POWER YOUR FUTURE-READY CLOUD

With Intel® Xeon® Scalable processors

DIGITAL TRANSFORMATION REQUIRES ...

EFFICIENCY

#1 factor for digital transformation is improving operational efficiency, according to enterprise survey[1]

AGILITY

62% of IT managers have a large app-development backlog[2]

SECURITY

More than **700 million malware samples** reported in Q2 2017[3]

BUILD YOUR HYBRID CLOUD FOUNDATION ON INTEL® XEON® SCALABLE PROCESSORS

OPTIMIZED PERFORMANCE:

Lets you develop and deploy services faster

UP TO
4.2X MORE VMS PER SERVER
vs. a four-year-old Intel® Xeon® processor E5-2690[4]

UP TO
1.65X AVERAGE GENERATIONAL GAINS
on two-socket servers across 12 industry-standard workloads[5]

VERSATILE, SCALABLE PLATFORM:

Supports demanding new workloads and enables real-time insights

UP TO
5X FASTER ANALYTICS
compared to previous-generation Intel® Xeon® processors[6]

UP TO
2X INCREASED STORAGE
efficiency on a virtual storage area network (VSAN)*[7]

SECURITY WITHOUT COMPROMISE:

Helps strengthen security across your ecosystem

UP TO
2.42X FASTER SSL WEB-PROXY PERFORMANCE
vs. the previous-generation Intel® Xeon® processor E5 v4 family[8]

ENHANCED ENCRYPTION ALGORITHMS
enable you to more broadly deploy advanced security features without compromising performance

REALIZE THE FULL POTENTIAL OF A HYBRID CLOUD

Built on Intel® Xeon® Scalable processors

Learn More:

Read the "Future-Ready Cloud" solution brief:
intel.com/content/www/us/en/cloud-computing/future-ready-cloud-brief.html

View the "Hybrid or Bust" webcast:
youtube.com/watch?v=CWFRUykw3aM

Read what one leading analyst says about unlocking the value of the cloud:
https://plan.seek.intel.com/us_en_influencer-ess_registration-form-forrester_hybridcloud_html

Learn how the global ecosystem of validated Intel® Select Solutions help ensure optimized performance
intel.com/selectsolutions

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[1] Clark, Tim. "Think Digital Transformation Doesn't Matter? Your Customers Beg to Differ." SAP Business Trends. May 2016. https://blogs.sap.com/2016/05/19/think-digital-transformation-doesnt-matter-your-customers-beg-to-differ/.

[2] IDC. "Why Upgrade Your Server Infrastructure Now?" Sponsored by Dell. July 2016. emc.com/collateral/analyst-reports/idc-why-upgrade-server-infrastructure.pdf.

[3] Source: A commissioned study conducted by Forrester Consulting on behalf of Intel in May 2017.

[4] Up to 65% lower four-year total cost of ownership (TCO) estimate example based on equivalent rack performance using a VMware ESXi* virtualized consolidation workload comparing 20 installed 2-socket servers with the Intel® Xeon® processor E5-2690 running VMware ESXi* 6.0 GA and using Guest OS Red Hat* Enterprise Linux* (RHEL*) 6.4 (at a total cost of $919,362) to five new servers with the Intel® Xeon® Platinum 8180 processor running VMware ESXi* 6.0 U3 GA and using Guest OS RHEL* 6 64-bit (at a total cost of $320,879, including basic acquisition). Server pricing assumptions are based on current OEM retail published pricing for 2-socket servers with the Intel® Xeon® processor E5-2690 v4 and two CPUs in a 4–socket server using the Intel® Xeon® processor E7-8890 v4—subject to change based on actual pricing of systems offered.

[5] 1.65x Average Performance Gains: Geomean based on normalized generational performance (estimated based on Intel internal testing of online transaction processing [OLTP] brokerage, SAP SD 2-Tier*, HammerDB*, server-side Java*, SPEC*int_rate_base2006, SPEC*fp_rate_base2006, server virtualization, STREAM* triad, LAMMPS*, DPDK L3 packet forwarding, Black-Scholes, and the Intel® Distribution for LINPACK* Benchmark. intel.com/content/www/us/en/benchmarks/server/xeon-scalable/xeon-platinum-world-record.html.

[6] Up to 5x claim based on OLTP warehouse workload: one-node, 4 x Intel® Xeon® processor E7-4870 on Emerald Ridge with 512 GB total memory on Oracle* Linux* 6.4 using Oracle Database 12c* running 800 warehouses. Benchmark: HammerDB*, Score: 2.46322e+006 (higher is better). Compared to: one-node, 4 x Intel® Xeon® Platinum 8180 processor on Lightning Ridge SKX with 768 GB total memory on Red Hat* Enterprise Linux* (RHEL*) 7.3 using Oracle* 12.2.0.1 (including database and grid) with 800 warehouses. Score: 1.2423e+007.

[7] Up to 4.28x more VMs based on a server-virtualization consolidation workload. Based on Intel® internal estimates with a one-node setup using 2 x Intel® Xeon® processor E5-2690 with 256 GB total memory on VMware ESXi* 6.0 GA and using Guest OS Red Hat* Enterprise Linux* (RHEL*) 6.4, glassfish 3.1.2.2*, and postgresql 9.2*. Data source: request number 1,718. Benchmark: server virtualization consolidation, score: 377.6 @ 21 VMs. Compared to a one-node setup using 2 x Intel® Xeon® Platinum 8180 processor on Wolf Pass SKX with 768 GB total memory on VMware ESXi* 6.0 U3 GA and using Guest OS RHEL* 6 64-bit. Data source: request number 2,563. Benchmark: server virtualization consolidation, score: 1,580 at 90 VMs.
Higher is better.

[8] Intel. "Intel® Xeon® Scalable Processors World Record Benchmarks." intel.com/content/www/us/en/benchmarks/server/xeon-scalable/xeon-platinum-world-record.html.

Tests document performance of components on a particular test, in specific systems. Differences in hardware, software, or configuration will affect actual performance. Consult other sources of information to evaluate performance as you consider your purchase. For more complete information about performance and benchmark results, visit intel.com/benchmarks.

Cost reduction scenarios described are intended as examples of how a given Intel- based product, in the specified circumstances and configurations, may affect future costs and provide cost savings. Circumstances will vary. Intel does not guarantee any costs or cost reduction.

Intel does not control or audit third-party benchmark data or the web sites referenced in this document. You should visit the referenced web site and confirm whether referenced data are accurate.

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For more complete information about performance and benchmark results, visit intel.com/benchmarks.

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