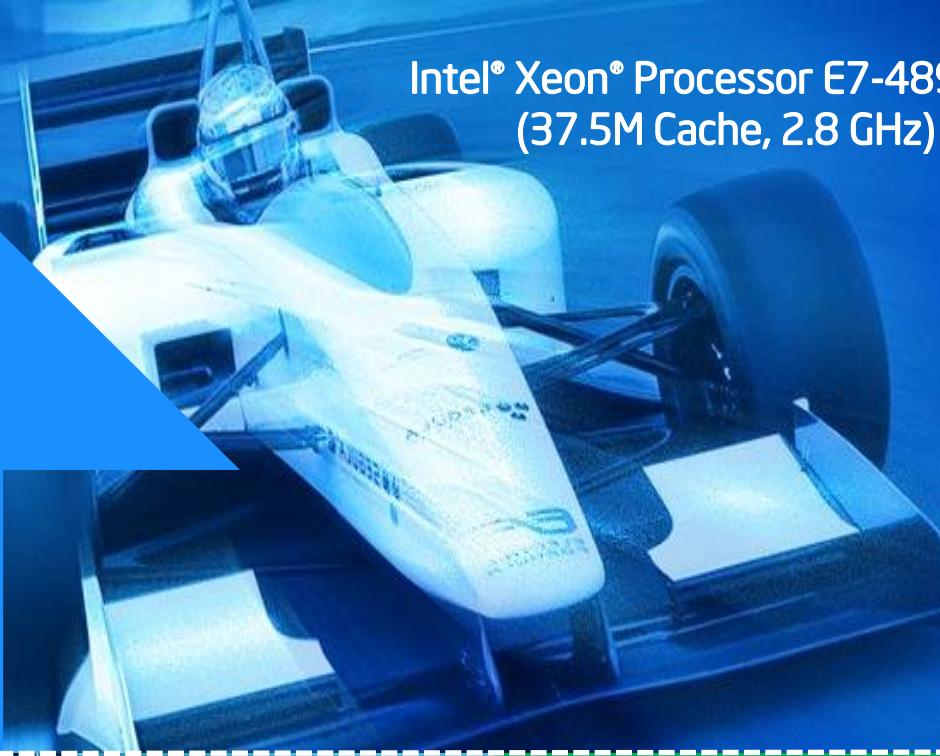




Intel® Xeon® Processor E7-4890 v2
(37.5M Cache, 2.8 GHz)

UP TO
80%
Higher
Performance¹

Est. SPECint*_rate_base2006



Reduce Your RISC

AT UP TO
80%
Est. Lower TCO²

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products. NOTES 1-2: See next slide for assumptions and configuration details.

Reduce Your RISC... Configuration Details

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1. **Up to 80% higher performance on Xeon E7 v2 over IBM Power* 7+ at ~80% lower TCO claim based on Intel estimated SPECint*_rate_base2006 results and pricing of comparable 4-socket rack server using Intel® Xeon® processor E7-4890 v2 (37.5M Cache, 2.8 GHz, 15-Cores) to IBM POWER*750 using POWER7+ (80M Cache, 4.0 GHz, 8-Cores) as of December 2013.**
 - a. SPECint_rate_base2006 benchmark results:
 - i. 4-chip IBM POWER7+-based Power 750 (1230 baseline score) source: <http://public.dhe.ibm.com/common/ssi/ecm/en/p003017usen/P0003017USEN.PDF> (page 8).
 - ii. 4-chip Intel Xeon processor E7-4890 v2 (2280 baseline score estimated)
 - b. Estimated street pricing:
 - i. 4-chip Intel Xeon Processor E7-4890 v2 platform Intel estimated price of \$51,237 with 4x Intel Xeon processor E7-4890 v2 processors, 256 GB memory, 2 HDDs.
 - ii. 4-chip IBM Power 750 Express Pricing of \$177,290: 4 x 4.0 GHz POWER7+* processors, 256GB memory, 2 HDDs. Source: IBM United States Prices 113-026, dated February 5, 2013 (hardware list prices). http://www-01.ibm.com/common/ssi/rep_ca/6/897/ENUS113-026/ENUS-113-026-LIST_PRICES_2013_02_05.PDF.
- c. **Up to 80% better 4-year TCO through lower software costs claim based on Intel internal total cost of ownership tool normalizing integer throughput performance between the two options.**
 - a. Calculations includes analysis based on performance, power, cooling, electricity rates, operating system and annual support/license costs on IBM AIX V7.1 at <http://www-304.ibm.com/easyaccess3/fileserve?contentid=249139> plus estimated server costs.
 - b. Assumptions include 42U racks, \$0.10 per kWh, cooling costs 2x average server power consumption costs, Alinean* assumptions of \$500 per server maintenance and \$30 per server networking costs, average real estate cost per year from VMware* planning tool at \$310 per sq. foot * 10 sq. feet per rack divided by the number of servers per rack, 60% CPU utilization and PUE of 2.0.

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- Relative performance is calculated by assigning a baseline value of 1.0 to one benchmark result, and then dividing the actual benchmark result for the baseline platform into each of the specific benchmark results of each of the other platforms, and assigning them a relative performance number that correlates with the performance improvements reported.
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