IBM Power System S822LC commercial computing

Open standards-based system designed to simplify and optimize your data center

Highlights

- A high-performance, open standards-based system for cloud deployment

- Runs big data and analytics, Java, open source and Linux apps on a platform optimized for data and Linux

- Enables your apps and enterprise data to be always available on a robust system designed for business-critical workloads

- Realize low cost of acquisition and the ability to achieve superior economics

- Gain the performance and capabilities of IBM® POWER8® combined with the cost advantages of industry standardization

It's no secret that disruptive trends in technology are rapidly remaking how organizations do business. Technology is advancing so rapidly, in fact, that dynamic communities of collaboration are forming just to harness it all. The growing torrent of data from both within and outside your organization, from mobile employees and from customers and prospects, presents an unprecedented opportunity to gain valuable insights and apply these insights at the best point of impact to improve your business results.

Making the transition to advanced capabilities requires an integrated infrastructure that supports your key IT initiatives. Our investments to bring new optimized solutions in the area of advanced analytics, cloud and mobile access are designed to simplify and accelerate your ability to seize today's market opportunities.

The next generation of IBM Power Systems™, with POWER8 technology, is the first family of systems built with innovations that transform the power of big data and analytics, mobile and cloud into competitive

advantages in ways never before possible. Our new scale-out systems provide powerful, scalable and economical means to put data to work for you. The IBM Power System S822LC offers:

• Superior throughput and performance for -high value Linux workloads, such as LAMP,[1] big data and analytics or industry applications
• Low acquisition cost through system optimization (industry standard memory, selected configurations, industry standard warranty)
• Solutions incorporating OpenPOWER Foundation community innovation that are built to industry standards
• Modular design optimized to scale from single racks to hundreds of racks for large-scale clusters and scale-out deployments built on a 2S2U platform with up to 20 cores of POWER8

The waitless world demands open innovation

Power Systems are designed for big data and deliver the performance and throughput of POWER8 combined with the cost optimization of industry standardization—all without the wait.

Designed for the demands of big data and analytics

Businesses are amassing a wealth of data and Power Systems can store it, secure it and, most important, extract actionable insight from it in a timeframe that matters. Power Systems are designed for big data. From predictive analytics and data warehouses to unstructured big data processing and cognitive

IBM Watson™ solutions, Power servers are optimized for the compute-intensive performance demands of database and analytics applications, and can flexibly scale to support the demands of rapidly growing data.

IBM Power System S822LC

IBM Power System S822LC is designed to deliver superior performance and throughput for high-value Linux workloads, such as industry applications, big data and LAMP. With greater reliability, serviceability and availability than competitive platforms, the Power System S822LC incorporates OpenPOWER Foundation community innovation for clients that want the advantages of running their big data, Java, open source and industry applications on a platform.

Power System S822LC at a glance

System configurations	Model 8335-GCA
Processor and Memory	
Microprocessors	Two 8-core 3.32 GHz POWER8 processor cards or two 10-core 2.92 GHz POWER8 processor cards
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	Up to 64 MB per socket
Memory Min/Max	4 GB, 8 GB, 16 GB and 32 GB 1333 MHz DDR3 module, 32 GB to 1 TB
Processor-to-memory bandwidth	115 GB/sec per socket, 230 GB/sec per system (Max sustained memory bandwidth to L4 cache from SCM) 170 GB/sec per socket, 340 GB/sec per system (Max peak memory bandwidth to DIMMs from L4 cache)
Storage and input/output (I/O)	
Standard backplane	2 small form factor (SFF) bays for hard disk drive (HDD) or solid-state disk (SSD)
Media bays	N/A
RAID option	Hardware RAID comes from integrated PCIe adapter
Adapter slots	Five PCIe Gen3 slots: Three x16 plus Two x8 PCIe Gen3 Up to Two NVIDIA GPUs option available
I/O Bandwidth	64 GBps
Power, RAS, system software and physical characteristics and warranty	
Power supply	200 V to 240 V
RAS features	Processor instruction retry Selective dynamic firmware updates Chip kill memory ECC L2 cache, L3 cache Service processor with fault monitoring Hot-swappable disk bays Hot-plug and redundant power supplies and cooling fans (no power redundancy with GPU(s) installed)
Operating systems*	Linux on POWER
System dimensions	441.5 W x 86 H x 822 D mm
Warranty	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.

Why IBM?

IBM is honored to be recognized by readers of the Linux Journal as the winner of the "Best Linux Server Vendor" category in the 2013 Readers' Choice Awards—for the third year in a row. This recognition demonstrates the value of IBM's continued commitment to industry-leading collaboration and revolutionary technology.

Recently, IBM announced a new USD 3 billion research and development investment to create the next generation of chip technologies that will fuel the systems required for cloud, big data and cognitive computing. More specifically, these new materials include carbon nanotubes, graphene and nanophotonics to create system features at 7 nanometers and beyond.

For more information

To learn more about the IBM Power Systems, please contact your IBM marketing representative or IBM Business Partner, or visit the following website:
ibm.com/marketplace/cloud/commercial-computing/us/en-us

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. For credit-qualified clients we can customize an IT financing solution to suit your business requirements, enable effective cash management, and improve your total cost of ownership. IBM Global Financing is your smartest choice to fund critical IT investments and propel your business forward. For more information, visit:
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