



---

## Highlights

- Provides a highly secure architecture and stable platform for deploying business processing applications
  - Facilitates consolidation of UNIX, IBM i and Linux workloads for midsize businesses
  - Helps you gain faster insights with the IBM POWER8 processor
  - Includes smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies
  - Helps reduce energy consumption using advanced energy control
- 

# IBM Power System S814 server

*Open technology server for midsize business solutions*

## Power Systems: Innovation to put data to work New innovation brings faster insight to the point of impact for today's data hungry applications

Built with innovation that puts data to work, IBM® Power Systems™ deliver the foundation for organizations to bring insight to the point of impact up to 2x faster. These first generation systems push the physical and virtual boundaries of data center technology with innovation designed to drive faster and more efficient data-centric applications required for today's smarter enterprise.

With new innovations, Power Systems can help you:

- Gain faster insights with the IBM POWER8™ processor and smart acceleration enabled by Coherent Accelerator Processor Interface (CAPI) technologies such as accelerators for key workloads
- Achieve lower latency and smaller footprint with CAPI Flash
- Move data in and out of systems more quickly with twice the memory and I/O expansion
- Achieve greater speed and efficiency for database, transactional and other highly multi-threaded applications with transactional memory supported by 50 percent more cores and 2x the number of simultaneous threads per core

## Designed and optimized for big data and analytics

Businesses are amassing a wealth of data. Power Systems, built with innovation that puts data to work, can scale to support growing workloads and help businesses find insights faster. Power Systems are designed for



big data. From operational business intelligence and data warehouses to predictive analytics solutions, IBM Power® servers are optimized for the compute-intensive performance demands of database and analytics applications. These servers can flexibly scale to support the demands of rapidly growing data for mid-market businesses.

**Delivering open innovation by revolutionizing the way IT is developed and delivered**

With an architecture at the heart of the open server development community and the OpenPOWER Foundation, the open technology platform at the core of Power Systems presents a world of community created innovation, applications and technology components to help quickly deliver a broader set of applications and new technologies. Leveraging open standards, Power Systems provide developers with tools tuned for a platform that can boost productivity and performance by removing constraints imposed by commodity architecture. With continuous innovation built into the platform, Power Systems can enable future integrated hardware solutions designed to dramatically accelerate compute and data-intensive tasks.



---

**IBM Power System S814 server**

The IBM Power System S814 is designed to be a highly secure architecture providing a stable database and middleware platform for efficient deployment of business processing applications. A 1-socket system with a 6-core POWER8 processor is available in either a rack or tower configuration. The higher performance 8-core system is available in a rack configuration and supports new I/O capabilities including CAPI accelerators, higher internal disk and SSD capacities, and hot plug PCIe Gen3 slots.



**IBM Systems and Technology**  
**Data Sheet**

<b>IBM Power System S814 server at a glance</b>	
System configurations	Model 8286-41A
<b>Processor and Memory</b>	
Microprocessors	One 4-core 3.02 GHz POWER8 processor card (rack and tower) or One 6-core 3.02 GHz POWER8 processor card (rack and tower) or One 8-core 3.72 GHz POWER8 processor card (rack only)
Level 2 (L2) cache	512 KB L2 cache per core
Level 3 (L3) cache	8 MB L3 cache per core
Level 4 (L4) cache	16 MB per DIMM
Memory Min/Max	One, two or four 16 GB 1600 MHz DDR3 module (4- core configuration only) 16 GB, 32 GB and 64 GB 1600 MHz DDR3 module, 16/512 GB (for 6-core or 8-core configuration) Active Memory Sharing
Processor-to-memory bandwidth	192 GBps per socket
<b>Storage and I/O</b>	
Standard backplane	Eight (4-core) or twelve (6- or 8-core) SFF bays for Hard Disk Drive (HDD)/Solid State Disk (SSD)
With dual IOA higher function backplane	18 SFF bays for HDD/SSD (6- or 8-core only)
Media bays	One slimline DVD
Integrated SAS controller	Standard RAID 0,5,6,10. optional: 7200 MB <sup>†</sup> cache & Easy Tier function
Adapter slots	Included one x8 PCIe slots must contain a 4-port 1 Gb Ethernet LAN available for client use Seven PCIe Gen3 slots with concurrent maintenance: two x16 plus five PCIe Gen3 x 8 One CAPI adapter
I/O bandwidth	96 GBps per socket
<b>Power, RAS, System Software, Physical Characteristics and Warranty</b>	
Power supply	Tower: 100 V to 240 V; Rack: 200 V to 240 V
RAS features	Processor instruction retry Alternate processor recovery Selective dynamic firmware updates Chipkill memory ECC L2 cache, L3 cache Service processor with fault monitoring Hot-swappable disk bays Hot-plug concurrent maintenance PCIe slots Hot-plug and redundant power supplies and cooling fans Dynamic processor deallocation Extended error handling on PCI slots
Operating systems*	AIX, IBM i and Linux on POWER
System dimensions	Rack: 427.5 W x 173 H x 750.5 D mm Tower: 328.5 W x 522 H x 751.7 D mm
Warranty	3 year Limited Warranty, on site for selected components; CRU (customer replaceable unit) for all other units (varies by country), Next business day 9x5 (excluding holidays), warranty service upgrades and maintenance are available.

## For more information

To learn more about the IBM Power System S814 server, please contact your IBM marketing representative or IBM Business Partner, or visit the following websites:

[ibm.com/systems/power/hardware/s814/index.html](http://ibm.com/systems/power/hardware/s814/index.html)

For more information on hardware maintenance, software support, solution support and managed support, visit:

[ibm.com/services/maintenance](http://ibm.com/services/maintenance)

Additionally, IBM Global Financing can help you acquire the IT solutions that your business needs in the most cost-effective and strategic way possible. We'll partner with credit-qualified clients to customize an IT financing solution to suit your business goals, 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: [ibm.com/financing](http://ibm.com/financing)

Statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

Actual available storage capacity may be reported for both uncompressed and compressed data and will vary and may be less than stated.

\* See facts and features document for detailed OS level support.

† 1.8 GB write cache with compression up to 7.2 GB effective



---

© Copyright IBM Corporation 2014

IBM Systems and Technology Group  
Route 100  
Somers, NY 10589

Produced in the United States of America  
June 2014

IBM, the IBM logo, ibm.com, AIX, PowerLinux, PowerHA, PowerVM, Power Systems, Power, POWER8, POWER7, and POWER7+ are trademarks of International Business Machines Corporation in the United States, other countries or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at [ibm.com/legal/copytrade.shtml](http://ibm.com/legal/copytrade.shtml)

Linux is a trademark of Linus Torvalds in the United States, other countries or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

UNIX is a registered trademark of The Open Group in the United States, other countries or both.

The Power Architecture and Power.org wordmarks and the Power and Power.org logos and related marks are trademarks and service marks licensed by [power.org/](http://power.org/)

Other company, product or service names may be trademarks or service marks of others.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates. The performance data discussed herein is presented as derived under specific operating conditions. Actual results may vary.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.



Please Recycle