IBM Power S1112

Autonomous IT built for the AI era

Highlights

Entry-level Power11 processor-based server designed for AIX, IBM i, and Linux workloads

Up to 2X better core performance versus Power S914 and 3X better core performance versus Power S814

Built-in quantum-safe security

Integrated AI acceleration for near-edge inferencing and data-local workloads

Compact rack or deskside form factor for remote, branch, and space-constrained environments

The IBM® Power® S1112 server brings enterprise-grade Power11 capabilities to entry and edge environments. Designed for organizations modernizing smaller core workloads or extending secure computing closer to where data is generated, the Power S1112 delivers the performance, reliability, and security expected from IBM Power in a compact and efficient footprint. It is optimized to support a range of workloads, including core business applications, AI inferencing, and edge analytics, enabling organizations to unlock new value from their data. With built-in hybrid cloud capabilities, the system allows seamless integration with cloud services and modern development frameworks, helping businesses scale and adapt with greater agility. Additionally, advanced automation and simplified management tools reduce operational complexity, allowing IT teams to focus on innovation while maintaining consistent performance and availability.

With support for AIX, IBM i, and Linux, the Power S1112 is ideal for upgrading older one-socket systems, hardening distributed applications, and enabling new AI-powered use cases at remote or branch locations. Built on the latest Power11 architecture, it provides higher performance per core, advanced memory and I/O technologies, and embedded security features to help organizations modernize with confidence. Its scalable design enables organizations to start small and grow capacity as business needs evolve, without disrupting existing operations. Enhanced virtualization capabilities help maximize resource utilization while maintaining strong workload isolation across environments. Together, these capabilities allow organizations to consolidate infrastructure, reduce costs, and deliver consistent performance across distributed IT landscapes.





Built on the Power11 Architecture

The Power S1112 is powered by a single-socket Power11 processor using a modular eSCM design, with flexible core options that allow clients to right-size the system for current needs while preserving headroom for future growth. Compared to previous generations, the Power S1112 offers 2X better core performance versus Power S914[1] and 3X better core performance versus Power S814[2], and supports scalable configurations with 4 or 10 cores, improving efficiency while reducing infrastructure footprint, energy consumption, and operational costs. This higher per-core performance enables clients to upgrade aging systems without automatically increasing software licensing requirements, delivering immediate value and a faster return on investment. This modular design also simplifies deployment and servicing, helping reduce downtime and streamline lifecycle management. In addition, improved energy efficiency and system utilization contribute to more sustainable IT operations while maintaining enterprise-class performance and reliability.

Next-Generation Memory and Storage

The Power S1112 supports next-generation DDR5 DDIMM memory, delivering higher bandwidth, increased capacity, and improved reliability for data-intensive workloads, with support for up to 512 GB of DDR5 memory designed for higher throughput and resilience. For fast local data access, the system also supports up to 12.8 TB of NVMe storage, helping reduce latency for transactional workloads, analytics, and AI inferencing at the edge. This combination of high-speed memory and storage enables faster data processing and improved application responsiveness across a wide range of workloads. Integrated reliability features, including advanced error detection and correction, help ensure data integrity and system stability in mission-critical environments. Together, these capabilities allow organizations to run more demanding workloads at the edge while maintaining the performance and resilience expected from enterprise infrastructure.

Enterprise-Grade Security and Reliability

Security and availability are built into every layer of the Power S1112, including embedded quantum-safe cryptography that helps protect data against future threats while maintaining compliance with evolving regulatory requirements. Power RAS capabilities further support continuous uptime through advanced error detection and correction, a self-healing architecture, and designed-in resilience for mission-critical workloads. Together, these features help organizations protect sensitive data, maintain service continuity, and reduce the risk of unplanned downtime, particularly in remote or lightly staffed locations. Secure boot, firmware integrity validation, and system-wide encryption help safeguard the platform from threats across the stack. Additionally, automated platform error log collection, AI-assisted troubleshooting, and autonomous error resolution capabilities help accelerate issue identification and remediation, further enhancing reliability and reducing operational risk.

AI-Ready for Edge and Near-Edge Use Cases

The Power S1112 includes on-chip matrix math acceleration (MMA) to support efficient AI inferencing directly on the system, enabling organizations to process data locally, reduce latency, and minimize data movement. Typical use cases include real-time analytics and decision support, computer vision for quality inspection or surveillance, and intelligent automation at branch or remote sites. By combining AI acceleration with enterprise-grade security and reliability, the Power S1112 enables production AI workloads at the edge. This allows organizations to act on insights in real time without relying on constant connectivity to centralized data centers or cloud environments.



Simplified Management and Deployment

With optional IBM Power management tools, including HMC and vHMC, the Power S1112 supports remote monitoring, control, and maintenance for simplified management of distributed environments. The server provides capabilities such as remote power-on and system control, guided concurrent maintenance, and centralized management for distributed environments. Compact rack-mounted and deskside options make the system easy to deploy in space-constrained locations while maintaining consistent management across the IBM Power portfolio. These capabilities help reduce the need for on-site IT staff, lowering operational costs and simplifying support for remote or edge deployments. Consistent tooling and automation across environments also enables faster issue resolution and more efficient system lifecycle management.

Flexible IBM i Workload Expansion

Support IBM i environments within the P05 software tier by enabling up to 4 IBM i cores and 64 GB of memory for core business workloads, while taking advantage of additional server resources for expanded innovation. With the Power S1112, organizations can allocate unused processor cores and memory to AIX and Linux workloads running alongside IBM i on the same system. This flexible “virtual boundary” approach helps clients maximize infrastructure utilization without impacting IBM i software tier eligibility. Businesses can also use available resources to support emerging AI, automation, and analytics workloads on Linux while maintaining the reliability and security of IBM i operations. By consolidating traditional and modern workloads onto a single platform, the Power S1112 helps simplify IT environments while creating a foundation for future growth and modernization.

Ideal Workloads and Use Cases

The Power S1112 is well suited for IBM i system upgrades from older one-socket platforms, as well as AIX and Linux workloads that require high reliability in a compact footprint. It also supports hardened applications and databases at remote or branch locations and enables AI inferencing and data-local processing at the edge. By consolidating multiple workloads onto a single system, organizations can simplify infrastructure and improve overall resource utilization. Its enterprise-class resilience ensures consistent performance and uptime, even in environments with limited on-site IT support. This makes the Power S1112 an ideal platform for extending core business capabilities to the edge while maintaining centralized control and governance.

IBM Power S1112 Technical Specifications

Product Line	IBM Power S1112
Machine Type	9242-21B 9242-21T
System Packaging	19” Rack Drawer (2U) Tower
Microprocessor Type	64-Bit Power11
Number of Processor Sockets Per Server	1 eSCM
Processor Options GHz (Cores/Socket) | Max # of Cores	4 10
EnergyScale	Y
Level 2 (L2) Cache Per Core	2 MB
Level 3 (L3) Cache Per Core	8 MB
System Memory (Minimum-Maximum) 4000/4800 MHz DDR5	512 GB 4 DDR5 DDIMMs
Reliability, Availability, Serviceability	
Chipkill Memory	Y
Service Processor (eBMC)	Y
Hot-Swappable NVMe SSD Disks	Y
Dynamic Processor Deallocation	Y
Processor Instruction Retry	Y
Hot-Plug Concurrent Maintenance PCIe Slots	N
Redundant Hot-Plug Power	Y
Redundant Hot-Plug Cooling	Y
Dual VIOS	Y
Active Memory Mirroring	Y
Capacity and Expandability	
Capacity on Demand (CoD)	N
Power Private Cloud (EP2.0)	N
PowerVM Enterprise Edition	Y
Max Logical Partitions/Micropartitions	200
System Unit PCIe Slots	2 PCIe x8 Gen4 Direct 2 PCIe x16 Gen4 Direct
Max PCIe Gen4 I/O Drawer	1/2
Max PCIe Gen4 Slots: PCIe I/O Drawers	6 in IO Drawer
Max NED24 NVMe Drawer	0
Max NED24 NVMe Slots: NVMe Drawer	0
Internal Storage Bays	4 NVMe U.2
Maximum TB Storage in System Unit	12.8 TB
AIX SMT8 rPerf # of Cores: rPerf	4C: 148.8 10C: 298.7
IBM i CPW # of Cores: Perf	4C: 117,300 10C: 116,500

The IBM Power S1112 delivers enterprise-class Power capabilities in an entry-level system designed for modern workloads and distributed environments. By combining Power11 performance, quantum-safe security, AI acceleration, and proven reliability, it helps organizations modernize confidently while preparing for future demands. Its compact design and flexible configuration options make it easy to deploy in a wide range of environments, from core data centers to edge locations. With built-in support for hybrid cloud integration, the system enables seamless connectivity between on-prem infrastructure and cloud services. Together, these capabilities position the Power S1112 as a powerful and adaptable platform for driving innovation across the enterprise.

For More Information
To learn more about IBM Power S1112, contact your IBM representative or IBM Business Partner or visit https://www.ibm.com/products/power-s1112



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Disclaimer 1: Based on published CPW results comparing Power S1112/4 core to IBM Power S914/4 core. Valid as of 7/14/2026 and available at: https://www.ibm.com/downloads/documents/us-en/10c31775c5d40fed

Disclaimer 2: Based on published CPW results comparing Power S1112/4 core to IBM Power S814/4 core. Valid as of 7/14/2026 and available at: https://www.ibm.com/downloads/documents/us-en/10c31775c5d40fed

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