## Dell PowerEdge Servers Portfolio Guide





**Dell**<sup>™</sup> **PowerEdge**<sup>™</sup> **Servers** 

Purpose-Built for Reliability

Virtualization-Enabled for an Efficient Infrastructure

Intelligent, Connected Systems Managment

## With Dell you can

Whether it is your first server, your next server, your growing network or making IT more manageable, we are here to help.

We understand every organization is different and has different needs at different times. And you want a diverse portfolio of products and services to meet a variety of business and non-business needs. Those products and services must be easy to manage, reliable, scalable and flexible, so when ready, you have the tools to help you move forward regardless of your current stage in business or IT. Whether it is your first server, your next server, your growing network or how to make it all more manageable, we are here to help.

Dell wants to provide you with technology that is intelligent, yet simplified in even the most complex environments. We understand our job is to make yours easier.

#### **Recover Valuable Time**

Spend more time on meeting business objectives and less on planning, deploying and maintaining IT.

#### **Control Soaring Costs**

Reduce your data center footprint by consolidating with high-performance virtualized servers, storage and networking.

#### **Improve Productivity**

Maximize results on business applications with Dell's highest performing PowerEdge server.

## PowerEdge Servers

The 11th generation PowerEdge servers are designed to enhance your IT experience. Dell is changing the way you interact with your technology with easier management, more reliability, better energy efficiency and releasing products with the latest and greatest processor technology. Dell PowerEdge servers deliver value to you by taking technology that was previously over-priced, complex and underutilized and making it easy-to-buy, easy-to-use and easy-to-own, saving you time, money, and resources.

We put our time and technology into features we know you need to be more successful and to ensure your day goes smoother. Inspirations such as the Lifecycle Controller for advanced manageability, interactive LCD screens for system monitoring, dual embedded hypervisors for added redundancy, and FlexMem Bridge for maximum memory access help you to take our technology where you need it to go.



### Dell PowerEdge Servers:

## Built to the most demanding specifications ever set forth. Yours.

Meet our latest generation of PowerEdge servers. Purpose-built to focus on the key business and non-business related challenges you face in your IT environment. With these servers, Dell hopes to help you build a solid road to the future, so all you need to do is drive forward

#### Our new portfolio of servers address:

- Reliability
- Manageability
- Energy Efficiency
- Memory Scalability and Capacity
- Virtualization Performance
- Business Value

Combined with a new suite of systems management solutions and flexible services, Dell PowerEdge servers can help control soaring costs, improve productivity, and free up valuable time so you can do more with your IT environment.



#### PowerEdge R210

An ultra-compact 1-socket, 1U entry rack server featuring advanced management capabilities, low-wattage power supplies and external storage connectivity options in a small chassis.



#### PowerEdge R415

A 2-socket rack server with enterprise-class features offering a great balance of processing power and value with up to 12 cores and 8 DIMMs in a 1U form factor.



#### PowerEdge R310

A high-performance, 1-socket 1U rack server with flexible computing power, business scalability, simplified management, data protection, and security options ideal for small- to mid-size businesses, remote offices, and enterprises.



#### PowerEdge R510

A multi-purpose 2-socket, 2U core application rack server offering an excellent balance of internal storage, redundancy and value in a compact, 24" deep chassis.



#### PowerEdge R410

A powerful 2-socket, 1U server ideal for compute-intense applications in space-constrained data centers and HPCC environments



#### PowerEdge R515

A 2-socket rack server offering immense amounts of local storage capacity, enterprise-class features and excellent price/performance with up to 12 cores and 8 DIMMs in a 2U form factor.



#### PowerEdge R610

A 2-socket, 1U rack server great for corporate data centers and remote sites that require exceptional virtualization, system management, and energy efficiency.



#### PowerEdge R810

A scalable 2U, 2- or 4-socket server offering performance and rack density that allows workload consolidation or high virtualization machine density.



#### PowerEdge R710

A 2U rack server created to efficiently address a wide range of key business applications which can help lower TCO with enhanced virtualization capabilities, improved energy efficiency, and innovative system management tools.



#### PowerEdge R815

A 4-socket rack server offering the latest AMD Opteron™ processors with up to 48 processor cores and an excellent balance of advanced manageability, memory scalability, I/O, and redundancy in a space-saving 2U form factor.



#### PowerEdge R715

A 2-socket rack server powered by the latest AMD Opteron™ processors and offering excellent price/performance with up to 24 processor cores and 16 DIMMs in a 2U form factor.



#### PowerEdge R910

A scalable 4U, 4-socket server offering performance and reliability while allowing large workload consolidation or max virtualization machine density.



PowerEdge T110
Dell's entry tower server, an ideal first server for small businesses supporting filesharing, centralization, and office collaboration.



PowerEdge T410
Dell's high-value, flexible 2-socket tower server designed to address the broad needs of the growing business and corporate remote offices.



PowerEdge T310
A robust, reliable, enterpriseclass, 1-socket tower server featuring advanced manageability, redundancy, and scalability.



PowerEdge T610

A 2-socket, 5U tower server ideal for corporate data centers and remote sites that require high availability, exceptional virtualization, system management and energy efficiency.



PowerEdge T710
A 2-socket, 5U tower server that offers enhanced system performance and more virtual machine per server capacity than previous generations.



PowerEdge M610

A 2-socket, half-height blade server designed for virtualization, mainstream business and database applications.



#### PowerEdge M710

A 2-socket, dual-and quad-core, full-height blade server. Ideal for I/O-intensive applications, virtualization, and compute-intense, business-critical applications.



PowerEdge M610x

A full-height, 2-socket server with PCle expansion capabilities that bring a new dimension of flexibility and performance to the Dell M-Series.



#### PowerEdge M710HD

Virtualization-optimized, half-height 2-socket server that offers tremendous I/O throughput, maximized memory density, and robust Intel® Xeon® 5600 processing power with hot-swappable SAS or SSD hard drives



PowerEdge M910

A full-height, 4-socket blade server that allows deployment of large Enterpriseclass applications as well as the ability to support heavy virtualization or workload consolidation in maximum density.



#### PowerEdge C1100

Hyperscale-inspired, 1-socket, six- and quad-core, 1U rack server. Ideal for scale-out power and space-sensitive data centers requiring maximum memory flexibility.



#### PowerEdge C2100

Hyperscale-inspired, 2-socket, six- and quad-core, 2U rack server. Ideal for scale-out data center environments with critical memory and storage density requirements.



#### PowerEdge C6100

Hyperscale-inspired, 4 x 2-socket, six- and quad-core, 2U shared infrastructure server. Ideal for scale-out environments such as HPCC, Web 2.0, gaming, and cloud building.

# PowerEdge Rack Servers Maximize Performance and Availability

Dell provides a complete portfolio of 1, 2, and 4 socket rack servers designed to reduce complexity and deliver superior value. PowerEdge rack servers feature excellent performance and functionality and outstanding reliability.



#### **Dell PowerEdge Rack Servers**

_		Description	Form Factor	Features	Processor(s)	RAM (min/max)	PCI slots	Embedded RAID Controllers	Integrated NIC	Drive Bays	Availability Features
	R910	The PowerEdge R910 is an Intel processor-based 4-socket, 4U rack server for mission-critical applications in corporate data centers and workloads needing the highest performance, reliability and I/O scalability.	4U	4U, 4-socket, 6- or 8-core Intel processors Up to 16 hard drives 64 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	Intel® Xeon® Processor 7500 Series	4GB/1TB DDR3 RDIMMS	Up to 10 PCIe G2* slots: Standard: 7 PCIe Gen2* slots (2 x4, 4 x8, 1 x16. *Note:slot5 is x4 PCIe Gen1 slot Optional: 10 PCIe Gen2* (6 x4, 4 x8) One Storage x8 slot	PERC H200 PERC H700"	Two embedded Broadcom 5709C dual-port NICs	Hot-Swap options available: Up to sixteen 2.5" SAS or SSD drives	DDR3 ECC memory, hot-swap hard drives, redundant power supplies. interactive LCD screen, Dual SD modules
	R815	The PowerEdge R815 is an AMD processor-based 4-socket, 2U rack server ideal for customers seeking a combination of value, systems management and performance in virtualization, database, HPC and other highly threaded application implementations.		2U, 4-socket, 8- or 12- core AMD processors Up to 6 hard drives 32 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	AMD Opteron™ 6100 Series	8GB/ 512GB	6PCIe + 1 storage slot	PERC H200 PERC H700	Two embedded Broadcom 5709C dual-port NICs	Hot-Swap options available: Up to six 2.5" SAS, SATA or SSD drives	DDR3 ECC memory, hot-swap hard drives, redundant power supplies. interactive LCD screen, Dual SD modules
Kacks	R810	The PowerEdge R810 is an Intel processor-based 2 or 4-socket, 2U rack server ideal for usage in data centers and remote sites needing optimal performance and memory scalability for mission-critical applications in an efficient 2U form factor.	2U	2U, 2 or 4-socket, 6- or 8-core Intel processors Up to 6 hard drives 32 DDR3 DIMM slots Unique Dell FlexMem Bridge memory expansion technology Advanced systems- management capabilities Redundancy options available	Intel® Xeon® Processor 7500 and 6500 Series	16GB/ 512GB DDR3 RDIMMs	6PCIe + 1 storage slot	PERC H200 PERC H700	Two embedded Broadcom® 5709C dual-port NICs	Hot-Swap options available: Up to six 2.5" SAS, SATA or SSD drives	DDR3 ECC memory, hot-swap hard drives, redundant power supplies. interactive LCD screen, Dual SD modules
	2970	The PowerEdge 2970 is an AMD processor-based 2-socket, 2U rack server for general business applications and is well-suited for customers seeking excellent security, manageability, and energy efficiency.	2U	2U, 2-socket, 4- or 6-core AMD processors Up to 8 hard drives 8 DDR2 DIMM slots Remote-management capabilities Redundancy options available	Up to two six-core AMD Opteron™ 2400 or 2300 Series Processors	1GB – 64GB DDR2 SDRAM	Three PCIe, 2 x8, 1 x4	PERC 6/i PERC 5/i SAS 6/iR PERC 6/E PERC 5/E	Dual-embedded Broadcom Gigabit NICs— TOE enabled	8 x 2.5" Hard Drive Option or 6 x 3.5" Hard Drive Option	Hot-plug hard drives, Hot-plug redundant power, Hot-plug redundant cooling, ECC memory, Spare Row, Single Device Data Correction (SDDC), RAID controller W/ battery-backed cache, High availability failover cluster support, DRAC 5, Support for internal tape device or internal disk drive backup unit, toolless chassis, Cluster support

#### **Dell PowerEdge Rack Servers**

		Description	Form Factor	Features	Processor(s)	RAM (min/max)	PCI slots	Embedded RAID Controllers	Integrated NIC	Drive Bays	Availability Features
	an AMD p 2-socket, ideal for c value, sys and great performal consolida	nce in workload ation, virtualization, databases and other	2U	2U, 2-socket, 8- or 12- core AMD processors Up to 6 hard drives 16 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	AMD Opteron™ 6100 Series	8GB/256GB	6PCIe + 1 storage slot	PERC H200 PERC H700	Two embedded Broadcom® 5709C dualport NICs	Hot-Swap options available: Up to six 2.5" SAS, SATA or SSD drives	DDR3 ECC memory, hotswap hard drives, redundant power supplies. interactive LCD screen, Internal Dual SD module
Kacks	mainstrea based 2-s server gre or corpor and remo exception	erEdge R710 is a am Intel processor- socket, 2U rack eat for server rooms rate data centers ote sites that require nal virtualization, management and fficiency.	2U	2U, 2-socket, 4- or 6-core Intel processors Up to 8 hard drives 18 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up to 288GB (18 DIMM slots): 1GB/2GB/ 4GB/8GB/ 16GB DDR3, 800MHz, 1066MHz or 1333MHz	2 PCle x8 + 2 PCle x4 Gen2 or 1 x16 + 2 x4 Gen2	Optional PERC 5/i integrated SAS/SATA II daughtercard controller with 256MB cache, PERC 5/e adapter, PERC 6/I, and SAS 6/iR	Four embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC with failover and load balancing; TOE (TCPIP Offload Engine) supported on Microsoft® Windows Server® 2003 SP1 or higher with Scalable Networking Pack; Optional 1GBe and 10GBe add-in NICs	Hot-Swap options available: Up to six 3.5" SAS or SATA drives Up to eight 2.5" SAS, SATA or SSD drives	DDR3, Spare Bank; hot- plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; PERC 6/i; optional PERC5/i integrated daughtercard controller with battery-backed cache; hot-plug redundant cooling; toolless chassis; fibre and SAS cluster support; validated for Dell/EMC SAN
	an Intel pr 2-socket, well-suite or corpora and remote exception	erEdge R610 is rocessor-based 1U rack server ed for server rooms rate data centers ste sites that require hal virtualization, management and ficiency.	1U	2U, 2-socket, 4- or 6-core Intel processors Up to 6 hard drives 12 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up 192GB (12 DIMM slots/ 6 per- processor): 1GB/2GB/ 4GB/8GB/ 16GB DDR3 800MHz, 1066MHz or 1333MHz	2x8 Gen2 slots	Optional PERC 6/i integrated SAS/ SATA daughtercard controller with 256MB cache, PERC 5/e adapter, PERC 6/i and SAS 6/iR PERC 6i utilizing battery- backed 256MB DDRII 667	Two dual port embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC with failover and load balancing. Optional 1GBe and 10GBe add- in NICs	Hot-Swap options available: Up to six 2.5" SAS, SATA or SSD drives	DDR3 memory; ECC; hot- plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; optional PERC 6/i integrated daughtercard controller with battery-backed cache; hot-plug redundant cooling. toolless chassis; fibre and SAS cluster support; validated for Dell/EMC SAN
	an AMD p 2-socket, that is gre branch or database t virtualizati consolidat application	erEdge R515 is processor-based 2U rack server eat for department, r small business tasks, email, iion, workload ation and business with large equirements.	2U	2U, 2-socket, 4- or 6-core AMD processors Choice of 8 or 12 hard drive chassis 8 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	AMD Opteron™ 4100 Series	1GB/64GB	3PCIe + 1 storage slot	PERC H200 PERC H700 PERC S300 (software based, 8HDD only)	One embedded Broadcom® 5716 dualport NIC	Hot-Swap options available: Up to eight or twelve 3.5" SAS or SATA, or 2.5" SAS or SSD drives	Up to 16TB-24.6TB (depending on chassis model)

#### **Dell PowerEdge Rack Servers**

		Description	Form Factor	Features	Processor(s)	RAM (min/max)	PCI slots	Embedded RAID Controllers	Integrated NIC	Drive Bays	Availability Features
	R510	The PowerEdge R510 is an Intel processor-based 2-socket, 2U rack server ideal for department, branch or small business database tasks, email, virtualization, workload consolidation and core business applications with large, local storage needs.	2U	2U, 2-socket, 4- or 6-core Intel processors Choice of 4, 8 or 12 hard drive chassis 8 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up to 128GB (8 DIMM slots): 1GB/2GB/ 4GB/8GB/ 16GB DDR3 800MHz, 1066MHz or 1333MHz	Four total: One x8 slot Two x4 slots (both w/ x8 connectors) One Internal Storage x4 slot (w/ x8 connector, for integrated controller cards only)	Optional PERC 6/i integrated controller card, PERC 6/E with 256MB or 512MB of battery-backed cache, SAS 6/iR integrated controller card, PERC S300 (software based) controller card, PERC S100 (software-based)	Embedded Dual-port Broadcom® NetXtreme™ II 5716 Gigabit Etherne.	Cabled HD options: Up to four 3.5" SAS or SATA drives Hot-Swap HD options: Up to eight or twelve 3.5" SAS or SATA or 2.5" SAS or SSD drives	Up to 16TB-24.6TB (depending on chassis model)
	R415	The PowerEdge R415 is an AMD processor-based 2-socket, 1U rack server suited for small and medium businesses and data centers run-the-business functions such as IT infrastructure, file/print, web, email, select HPC usage and entry virtualization needs.	1U	1U, 2-socket, 4- or 6-core AMD processors Up to 4 hard drives 8 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	AMD Opteron™ 4100 Series	1GB/64GB	1 PCle	SAS 6/iR PERC H200 PERC H700 PERC S300 (software based, 8HDD only)	One embedded Broadcom® 5716 dualport NIC	Cabled HD options: Up to four 3.5" SAS or SATA drives Hot-Swap HD options: Up to four 3.5" SAS or SATA or 2.5" SAS or SSD drives	DDR3 ECC memory, hotswap hard drives, redundant power supplies, optional interactive LCD screen, LED lights
Racks	R410	The PowerEdge R410 is an Intel processor-based 2-socket, 1U rack server with advanced systems management and redundancy options for small and medium business to larger enterprise business applications, select HPC usage and entry virtualization needs.	1U	1U, 2-socket, 4- or 6-core Intel Processors Up to 4 hard drives 8 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up to 128GB (8 DIMM slots). 1GB/2GB/ 4GB/8GB/ 16GB DDR3 800Mhz, 1066Mhz, 1333Mhz	1 PCle x 16 (True x16, Gen2), 1 Proprietary for SAS 6/iR Modular card only	Optional PERC 6/i, PERC 6/E with 256MB or 512MB of battery- backed cache, SAS 6/iR	Embedded Dual-port Broadcom® NetXtreme™ II 5716 Gigabit Ethernet	Cabled HD options: Up to four 3.5" SAS or SATA drives Hot-Swap HD options: Up to four 3.5" SAS or SATA or 2.5" SAS, SATA or SSD drives	DDR3 memory, Quad- pack LED Diagnostic or LCD diagnostic with hot-swap HDD chassis; TPM; optional hot-swap hard drives; optional hotswap redundant power supply; optional PERC 6/i RAID controller with battery-backed cache; toolless hot- swap hard drivechassis
	R310	The PowerEdge R310 is an Intel processor-based enterprise-class 1-socket rack server that provides advanced systems management and redundancy options for web, email, SAN proxy, DHCP server, video streaming, security, and file/print services.	1U	1U, 1-socket, dual- or quad- core Intel processors Up to 4 hard drives 6 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	Single socket, quad-core Intel® Xeon® Processor 3400 Series	1GB, DIMM Module 2GB, DIMM Module 4GB, DIMM Module 8GB, DIMM Module	2 PCle slots: Slot 1: X16, Full height, Half length Slot 2: X8, PCle 2.0 (5GT/s), Full height, Half length	PERC H800 or PERC H800 NV X8 PERC 6/E 256MB x8 PERC 6/E 512MB x8 6Gbs SAS HBA X8 SAS 5/E x8	Dual embedded GbE LOMs without TOE	Cabled HD options: Up to four 3.5" SAS or SATA drives Hot-Swap HD options: Up to four 3.5" SAS or SATA or 2.5" SAS or SSD drives	DDR3 ECC memory, hot-swap hard drives, redundant power supplies, quad-pack LED diagnostic/LCD
	R210	The PowerEdge R210 is an Intel processor-based entry 1-socket, 1U rack server—great for the small business or as a specialized application server or edge server for larger corporations.	1U	1U, 1-socket, dual- or quad- core Intel processors Up to 2 hard drives 4 DDR3 DIMM slots Optional advanced systems-management capabilities eSATA external storage connectivity option	One quad-core Intel® Xeon® Processor 3400 Series	Up to 16GB (4 U-DIMMs): 1GB/2GB/ 4GB DDR3 1066MHz or 1333MHz	One total: One PCIe x16 G2 slot	SAS 6/IR Adapter PERC S100 (software based) PERC S300 (software based) PERC 6/E with 256MB or 512MB of battery- backed cache	Embedded Dual-port Broadcom® NetXtreme™ II 5716 Gigabit Etherne.	Cabled options available: Up to two 2.5"/3.5" SAS, SATA or SSD drives	DDR3 ECC memory, SW RAID, TPM/ TCM; Quad-pack LED diagnostic; toolless chassis

# PowerEdge Tower Servers Achieve Unprecedented Value

Dell provides a complete tower server portfolio with a wide choice of performance and functionality, providing you with a solid foundation to run your businesses and organizations. The PowerEdge server towers are designed to deliver high quality and reliability at a consistently low acquisition cost with exceptional price for performance.



#### **Dell PowerEdge Tower Servers**

		Description	Form Factor	Features	Processor(s)	RAM (min/max)	PCI slots	Embedded RAID Controllers	Integrated NIC	Drive Bays	Availability Features
	T710	The PowerEdge T710 is an Intel processor-based 2-socket tower server that offers remote sites, large business units and growing businesses robust virtualization and server consolidation features, outstanding scalability and advanced systems management.	Tower or 5U Rack- mountable	2-socket, 4- or 6-core Intel processors Up to 16 hard drives 12 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up to 192GB (18 DIMM slots): 1GB/2GB/4GB/ 8GB/16GB DDR3 800MHz, 1066MHz or 1333MHz	1 PCIe x16 + 4 PCIe x8 + 1 PCIe x4 (all G2)	Optional PERC 6/i integrated SAS/SATA daughtercard controller with 256MB cache, PERC 5/E adapter, PERC 6/i, and SAS 6/iR	Dual embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC with failover and load balancing (4 total ports).	Hot-Swap options available: Up to eight 3.5" SAS or SATA drives Up to sixteen 2.5" SAS, SATA or SSD drives	DDR3, hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support (4 total ports); optional PERC6/i integrated daughtercard controller with battery-backed cache; hot-plug redundant cooling; toolless chassis; fibre and SAS cluster support; validated for Dell/EMC SAN
	T610	The PowerEdge T610 is an Intel processor-based 2-socket tower server ideal for growing small and medium businesses, as well as remote sites that require high availability, exceptional virtualization capabilities, and advanced systems management.	Tower or 5U Rack- mountable	2-socket,4- or 6-core Intel processors Up to 8 hard drives 12 DDR3 DIMM slots Advanced systems- management capabilities Redundancy options available	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	Up to 192GB (12 DIMM slots/ 6 per-processor): 1GB/2GB/4GB/ 8GB/16GB DDR3 800MHz, 1066MHz or 1333MHz	2 PCle x8 + 3 PCle x4 Gen2	Optional PERC 6/i integrated SAS/SATA daughtercard controller with 256MB cache, PERC 5/e adapter, PERC 6/i, and SAS 6/iR	One dual port embedded Broadcom® NetXtreme II™ 5709c Gigabit Ethernet NIC with failover and load balancing. Optional 1GBe and 10GBe add- in NICs	Hot-Swap options available: Up to eight 3.5" SAS or SATA drives Up to eight 2.5" SAS, SATA or SSD drives	DDR3 memory; ECC; hot-plug hard drives; optional hot-plug redundant power supplies; dual embedded NICs with failover and load balancing support; optional PERC6/i integrated daughtercard controller with battery-backed cache; hot-plug redundant cooling; toolless chassis; fibre and SAS cluster support; validated for Dell/EMC SAN
IOWers	T410	The PowerEdge T410 is an Intel processor-based 2-socket tower server well-suited for growing businesses and remote sites that require high performance, flexibility, advanced systems management and value.	Tower only (5U rack via 3rd party tray)	2-socket, 4- or 6-core Intel processors Up to 6 hard drives 8 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	Latest dual- core or quad-core Intel® Xeon® Processor 5500 Series	Up to 128GB (8 DIMM slots): 1GB/2GB/4GB/ 8GB/16GB DDR3 800MHz, 1066MHz or 1333MHz	4 PCIe x 8 (x4 routing), 1 PCIe x 16 (x8 routing)	Optional PERC 6/i, PERC 6/E with 256MB or 512MB of battery-backed cache, SAS 6/iR	Embedded Dual- port Broadcom® NetXtreme II™ 5716 Gigabit Ethernet	Cabled HD options: Up to six 3.5" SAS or SATA drives Hot-Swap HD options: Up to six 3.5" SAS or SATA Up to six 2.5" SAS, SATA or SSD drives	Quad-pack LED Diagnostic or LCD diagnostic with hot-swap HDD chassis; TPM; optional hot-swap hard drives; optional hotswap redundant power supply; optional PERC 6/i RAID controller with battery-backed cache; toolless chassis
	T310	The PowerEdge T310 is an Intel processor-based 1-socket tower server that provides growing businesses and remote offices enterprise-class performance, advanced systems management options and redundancy.	Tower	1-socket, dual- or quad-core Intel processors Up to 4 hard drives 6 DDR3 DIMM slots Optional advanced systems-management capabilities Redundancy options available	One quad- core Intel® Xeon® Processor 3400 Series	Up to 32GB (R-DIMM only): Support 6 R-DIMMs or 4 U-DIMMs, 1GB/2GB/4GB/8GB DDR3 800MHz, 1066MHz or 1333MHz	5 total: Two x8 slot, (one with x16 connector) One x4 slot (with x8 connector) Two x1 slots	Optional PERC 6/I, PERC 6/E with 256MB or 512MB of battery-backed cache, SAS 6/IR Adapter, PERC S300 (software based), PERC S100 (software based)	One Dual-Port Broadcom® NetXtreme™ II 5716 Gigabit Ethernet	Cabled HD options: Up to four 3.5" SAS or SATA drives Hot-Swap HD options: Up to four 3.5" SAS or SATA Up to four 2.5" SAS or SSD drives	DDR3 ECC memory, SW RAID, TPM/ TCM, Redundant PSU; Quad-pack LED diagnostic / LCD with Hot-swap HDD chassis, Hot-swap HDD; toolless chassis
	T110	The PowerEdge T110 is an Intel processor-based 1-socket tower server designed for growing small businesses needing an entry-level system for simple file sharing, centralization and collaboration.	Tower	1-socket, dual- or quad-core Intel processors Up to 4 hard drives 4 DDR3 DIMM slots Basic, system-level management eSATA external storage connectivity option	One quad- core Intel® Xeon® Processor 3400 Series	Up to 16GB (4 U-DIMMs): 1GB/2GB/4GB DDR3 1066MHz or 1333MHz	Four total: Two x8 slot, (one with x16 connector) One x4 slot (with x8 connector) One x1 slot	SAS 6/iR Adapter, PERC S300 (software based), PERC S100 (software based)	One Single-Port Broadcom® 5722 Gigabit Ethernet	Cabled options available: Up to four 3.5" SAS or SATA drives	DDR3 ECC memory, SW RAID, TPM/ TCM, quad pack LED lights, toolless chassis

## PowerEdge Blade Servers Invest in Total Business-Class Solutions

The Dell PowerEdge M-Series blade servers address the challenges of an evolving IT environment by delivering leading enterprise-class features and functionality. The M-Series delivers a unique array of options configured to meet the needs of your IT environment today and in the future.

#### Simple Manageability

Dell's blade solutions deliver an array of enterprise-class management capabilities, including centralized, chassisbased tools to maximize data center productivity.

#### **Increased Flexibility**

Designed to lead the industry in rapid deployment, Dell's fully modular blade enclosure provides an effective solution for scaling your I/O infrastructure that delivers savings in time, cabling, and switch port costs.

#### **Energy Efficiency**

Dell M-Series blades are designed for energy efficiency and density to address growing power consumption and space constraints in your data center.



#### Dell PowerEdge M1000e Blade Enclosure

	Product	Description	Form Factors	Power Supplies	Cooling Fans	I/O Modules	Management Modules	Management Highlights
M1000e	performance combined with	optimized	10U enclosure holds up to 16 blade servers	Choice of 3 or 6 hot- pluggable power supplies	redundant fan modules all	Up to 6 I/O modules for three redundant fabrics; available switches include Dell and Cisco® 1Gb/10Gb Ethernet with modular bays, Dell 10Gb Ethernet with modular bays, Dell Ethernet pass-through, Brocade® 4Gb Fibre Channel, Brocade® 8Gb Fibre Channel, Fibre Channel pass-through, Mellanox® DDR and QDR InfiniBand	1 (standard) or 2 (redundant) Chassis Management Controllers (CMCs); optional integrated KVM switch for "crash cart" management	Dynamic power management allows for predefined power limits to individual blades; real-time reporting for enclosure and blade power consumption; real-time thermal monitoring; secure SSL and command line interfaces; front control panel with interactive LCD for module setup, info, and troubleshooting

#### Dell PowerEdge Blade Servers

		Description	Form Features		Processor(s)	RAM (min/max)			Integrated NIC	Drive Bays	Availability Features
	M910	The PowerEdge M910 is an Intel processor-based high-performance 4-socket full-height blade server ideal for organizations that require maximum performance and scalability for core applications while minimizing their power and physical space requirements.	is an Intel processor- based high-performance 4-socket full-height blade server ideal for organizations that require maximum performance and scalability for core applications while minimizing their power and physical space  2- or 4-socket, 6- or 8-core Intel processors Up to 32 DDR3 DIMM slots Unique Dell FlexMem Bridge memory expansion technology Internal dual SD module for hypervisor redundancy Advanced embedded systems management		Up to four quad-, six-, or eight-core Intel® Xeon® Processor 7500 Series or, Up to two quad-, six-, or eight-core Intel® Xeon® Processor 6500 Series	1GB/2GB/ 4GB/8GB/ 16GB ECC DDR3	4 mezzanine card slots for up to 3 fully redundant, highly available I/O fabrics	PERC H200 PERC H700	Four embedded Broadcom® Gigabit NICs with TOE and iSCSI Firmware Boot	Hot-Swap options available: Up to two 2.5" SAS or SSD drives	Three USB 2.0 bootable ports on front panel for floppy, CD/DVD, memory key, keyboard/mouse; Integrated Dell Remote Access Controller (iDRAC); Integrated Dell LifeCycle Controller; Optional Redundant Embedded Persistent Storage for Virtualization Hypervisor
Blades	M710	The PowerEdge M710 is an Intel processor-based 2-socket, full-height blade server providing the bandwidth necessary for virtualization and performance-intensive business-critical applications.	Full-height blade; Up to 8 fit into an M1000e enclosure	2-socket, 4- or 6-Core Intel processors Up to 18 DDR3 DIMM slots Excellent memory scalability Advanced embedded systems management	Up to two quad-core or six-core Intel® Xeon® Processor 5500 or 5600 Series	1GB - 192GB up to 1333MHz DDR3	4 mezzanine card slots for up to 2 fully redundant, highly available, high-speed mezzanine card I/O fabrics	SAS 6/iR (no RAID, RAID 0/1) CERC 6/i (RAID 0/1)	Four embedded Broadcom Gigabit NICs with TOE and iSCSI Firmware Boot	Hot-Swap options available: Up to four 2.5" SAS or SSD drives	Three USB 2.0 bootable ports on front panel for floppy, CD/DVD, memory key, keyboard/mouse; embedded ATI RN50 video controller with 32MB memory; integrated Dell Remote Access Controller (iDRAC6); flexible I/O options include 1/10 Gigabit Ethernet, 4/8Gb Fibre Channel, and DDR or QDR InfiniBand; Integrated Persistent Storage for Virtualization
	M710HD	The PowerEdge M710HD is an Intel processor-based 2-socket, half-height blade server with extensive I/O flexibility and robust memory scalability for virtualization and workload consolidation.	Half-height blade; Up to 16 fit into an M1000e enclosure	2-socket, 4- or 6-core Intel processors Up to 18 DDR3 DIMM slots Excellent memory scalability Advanced embedded systems management	Up to two quad-core or six-core Intel® Xeon® Processor 5500 and 5600 Series	1GB - 192GBs up to 1333MHz DDR3	2 mezzanine card slots for flexible I/O options	PERC H200 Modular RAID Controller (6Gb/s)	Two embedded Broadcom® NetXtreme II™ 5709 Gigabit Ethernet NICs with failover and load balancing	Hot-Swap options available: Up to two 2.5" SAS or SSD drives	Two USB 2.0 bootable ports on front panel for floppy, CD/DVD, memory key, keyboard/mouse; Integrated Dell Remote Access Controller (IDRAC); Integrated Dell LifeCycle Controller; Optional Redundant Embedded Persistent Storage for Virtualization Hypervisor

#### Dell PowerEdge M1000e Blade Servers (cont.)

Description		Description	Form Factor Features		Processor(s)	RAM (min/max)			Integrated NIC	Drive Bays	Availability Features
Blades	M610	The PowerEdge M610 is an Intel prcoessor-based 2-socket, half-height blade server built for virtualization, mainstream business applications and front-end database workloads.	Half-height blade; Up to 16 fit into an M1000e enclosure	2-socket, 4- or 6-core Intel processors Up to 12 DDR3 DIMM slots Advanced embedded systems management	Up to two quad- core or six-core Intel® Xeon® Processor 5500 or 5600 Series	1GB - 192GB up to 1333MHz DDR3	2 mezzanine card slots for flexible I/O options	SAS 6/iR (no RAID, RAID 0/1) CERC 6/i (RAID 0/1)	Two embedded Broadcom Gigabit NIC with TOE and iSCSI Firmware Boot	Hot-Swap options available: Up to two 2.5" SAS or SSD drives	Two USB 2.0 bootable ports on front panel for floppy, CD/DVD, memory key, keyboard/mouse; embedded ATI RN50 video controller with 32MB memory; Integrated Dell Remote Access Controller (iDRAC6); flexible I/O options include 1/10 Gigabit Ethernet, 4/8Gb Fibre Channel, and DDR or QDR InfiniBand; Integrated Persistent Storage for Virtualization
	M610x	The PowerEdge M610x is an Intel processor-based 2-socket, full-height blade server ideal for organizations with unique I/O or computational needs requiring industry-standard PCIe slots.	Full-height blade; Up to 8 fit into an M1000e enclosure	2-socket, 4- or 6-core Intel processors Up to 12 DDR3 DIMM slots PCIe expansion module for added flexibility Advanced embedded systems management	Up to two quad- core or six-core Intel® Xeon® Processor 5500 and 5600 Series	1GB - 192GBs up to 1333MHz DDR3	2 mezzanine card slots for flexible I/O options	PERC H200 Modular RAID Controller (6Gb/s)	Two embedded Broadcom® NetXtreme II™ 5709 Gigabit Ethernet NICs with failover and load balancing	Hot-Swap options available: Up to two 2.5" SAS or SSD drives	Two full-height, full-length 2nd Generation x16 PCIe expansion slots; Two USB 2.0 bootable ports on front panel for floppy, CD/ DVD, memory key, keyboard/mouse; Integrated Dell Remote Access Controller (iDRAC); Integrated Dell LifeCycle Controller; Optional Embedded Persistent Storage for Virtualization Hypervisor

## PowerEdge Cloud Servers Your Apps, Our Horsepower

Hyperscale-inspired servers designed to bring the most compute power in the least amount of space. These servers have the right combination of features for your scale-out environment, and nothing more.



#### **Dell PowerEdge Cloud Servers**

		Description	Form Factor	Features	Processor(s)	RAM (min/max)	PCI slots	Drive Controllers	Embedded RAID Controllers	Integrated NIC	Max. Internal Storage**	Availability Features
	C1100	Designed to meet the demands of dense data center environments, the high-performance PowerEdge C1100 offers massive memory and disk storage in a space- efficient 1U form factor	2-socket, 1U rack mount	2x memory over previous Intel® generations Save 60% over a system that has 8 DIMM slots for 64Gb of memory  More hard drives in 1.7": At only 1U high, choose from high-capacity SATA, high-performance 6Gb SAS or enterprise-class SLC SSDs to create the optimal storage for your applications	Six-core Intel® Xeon® Processor 5600 Series Quad-core Intel® Xeon® Processor 5500 and 5600 Series	Up to 144GB (18 DIMM slots): 2GB/4GB/8GB DDR3, 1066MHz or 1333MH.	3 PCle G2 slots: 1 x 16 PCl Express Gen2 slot, 1 proprietary mezzanine for dual port 10GBE daughtercard, 1 proprietary mezzanine for LSI 1068E SAS daughtercard	ICH10R, LSI 2008 SAS daughtercard	LSI MegaRAID® 9260-8i, PERC H700	Intel 82576 - 2 x Gb Ethernet and 1 x 100Mb Ethernet dedicated management port	8TB SATA or NL 6Gb SAS	DDR3 ECC memory, hot-swap hard drives, redundant power supplies
Cloud Servers	C2100	A data monster with more memory and disk capacity to get results faster. The most drives with the most memory in the most popular 2U form factor	2-socket, 2U rack mount	2x memory over previous Intel generations  Save 60% over a system that has 8 DIMM slots for 64Gb of memory  The right mix: The mix of disk configurations and backplane options allow you to select the combination of components that best matches your needs	Six-core Intel® Xeon® Processor 5600 Series Quad-core Intel® Xeon® Processor 5500 and 5600 Series	Up to 144GB (18 DIMM slots): 2GB/4GB/8GB DDR3, 1066MHz or 1333MH.	4 PCle G2 slots: 2 x 8 PCl Express Gen2 slots, 1 proprietary mezzanine for dual port 10Gb Ethernet daughtercard, 1 proprietary mezzanine for LSI 2008 SAS daughtercard	ICH10R, LSI 2008 SAS daughtercard	PERC H200, PERC H700, LSI MegaRAID® 9260-8i	Intel 82576 - 2 x Gb Ethernet and 1 x 100Mb Ethernet dedicated management port	25TB SATA or 24TB NL SAS	DDR3 ECC memory, hot-swap hard drives, redundant power supplies
O	C6100	Ultra-dense 2U shared infrastructure supporting up to 4 independent server nodes, providing capacity, performance and flexibility in a dense eco-friendly package	4 x 2-sockets in a 2U rack mount	2x density of traditional 1U servers  20% more dense than blades  30% more storage than comparable HP servers  Shared infrastructure uses less floor space, power and cooling  Service individual nodes to increase uptime by up to 75%  92% efficient hot-plug redundant power supplies	Six-core Intel® Xeon® Processor 5600 Series Quad-core Intel® Xeon® Processor 5500 and 5600 Series	Up to 96GB (12 DIMM slots): 2GB/4GB DDR3, 1066MHz or 1333MHz	1 PCIe x 8 mezzanine daughtercard slot and x16 riser slot	LSI 1068e 3GB SAS/ LSI 2008 6GB SAS mezzanine	LSI 8708/ LSI9260-8i add-in RAID controller	Intel 82576 - 2 x Gb Ethernet and 1 x 100Mb Ethernet dedicated management port	12TB SATA or 24TB NL SAS	DDR3 ECC memory, independent hot-swap nodes and hard drives, two shared hot-plug power supplies

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