IBM **Power Systems**

POWER9 Servers Overview

Scalable servers to meet the business needs of tomorrow.

IBM Power Systems

Power Systems are built for the most demanding, data-intensive, computing on earth. Our cloud-ready servers help you unleash insight from your data pipeline—from managing mission-critical data, to managing your operational data stores and data lakes, to delivering the best server for cognitive computing.

With industry-leading reliability and security, our infrastructure is designed to crush the most data-intensive workloads imaginable, while keeping your business protected.

Enterprise cloud-ready

Power Systems easily integrate into your organization's private or hybrid cloud strategy to handle flexible consumption models and changing customer needs.

No. 1 in reliability by ITIC

Ranked No. 1 in every major reliability category by ITIC*, IBM Power Systems deliver the most reliable on-premises infrastructure to meet around-the-clock customer demands.

Industry-leading value and performance

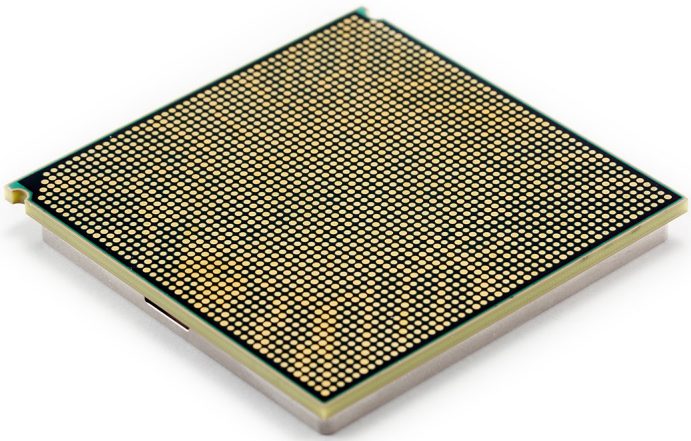
With Power Systems, clients can take advantage of superior core performance and memory bandwidth to deliver both performance and price-performance advantages.

*#1 in every major reliability category, 2017-2018 ITIC Global Server Hardware Reliability Report (PDF, 908KB)

IBM POWER9

IBM POWER9: Enhanced core and chip architecture for next-gen workloads

Built from the ground-up for data intensive workloads, POWER9 is the only processor with state-of-the-art I/O subsystem technology, including next generation NVIDIA NVLink, PCIe Gen4 and OpenCAPI.



POWER9 vs x86 Xeon SP

- 2x[1] — Performance per core
- 2.6x[2] — RAM per socket
- 1.8x[3] — Memory bandwidth per socket

POWER9 with NVLink vs x86 Xeon

- 9.5x[4] — CPU to accelerator bandwidth

POWER9 for Enterprise

Future-forward infrastructure to meet the needs of the enterprise

Take advantage of a scale-up infrastructure that lets you stay ahead of workload challenges, new data sources and compute demands. With these enterprise servers you can cloud enable workloads and build a cloud designed for the most data-intensive workloads.

Feature	E950	E980 1-4 nodes
MTM	9040-MR9	9080-M9S
System Packaging	4U	5U system node & 2U system controller unit
Processor Socket	2S to 4S	4S per node
# of cores	32, 40, 44, or 48 cores	Up to 192 cores
Memory DIMM Slots	128 DDR4 ISDIMMs	Up to 128 DDR4 CDIMMs
Memory – Max	16TB	16TB per node, up to 64TB
Built-In IBM PowerVM	Yes	Yes
PCIe Gen4 Slots	10 Slots	Up to 32 Slots
Operating System	AIX, Linux	AIX, IBM i, Linux

POWER9 for AIX and IBM i

Superior On-Premise Infrastructure for Hybrid Multicloud IT

IBM Power Systems scale-out servers for AIX, IBM i and Linux deliver higher security, reliability, industry-leading PCIe Gen4 I/O and a built-in cloud-optimized hypervisor included at no additional cost.

Feature	S914	S922	S924
MTM	9009-41G	9009-22G	9009-42G
System Packaging	4U & Tower	2U	4U
Processor Socket	1S	1S Upgradable or 2S	1S Upgradable or 2S
Processor Options (# of cores/socket and max GHz)	4C, 6C and 8C with 3.8 GHz max	1C, 4C with 3.8 GHz max 8C with 3.9 GHz max 10C, 11C with 3.8 GHz max	8C with 4.0 GHz max 10C, 11C and 12C with 3.9 GHz max
Memory DIMM Slots	16	32	32
Memory – Max	1TB	4TB	4TB
PCIe 4.0 Slots	12 Slots	15 Slots	15 Slots
NVMe Storage Capacity	70.4 TB	89.6 TB	89.6 TB