



Dell PowerEdge R910

The Dell™ PowerEdge™ R910 provides performance and reliability in a scalable 4U, four-socket server allowing large workload consolidation or max virtualization machine density.

With Intel® Advanced RAS (Reliability, Availability, Serviceability) Technology, internal dual SD modules for hypervisor redundancy, including design and component quality paired with Dell Lifecycle Controller, technicians avoid having to load diagnostics from other media. Dell built-in reliability saves valuable time and minimizes downtime for mission-critical workloads.

Purpose Built for Reliability

The PowerEdge R910 is built for reliability through factory integration and validation. The Dell “one-touch” process is designed to ensure one person is responsible for the entire server build, resulting in greater quality control. Every fully configured Dell server is tested (and re-tested) before it leaves the factory providing customers a fully configured and tested ready-to-deploy server.

Internal Dual SD module provides failover at the hypervisor; this feature was designed based on customer reliability feedback. Dell listened and delivered.

With Intel Advanced RAS Technology features never before seen in an industry-standard server, the PowerEdge R910 can automatically monitor, report, and recover from hardware errors to maintain data integrity and keep mission-critical services online.

Efficient Infrastructure

Performance resources, power efficiency, I/O, and memory scalability are essential to maximizing workload in the data center.

The PowerEdge R910 delivers the highest performing Xeon 7500 Series processors, up to 1TB of DDR3 memory, and 2 x 10Gb Optional LOM with 10 PCIe slots to help consolidate inefficient workloads.

Energy-efficient system design built with Energy Smart technologies includes power management features enabling power capping, power inventory, and power budgeting within your specific environment. Logical component layout of the internal components aids with airflow direction, helping to keep the server cool.

Intelligent Platforms, Connected Foundations

The PowerEdge R910 follows the 11th Generation PowerEdge behavioral specifications with the same system design commonality and usability true to the entire portfolio. All 11th Generation servers are designed to make

the user experience easier while saving time and money.

Dell system management solutions focus on simplicity, efficiency, cost containment and reduction, and an adherence to open standards. Our systems management solutions are complemented by, connected to, and integrated with 3rd-party offerings, thereby delivering comprehensive solutions across the complete solutions stack.

The Lifecycle Controller is a chip that is integrated on the server. It helps to simplify administrator tasks by performing a complete set of provisioning functions such as system deployment, system updates, hardware configuration, and diagnostics in a pre-OS environment—all from a single, intuitive interface called the Unified Server Configurator (USC).

Dell Services

Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent, and in-depth domain knowledge for the lowest TCO.

The PowerEdge R910 is easy to deploy, better to manage and maintain. Designed to save customers time and money to focus on what matters most, their people and business.

Feature	Technical Specification	
Form Factor	4U rack-mount	
Processors	Up to Four Intel® Xeon® processors 7500 Quad-, Six, or Eight-Core series	
Processor Sockets	4	
Front Side Bus or HyperTransport	Intel® QuickPath Interconnect (QPI)	
Cache	Up to 24MB	
Chipset	Intel® 7500 Chipset	
Memory ¹	Up to 1TB (64 DIMM slots) 1GB/2GB/4GB/8GB/16GB DDR3 1066MHz	
I/O Slots	Up to 10 PCIe G2* Slots: Standard: 7 PCIe Gen2* slots (2 x4, 4 x8, 1 x16) Optional: 10 PCIe Gen2* (6 x4, 4 x8)	One storage x8 slot *slot5 is x4 PCIe Gen1 slot
RAID Controller	Internal Controllers: PERC H200 (6Gb/s) PERC H700 (6Gb/s) with 512MB battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache External Controllers: PERC H800 (6Gb/s) with 512MB of battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache	External HBAs (non-RAID): 6Gbps SAS HBA SAS 5/E HBA LSI2032 PCIe SCSI HBA
Drive Bays	Hot-Swap Options Available: Up to sixteen 2.5" SAS, SSD	
Maximum Internal Storage	Up to 4.8TB	
Hard Drives ¹	2.5" (10K) SATA SSD: 50GB	2.5" SAS (10K) 146GB, 300GB, 600GB
Communications	Embedded NICs: 1GbE or 10Gb embedded NIC options with iSCSI offload 2x Broadcom® 5709c (4 ports x 1GbE Base-T Copper) Embedded NIC or Broadcom® 57711 (2 ports x 10Gb SFP+) and Broadcom® 5709c (2 ports x 1GbE Base-T Copper) Embedded NIC Optional NICs: Broadcom® 57710 Single Port 10GbE NIC, Copper CAT6 PCIe-8 Intel® DA 10GbE NIC, Dual Port, Optical, PCIe-8 Intel® 10GbE Single Port 10GbE NIC, Copper, PCIe-8 Broadcom® NetXtreme® II 5709 Gigabit NIC w/TOE & iSOE, Quad Port, Copper, PCIe-4 Broadcom® 5709 Dual Port 1GbE NIC w/TOE PCIe-4, Low Profile Broadcom® 5709 Dual Port 1GbE NIC w/TOE iSCSI, PCIe-4, Low Profile Broadcom® 5709 Dual Port 1GbE NIC w/TOE iSCSI, PCIe-4	Broadcom® NetXtreme® II 5709 Gigabit NIC w/TOE & iSOE, Quad Port, Copper, PCIe-4, Low Profile Broadcom® 5709 Dual Port 1GbE NIC w/TOE PCIe-4 Broadcom® NetXtreme® II 57711 10GbE NIC w/TOE & iSOE, Dual Port, SFP+, PCIe-8 Intel® Gigabit ET NIC, Dual Port, Copper, PCIe-4, Low Profile Intel® Gigabit ET Dual Port NIC, PCIe-4 Intel® Gigabit ET NIC, Quad Port, Copper, PCIe-4, Low Profile Broadcom® 5709 Dual Port 1GbE NIC w/TOE PCIe-4, Low Profile Intel® Gigabit ET Quad Port NIC, PCIe-4 Brocade® CNA Dual-port adapter Emulex® CNA iSCSI HBA stand up adapter OCE10102-IX-D Brocade® CNA BR1020
Power Supply	Hot-plug redundant PSUs: 4 x 750W (Energy Smart PSU) (or) 4 x 1100W (High Output PSU)	
Availability	Hot-plug hard drives, Hot-plug redundant power, Hot-plug redundant fans, ECC memory, Internal dual SD Module, redundant cooling	
Video	Matrox® G200 w/ 8MB memory	
Remote Management	iDRAC6 Express	iDRAC 6 Enterprise with vFlash optional
Systems Management	BMC, IPMI2.0 compliant Dell™ OpenManage™ featuring Dell Management Console Unified Server Configurator	Lifecycle Controller enabled via optional iDRAC6 Express, iDRAC6 Enterprise, and vFlash Microsoft® System Center Essential (SCE) 2010 v2
Rack Support	ReadyRails™ sliding rails with optional cable management arm for 4-post racks (optional adapter brackets required for threaded hole racks)	
Operating Systems	Microsoft® Windows® Essential Business Server 2008 Microsoft® Windows Server® 2008 SP2, x86/x64 (x64 includes Hyper-V™) Microsoft® Windows Server® 2008 R2, x64 (includes Hyper-V™ v2) Microsoft® Windows® HPC Server 2008 Novell® SUSE® Linux® Enterprise Server Red Hat® Enterprise Linux® Optional Embedded Hypervisor: VMware® vSphere™ 4.1 (including VMware ESX® 4.1 or VMware ESXi™ 4.1)	
	For more information on the specific versions and additions, visit www.dell.com/OSsupport .	
Featured Database Applications	Microsoft® SQL Server® solutions (see Dell.com/SQL) Oracle® database solutions (see Dell.com/Oracle)	

¹ GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

OEM Ready Models Available

OEM Ready platforms are grab-and-go products for OEM customers delivering a fast and simple path to a custom-branded solution. For more information, please visit dell.com/OEM.

Customer-Inspired, Intelligent Design at www.Dell.com/PowerEdge

© 2010 Dell Inc. All rights reserved. Dell, the DELL logo, the DELL badge, PowerEdge, and OpenManage are trademarks of Dell Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. This document is for informational purposes only. Dell reserves the right to make changes without further notice to any products herein. The content provided is as is and without express or implied warranties of any kind.

