768 GB and can expand to 48 TB of shared memory, offering plenty of room for growth. You can choose high performance DRAM only, or a combination of DRAM and HPE Persistent Memory, available in 128, 256, and 512 GB capacities and featuring Intel® Optane™ DC Persistent Memory. With support for HPE's unique x86 hard partitioning technology, HPE nPars, you can isolate workloads and/or consolidate multiple workloads onto a single managed complex. You can also service or reconfigure individual partitions while other partitions continue to run undisturbed.

HPE Superdome Flex 280 offers a lower entry point and more granular scaling. It starts at 2 sockets and scales to 8 sockets in 2-socket increments and features 3rd generation Intel Xeon Scalable processors. The server is designed to deliver 64 GB to 24 TB of shared memory using DRAM only, or in combination with Intel Optane Persistent Memory 200 series for HPE to meet the individual requirements of your workload.

GUARD MISSION-CRITICAL WORKLOADS AGAINST DOWNTIME

The HPE Superdome Flex family is built for mission-critical availability and features proven Superdome reliability, availability, and serviceability (RAS) capabilities not present in other standard x86 servers. These capabilities include a unique **Firmware First** approach to help you contain errors at the firmware level before any interruption can occur at the OS layer. In addition, a built-in **Analysis Engine** embedded in the management system offers best-in-class predictive fault handling and initiates self-repair without operator assistance.

HPE Superdome Flex offers advanced and unique resiliency capabilities across every subsystem—memory, I/O, processor, and fabric—for prompt error detection and system self-healing. To help ensure business continuity, support for HPE Serviceguard for Linux® clustering technology is also provided. HPE Serviceguard for Linux is application and infrastructure-aware clustering software that augments the ultra-reliable HPE Superdome Flex to deliver five nines (99.999%) application availability.[2] For additional details on the RAS and architecture capabilities of HPE Superdome Flex check this white paper.

To protect valuable data and workloads, the security strategy of the HPE Superdome Flex family focuses on helping minimize threat exposure to vulnerabilities, including those found in common firmware. The unique server management architecture provides many security advantages, for example, the operating system, which is a major source of vulnerabilities, is rarely trusted. HPE Superdome Flex 280 adds **silicon root of trust** protection from HPE and support for Trusted Platform Module (TPM) 2.0 to further defend against firmware attacks and malware.

ACHIEVE MAXIMUM RETURN FROM YOUR IT INVESTMENT WITH HPE POINTNEXT SERVICES AND HPE FINANCIAL SERVICES

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To address the most pressing challenges you're facing, HPE Financial Services offers a variety of financial and asset lifecycle options. You can capitalize on the resources and flexibility offered by these options to further preserve cash and align payments with deployment, helping you protect your day-to-day business and prepare for the future.

TRANSFORM YOUR BUSINESS WITH HPE SUPERDOME FLEX

Turn the unprecedented data flows in your enterprise into unprecedented opportunity. Take the next step on your digital transformation journey—ask your Hewlett Packard Enterprise sales representative about solutions based on HPE Superdome Flex.

LEARN MORE AT

hpe.com/superdome

[2] Based on HPE internal tests conducted by HPE R&D Labs, January 2020

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