

Introducing
12th Generation
Dell™ PowerEdge™
Servers.



Power your customer's innovation
with Dell and Intel innovation.

Give your customers the power to do more with the new 12th Generation Dell™ PowerEdge™ servers powered by Intel® Xeon® processors. Help them achieve more, maximize efficiency, and ensure business continuity.

Dell PowerEdge™ servers are built to support the work that IT organizations do. They are engineered to handle the most demanding business applications and designed with specific features to better run workloads like HPC, collaboration, database, ERP, business intelligence and data warehousing.

Our latest generation of PowerEdge™ servers built on the Intel® Xeon® processor E5 product family bring innovations to deliver value by taking technology that was previously inaccessible to most customers, to give them now the power to do more while saving money and resources. See what innovation can do for them:



Innovations	Customer benefits
Multi-core Intel® Xeon® E5-2600 processors Versatile processors at the heart of companies flexible, efficient data center.	Performance-packed processing Experience unrivalled performance for server applications and gain 80% more performance than previous generations*.
iDRAC7 with Lifecycle Controller 2.0 Enabling agentless remote management from anywhere, at anytime with a direct access to hardware status, inventory and configuration even if the OS is down or not installed.	Powerful system management Uniform lifecycle processes to simplify servers deployment, updates, monitoring and maintenance, providing an overall improved efficiency.
Integrated PCIe Gen3-capable expansion slots giving twice the interconnect bandwidth (8Gbps) as PCIe 2.0.	Impressive I/O capabilities To enable more effective PCIe data center solutions, such as GPU processing acceleration, power management and networking.
PowerEdge Express Flash SSD connecting SSD's directly to the PCI Gen 3 bus.	Faster interactions incredibly fast data access and significantly increasing application performances.
Dell OpenManage™ Power Center and Dell fresh air program allowing servers to run at higher temperatures ¹ or even without AC.	Energy efficiency and power management Gain tremendous operational costs savings.
PowerEdge Select Network Adapter Dell's unique embedded NIC technology in either 1GbE or 10GbE speeds without using a PCIe slot.	Flexible and scalable networking with greater memory, enhanced storage and scalable I/O where end-users can run more workloads and more virtual machines
Reliability, Availability and Serviceability (RAS) features such as hot-swap disks, fans and power supply units (PSUs).	Enhanced productivity and reliability Ensure maximum uptime, data security, and low-risk maintenance.

¹ All Dell 12G servers can operate at 45°C for excursions.

See how the new 12th Generation Dell PowerEdge servers can help companies process more data, support more applications, and reduce infrastructure complexity. All thanks to numerous innovations that combine with the Intel® Xeon® processors to give users more power and the tools to harness it.



Dell™ PowerEdge™ Tower Servers

Achieve unprecedented values.

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



Dell PowerEdge™ T320

T320
1-socket tower server

Ideal for office collaboration and productivity applications.

- 1x Intel® Xeon® Processor E5-2400 Series
 - Up to 6 DIMMS with extensive memory (96GB)
 - 3 x PCIe Gen 3-enabled plus 2 x PCIe Gen 2 expansion slots
 - Optional internal GPU accelerators
 - Optional hot-plug, front-access PCIe SSDs
 - Up to 16 x 2.5" or 8 x 3.5" hard drives
- Available June 2012.



Dell PowerEdge™ T420

T420
2-socket tower server

Ideal for database applications and general purpose Small and Medium Businesses workload.

- Up to 2 Intel® Xeon® Processor E5-2400 Series
 - Up to 12 with extensive memory (192GB)
 - 4 x PCIe Gen 3-enabled plus 2 x PCIe Gen 2 expansion slots
 - Optional internal GPU accelerators
 - Optional hot-plug, front-access PCIe SSDs
 - Up to 16 x 2.5" or 8 x 3.5" hard drives
- Available June 2012.



Dell PowerEdge™ T620

T620
Enterprise-class 2-socket tower server

Ideal for key workloads such as databases, web serving, CRM, desktop virtualization, medical imaging and security management.

- Up to 2 Intel® Xeon® Processor E5-2600 Series
- Up to 24 DIMMS with extensive memory (768GB)
- 7 x PCIe Gen 3-enabled expansion slots
- Optional Up to 4 x internal GPU accelerators
- Optional hot-plug, front-access PCIe SSDs
- Up to 32 x 2.5" or 12 x 3.5" hard drives

Dell™ PowerEdge™ M-Series 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 customers IT environment today and in the future.



Dell PowerEdge™ M420

M420
2-Socket, quarter-height blade
Ideal for exceptionally dense environments with extremely limited space.

- Up to 2 Intel® Xeon® Processor E5-2400 Series
- Up to 6 DIMMS with extensive memory (192GB)
- 1 x PCIe Gen3-enabled expansion slots
- Up to 2 x 1.8" SSD hard drives



Dell PowerEdge™ M520

M520
2-socket, half-height blade
Ideal for entry-level virtualization and general business applications.

- Up to 2 Intel® Xeon® Processor E5-2400 Series
- Up to 12 DIMMS with extensive memory (192GB)
- 2 x PCIe Gen3-enabled expansion slots
- Up to two SATA HDD/SSD or SAS HDD/SSD



Dell PowerEdge™ M620

M620
2-socket, half-height blade
Ideal for most demanding workloads, e-mail, database and virtual environments.

- Up to 2 Intel® Xeon® Processor E5-2600 Series
- Up to 24 DIMMS with extensive memory (768 GB)
- Up to two 2.5" PCIe SSD, SATA HDD/SSD, or SAS HDD/SSD
- 2 x PCIe Gen3-enabled expansion slots



Dell PowerEdge™ M820

M820
4-socket, full-height blade
Ideal for core business workloads that require power and scalability.

- Up to 4 Intel® Xeon® Processor E5-4600 Series
- Up to 48 DIMMS with extensive memory (1.5 TB)
- 4 x PCIe Gen3-enabled expansion slots
- Up to four 2.5" SAS, SSD, or up to two PCIe Express Flash SSD.





Dell™ PowerEdge™ Rack Servers





Maximize performance and availability.

Dell has 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, functionality and outstanding reliability.

Now, with the 12th generation PowerEdge™ rack servers engineered with the newest Dell server technology, and the latest Intel® Xeon® processor E5-Series, your customers will gain outstanding storage capacity, high memory density and I/O capabilities. With double the memory capacity of previous server generations, they will actually be able to achieve flexibility, scalability, and easy life cycle manageability.



			
Dell PowerEdge™ R320	Dell PowerEdge™ R420	Dell PowerEdge™ R520	Dell PowerEdge™ R620
R320 1 socket/1U rack server	R420 2- socket/1U rack server	R520 2- socket/2U rack server	R620 Hyper-dense 2-socket, 1U rack server
Ideal for basic IT workloads and department Web servers.	Ideal for basic IT workloads, Web servers and small HPC clusters.	Ideal for low-cost storage, Web servers and hosting.	Ideal for virtualization, HPC, and workgroup collaboration applications.
<ul style="list-style-type: none"> • 1 x Intel® Xeon® Processor E5-2400 Series • Up to 6 DIMMS with extensive memory (96GB) • 1 x PCIe slot Gen 3 plus 1 x PCI Gen 2 slot expansion slot • Optional internal GPU accelerators • Optional hot-plug, front-access PCIe SSDs • Up to 8 x 2.5" or 4 x 3.5" hard drives 	<ul style="list-style-type: none"> • Up to 2 Intel® Xeon® Processor E5-2400 Series • Up to 12 DIMMS with extensive memory (192GB) • Up to 2 x PCIe Gen 3-enabled expansion slots • Optional internal GPU accelerators • Optional hot-plug, front-access PCIe SSDs • Up to 8 x 2.5" or 4 x 3.5" hard drives 	<ul style="list-style-type: none"> • Up to 2 Intel® Xeon® Processor E5-2400 Series • Up to 12 DIMMS with extensive memory (192GB) • Up to 4 x PCIe Gen 3-enabled expansion slots • Optional internal GPU accelerators • Optional hot-plug, front-access PCIe SSDs • Up to 8 x 3.5" hard drives 	<ul style="list-style-type: none"> • Up to 2 Intel® Xeon® Processor E5-2600 Series • Up to 24 DIMMS with extensive memory (768GB) • Up to 3 PCIe Gen 3-enabled expansion slots • Choice of embedded NIC technology • Optional hot-plug, front-access PCI Express® flash drives • Up to 10 x 2.5" hard drives

			
Dell PowerEdge™ R720	Dell PowerEdge™ R720XD	Dell PowerEdge™ R820	Dell PowerEdge™ C6220
R720 2-socket, 2U rack server	R720xd 2-socket, 2U rack server	R820 4-socket rack server	C6220 Ultra-efficient 2-socket, 4-in-2U rack server
Ideal for data warehouses, e-commerce, virtual desktop infrastructure (VID), databases and HPC.	Ideal for workloads like medical imaging, large mail capacity and intensive data analytics, and collaboration software.	Ideal for Ideal for dense 4-socket designs and 4-socket HPC applications.	Ideal for cloud builders, high performance computing shops, hosters, Web 2.0 and big data applications.
<ul style="list-style-type: none"> • Up to 2 Intel® Xeon® Processor E5-2600 Series • Up to 24 DIMMS with extensive memory (768GB) • Up to 7 PCIe Gen 3-enabled expansion slots • Optional internal GPU accelerators • Optional hot-plug, front-access PCIe SSDs • Up to 8 x 3.5" or 16x2.5" hard drives 	<ul style="list-style-type: none"> • Up to 2 Intel® Xeon® Processor E5-2600 Series • Up to 24 DIMMS with extensive memory (768GB) • Up to 6 PCIe Gen 3-enabled expansion slots • Choice of embedded NIC technology • 1 or 2 internal RAID controllers • Up to 12 x 3.5" or 26 x 2.5" hard drives 	<ul style="list-style-type: none"> • Up to 4 Intel® Xeon® E5-4600 Series • Up to 48 DIMMS with extensive memory (768GB) • Up to 7 PCIe Gen 3-enabled expansion slots • Choice of embedded NIC technology • 1 or 2 internal RAID controllers • Up to 16 x 2.5" hot-plug SAS, SATA, or SSD 	<ul style="list-style-type: none"> • Up to 8 Intel® Xeon® Processor E5-2600 Series • Up to 16 DIMMS with extensive memory (up to 512GB per server node) • 80% more performance with Turbo Boost Technology* • Up to 4 hot-swap server nodes in 2U • Up to 12 x 3.5" or 24 x 2.5" hard drives

*(Generational Performance) Source: Performance comparison using geometric mean of SPECint*_rate_base2006, SPECfp*_rate_base2006, STREAM*_MP Triad, and Linpack* benchmark results. Baseline geometric mean score of 166.75 on prior generation 2S Intel® Xeon® Processor X5690 platform based on best published SPECrate* scores to www.spec.org and best Intel internal measurements on STREAM*_MP Triad and Linpack as of 5 December 2011. New geometric mean score of 306.74 based on Intel internal measured estimates using an Intel® Rose City platform with two Intel® Xeon® processor E5-2690, Turbo and EIST Enabled, with Hyper-Threading, 128 GB RAM, Red Hat® Enterprise Linux Server 6.1 beta for x86_64, Intel® Compiler 12.1, THP disabled for SPECfp*_rate_base2006 and enabled for SPECint*_rate_base2006. ©2012 Dell Products. Dell, the Dell logo, are registered trademarks or trademarks of Dell Inc. Dell disclaims proprietary interest in the trademarks or trade names of other entities used to refer to them or their products. Intel, Intel Logo, Intel Xeon are trademarks of Intel Corporation in the U.S. and other countries. Other trademarks or trade names may be used in this document to refer to third party products. Dell disclaims proprietary interest in the marks and names of others. Dell Corporation Limited, Dell House, The Boulevard, Cain Road, Bracknell, Berkshire RG12 1LF. If you wish not to receive further marketing material via fax or direct mail please inform us via mail: delluk@clientmail.eu.com; post: Dell - Suppressions. PO Box 59, ROSS ON WYE, HR9 7ZS, United Kingdom; or fax: 0800 3283071.

