



Highlights

- IBM® Power Systems™ L922 server easily integrates into your organization's cloud & cognitive strategy and delivers industry leading price performance for your mission critical workloads.
 - Gain insights faster from your data with up to 4 TB memory
 - Designed for security, reliability and performance to face current and future security threats.
 - Exploit the superior performance for Open Source Databases
 - Save on licensing cost with strongest per core performance in the industry
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IBM Power System L922

Future forward infrastructure for your mission critical data

IBM Power Systems L922

IBM® Power Systems™ L922 server easily integrates into your organization's cloud & cognitive strategy and delivers industry leading price performance for your mission critical Linux workloads.

The next generation of IBM Power Systems, with POWER9™ technology, is built with innovations that deliver unprecedented security and reliability for data intense workloads of today's enterprises. POWER9 is designed from the ground up for data intensive workloads like Databases or Analytics. This new server generation comes along with twice the memory footprint than POWER8® making it an ideal platform for in-memory and data centric applications. Changes in the memory subsystem and the use of Industry Standard Memory DIMMs take POWER9 to the next level of price/performance leadership. Designed to run commercial, cognitive and database workload better than any other competitive Server Platform, customers are trusting POWER Servers as the robust and secure backbone of their IT infrastructure. Most of the Fortune 500 companies are using POWER technology in their IT infrastructure down from the shop level to large Datacenter deployments.

The Power L922 server is a powerful 2-socket server that ships with up to 24 fully activated cores and I/O configuration flexibility to meet today's growth and tomorrow's processing needs. The server features:

- The following fully activated IBM POWER9 processor module configurations in a 19-inch rack-mount, 2U (EIA units) form factor:
 - 8-core Typical 3.4 to 3.9 Ghz (max) POWER9 Processor
 - 10-core Typical 2.9 to 3.8 Ghz (max) POWER9 Processor
 - 12-core Typical 2.7 to 3.8 Ghz (max) POWER9 Processor



**Systems
Data Sheet**

- Up to 4096 GB of DDR4 memory
- Storage backplane options:
 - Base Storage Backplane 8 SFF-3 Bays.
 - Split feature to 4+4 SFF-3 Bays: Add a second SAS Controller.
 - Expanded Function Storage Backplane 8 SFF-3 Bays/ Single IOA with Write Cache.
- Optional PCIe3 NVMe carrier card with two M.2 module slots
- Expansion capabilities for the EXP12SX/EXP24SX SFF Gen2 bay Drawer
- Hot-plug PCIe Gen4 and Gen3 slots
- Integrated:
 - Service processor
 - EnergyScale technology
 - Hot-plug and redundant cooling
 - USB 3.0 ports
 - Two HMC ports
 - One system port with RJ45 connector
- Two hot-plug, redundant power supplies
- 19-inch rack-mounting hardware (2U)



The new L922 – Large memory footprint of up to 4 TB in a dense form factor delivering highest security and reliability for Enterprise Linux workloads

Power System L922 (9008-22L) at a glance

System configurations

| | |
|-------------------------------|--|
| Microprocessors | Up to 2x POWER9 CPUs 8, 10, 12 cores |
| Level 2 (L2) cache per core | 512 K |
| Level 3 (L3) cache per core | 10 MB |
| RAM (memory) | Up to 4 TB, from 32 DDR4 IS DIMM @ 2666, 2400, and 2133 Mhz |
| Internal disk storage | SFF bays, one integrated SAS controller without cache, and JBOD RAID 0, 5, 6, or 10 <ul style="list-style-type: none"> • Optionally, split the above SFF-3 bays and add a second integrated SAS controller without cache. • Expanded Function Storage Backplane 8 SFF-3 Bays/Single IOA with Write Cache. • Optionally, attach an EXP12SX/EXP24SX SAS HDD/SSD Expansion Drawer to the single IOA. |
| Processor-to-memory bandwidth | Up to 170 GB/s per socket, 340 GB/s per system |
| L2 to L3 cache bandwidth | 7 TB/s on chip bandwidth |

Power System L922 (9008-22L) at a glance

System configurations

| | |
|--|--|
| Adapter slots | <p>PCIe slots with single processor:</p> <ul style="list-style-type: none"> • One x16 Gen4 low-profile, half-length slot (CAPI) • One x8 Gen4 low-profile, half-length slot (with x16 connector) (CAPI) • Two x8 Gen3 low-profile, half-length slots (with x16 connectors) • Two x8 Gen3 low-profile, half-length slots (one of these slots is used for the required base LAN adapter) <p>PCIe slots with two processors:</p> <ul style="list-style-type: none"> • Three x16 Gen4 low-profile, half-length slots (CAPI) • Two x8 Gen4 low-profile, half-length slots (with x16 connectors) (CAPI) • Two x8 Gen3 low-profile, half-length slots (with x16 connectors) • Two x8 Gen3 low-profile, half-length slots (one of these slots is used for the required base LAN adapter) |
| Integrated Standard features Adapter slots | <ul style="list-style-type: none"> • Service processor <ul style="list-style-type: none"> - EnergyScale technology - Hot-plug and redundant cooling - Two front USB 3.0 ports - Two rear USB 3.0 ports - Two HMC 1 GbE RJ45 ports - One system port with RJ45 connector - Two hot-plug, redundant power supplies - 19-inch rack-mounting hardware (2U) • one High Speed 25Gb/s per socket |
| Connectivity support (optional) I/O ports Standard features | <ul style="list-style-type: none"> • One front USB 3.0 ports <ul style="list-style-type: none"> - Two rear USB 3.0 ports - Two HMC 1GbE RJ45 ports - One system port with RJ45 connector <p>1x USB 3.0 front, 2x USB 3.0 rear, 2x HMC 1 GB Eth RJ45 ports, one system port with RJ45 connector, 2x High Speed 25 Gb/s ports</p> |
| Advanced POWER Virtualization | PowerVM Enterprise integrated |
| RAS features | <p>Processor instruction retry Selective dynamic firmware updates Chip kill memory ECC L2 cache, L3 cache Service processor with fault monitoring Hot-swappable disk bays Redundant cooling fans</p> |
| Operating systems | <p>Ubuntu 16.04.4 LTS (P8 Compatibility Mode) RedHat RHEL 7.4 LE (P8 Compatibility Mode) SuSE SLES 11 SP4 (P8 Compatibility Mode) SuSE SLES 12 SP3</p> |
| Power requirements | <p>Operating voltage: 1400 W PSU: 200 - 240 V AC Operating frequency: 47/63 Hz</p> |
| System dimensions | <p>Width: 482 mm (18.97 in.) Depth: 766.5 mm (30.2 in.) Height: 86.7 mm (3.4 in.) Weight: 30.4 kg (67 lb)</p> |
| Warranty | <p>3-year limited warranty, CRU (customer replaceable unit) for all other units (varies by country) next business day 9am to 5pm (excluding holidays), warranty service upgrades and maintenance are available.</p> |

Why IBM?

IBM is leading the Cognitive and Cloud space—Integrated Cloud capabilities in POWER9 go in line with IBM's cloud strategy and enable to connect current enterprise data with Cloud based AI or Analytics offerings like Watson. IBM gives you best in class on premise Cloud deployment possibilities with this announcement in addition to the off-premise portfolio already maintained. And we're applying that innovation to cognitive infrastructure, helping our customers on their journey to AI.

IBM aligns cutting-edge innovation with enterprise dependability—IBM has over 105 years of aligning continuous innovation with our customers' business needs.

The POWER9 Scale Out family will be the first set of entry servers that will come completely cloud enabled out of the box with PowerVM® capabilities. Additionally we introduce on chip Analytics and Algorithms helping customers running their workloads at an always optimized processor frequency for performance and throughput. In combination with the new memory footprint of 4TB IBM provides right now Systems to clients that are unmatched by competition in terms of memory scaling as well as core to memory ratio needed for data centric and in-memory workloads. The new L922 has built in security and is ready for current and future security threats.

For more information

To learn more about the Power System L922 please contact your IBM representative or IBM Business Partner.

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit: ibm.com/financing



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