Cisco Unified Computing System Claims Eight New World Records on Industry-Standard Benchmarks with the Intel Xeon Processor E5 Family

Performance Brief
March 2012

Highlights

Eight World Records

- Cisco captures eight world records on industry benchmarks on the same day that Intel announces the new Intel® Xeon® processor E5 family, bringing the total number of world records set by the Cisco Unified Computing System™ (Cisco UCS™) to 63.

Intel Xeon Processor E5 Family

- Designed with versatility in mind, the processors form the core of a flexible and efficient data center and deliver adaptive performance to workloads.

Broad Range of Performance

- This world-record performance demonstrates the breadth of Cisco's product line and the way in which Cisco UCS can accelerate performance across the data center—including delivering raw computing power for individual servers and high-performance computing (HPC) grids, accelerating enterprise applications, and powering Java application servers.

Broad Range of Server Products

- Cisco offers 12 blade and rack servers to power a range of workload requirements, all in the first unified system based on industry-standard, x86-architecture servers.

With the announcement of the versatile Intel Xeon processor E5 family, Cisco is first to demonstrate the full power of these processors by claiming eight new world records on industry benchmarks.

Designed to handle demanding workloads and support requirements for massive scalability and memory and I/O capacity, the broad portfolio of Cisco Unified Computing System™ (Cisco UCS™) blade and rack servers deliver industry-leading performance to data centers in a unified infrastructure (Table 1).

Table 1. World-Record Performance

Server	Processor	Benchmark	Score
Cisco UCS B200 M3 Blade Server	Intel Xeon processor E5-2690 at 2.9 GHz	Oracle E-Business Suite 12.1.2 Extra Large Payroll	828,729 Employees/hr Number-one result
		Oracle E-Business Suite 12.1.2 Large Order-to-Cash	206, 044 Lines/hr Number-one result
Cisco UCS C240 M3 Rack Server	Intel Xeon processor E5-2690 at 2.9 GHz	SPEComp®Mbase2001	94065 Number-one 2-socket server
Cisco UCS C220 M3 Rack Server	Intel Xeon processor E5-2690 at 2.9 GHz	SPECjbb®2005	1584567 business operations per second (bops); 792284 bops with 2 Java virtual machines (JVMs) Number-one 2-socket server
		SPECint®_rate_base2006	671 Number-one 2-socket server
		SPECfp®_rate_base2006	496 Number-one 2-socket server
		SPECfp®_base2006	89.9 Number-one 2-socket server
		SPECompLbase2001	527122 Number-one 2-socket server

Cisco Servers Powered by the Intel Xeon Processor E5 Family

Cisco's world-record results were established using three new 2-socket servers powered by the Intel Xeon processor E5 family.

The **Cisco UCS B200 M3 Blade Server** combines computing power with up to 384 GB of memory in a half-width form factor for memory-demanding workloads (Figure 1). Programmable I/O capacity enables the number and type of I/O devices to be configured on demand.

The **Cisco UCS C220 M3 Rack Server** delivers performance in a compact, one-rack-unit (1RU) form factor. Up to eight front-accessible, hot-swappable SAS, SATA, or SSD drives and up to 256 GB of memory are supported. In addition to two PCIe 3.0 slots, the server includes two built-in Gigabit Ethernet interfaces.

Designed for expandability, the **Cisco UCS C240 M3 Rack Server** supports up to 24 front-accessible, hot-swappable, SAS, SATA, or SSD drives, up to 384 GB of memory, five PCIe 3.0 slots, and four built-in Gigabit Ethernet interfaces for optimal performance.

Intel Xeon Processor E5 Family

The versatile Intel Xeon processor E5 family forms the core of a flexible and efficient data center. Adaptive performance and built-in capabilities, combined with Intel integrated I/O, help eliminate bottlenecks and increase agility. Almost any environment—from virtualization and cloud computing platforms to real-time transaction processing systems—can take advantage of the Intel Xeon processor E5 family to boost computing and storage performance and streamline data center operation.

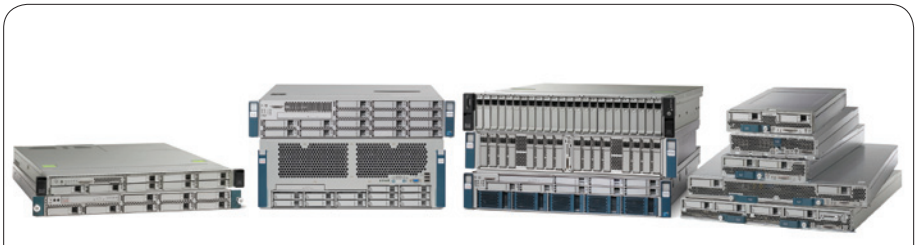

Figure 1. Cisco Unified Computing System Rack and Blade Servers

Cisco Unified Computing System

While all vendors have access to Intel processors, only Cisco unleashes their power to deliver high performance to applications. Cisco UCS integrates industry-standard, x86-architecture blade and rack servers with networking and storage access into a unified system. The system is programmed through a model-based management interface to accelerate the deployment and performance of applications in bare-metal, virtualized, and cloud-computing environments. A unified fabric supports network and storage I/O, while Cisco Fabric Extender Technology (FEX Technology) brings the network directly to servers and virtual machines for increased performance, security, and manageability.

Performance That Matters

Businesses understand that every vendor is able to set a performance record now and then—but setting seven records on the same day of a new processor launch is truly exceptional. The benchmark results cited in this document demonstrate performance on critical real-world server use cases, including general-purpose computing, Java applications, high-performance computing, and complex virtualization and cloud-computing workloads. Cisco's industry leadership and ability to set and reset world records on critical benchmarks are testimony to the fact that Cisco is not just selling servers—it is reinventing the server market.

For More Information

For more information about the Cisco Unified Computing System, visit http://www.cisco.com/go/ucs.

Disclosures

The results described in this document were obtained from detailed benchmark results available at http://www.cisco.com/go/ucsatwork as of March 9, 2012. SPEC®, SPECfp, SPECint, SPECjbb, and SPECcomp are registered trademarks of Standard Performance Evaluation Corporation. Comparative benchmark results are available at http://www.spec.org.

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