SPEC® OMPG2012 Result

Intel
Intel R2308WTTYS (Intel Xeon E5-2699 v4, 2.2GHz, DDR4-2133 MHz, SMT ON Turbo ON)

SPECompG_peak2012 = NC
SPECompG_base2012 = NC

OMP2012 license:13
Test sponsor: Intel
Tested by: Intel

Test date: Mar-2016
Hardware Availability: Mar-2016
Software Availability: Feb-2016

SPEC has determined that this result was not in compliance with the SPEC OMP2012 run and reporting rules. Specifically, the submitter reported that the result used an unsupported version of the Operating System. Results using a supported OS can be found at http://www.spec.org/omp2012/results/res2016q2/omp2012-20160530-0007.html.

Threads
350.md
351.bwaves
352.nab
357.bt331
358.botsalgn
359.botsspar
360.ilbdc
362.fma3d
363.swim
367.imagick
370.mgrid331
371.applu331
372.smithwa
376.kdtree

Hardware
CPU Name: Intel Xeon E5-2699 v4
CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz
CPU MHz: 2200
CPU MHz Maximum: 3600
FPU: Integrated

Operating System: Red Hat Enterprise Linux Server release 6.4, Kernel 2.6.32-358.el6.x86_64

Software
Continued on next page

Non-Compliant
SPEC OMPG2012 Result

Intel

Intel R2308WTYTS (Intel Xeon E5-2699 v4, 2.2GHz, DDR4-2133 MHz, SMT ON Turbo ON)

**SPECompG_peak2012 = NC**
**SPECompG_base2012 = NC**

<table>
<thead>
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<th>OMP2012 license:</th>
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<td>Intel</td>
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<td>Intel</td>
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*Results appear in the order in which they were run. Bold underlined text indicates a median measurement.*

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CPU(s) enabled: 44 cores, 2 chips, 22 cores/chip, 2 threads/core
CPU(s) orderable: 1,2 Chips
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 55 MB I+D on chip per chip
Other Cache: None
Memory: 128 GB (8 x 16 GB 2Rx4 PC4-2400U-R, running at 2133Mhz)
Disk Subsystem: NFS via 10GBPS Ethernet
Other Hardware: --
Base Threads Run: 88
Minimum Peak Threads: 44
Maximum Peak Threads: 88

Compiler: C/C++/Fortran: Version 14.0.4.211 of Intel Composer XE for Linux Build 20140805
C/C++/Fortran: Version 16.0.2.181 of Intel Composer XE for Linux Build 20160204
Auto Parallel: No
File System: Linux ext3
System State: Default
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other Software: None

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Intel DDR4-2133 MHz, SMT ON Turbo ON)
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Intel  

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Peak Compiler Invocation

C benchmarks (except as noted below):
specicc 2016u2
359.bottspar: specicc 2013_sp1.4.211
372.smithwa: specicc 2013_sp1.4.211
C++ benchmarks:
specicpc 2013_sp1.4.211
Fortran benchmarks (except as noted below):
specifort 2013_sp1.4.211
350.md: specifort 2016u2
371.applu331: specifort 2016u2

Peak Portability Flags

350.md: -FR
357.bt331: -mcmode=medium
353.swim: -mcmode=medium
367.imagick: -std=c99

Peak Optimization Flags

C benchmarks:
352.nab: -O3 -qopenmp -ipo -xCORE-AVX2 -fno-alias
-opt-malloc-options=1 -opt-alloc -fp-model fast=2
-no-prec-div -no-prec-sqrt -ansi-alias
358.botsalign: -O3 -qopenmp -ipo -xCORE-AVX2 -fno-alias -ansi-alias

Continued on next page
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Peak Optimization Flags (Continued)

- 359.botspar: -O3 -openmp -ipo -xCORE-AVX2 -fno-alias -ansi-alias
- 367.imagick: -O3 -qopenmp -ipo -xCORE-AVX2 -ansi-alias
- 372.smithwa: -O3 -openmp -ipo -xCORE-AVX2 -fno-alias
   -opt-streaming-stores always -opt-malloc-options=1
   -ansi-alias

C++ benchmarks:
- -O3 -openmp -ipo -xCORE-AVX2 -fno-alias -ansi-alias

Fortran benchmarks:
- 350.md: -O3 -qopenmp -ipo -xCORE-AVX2 -fno-alias
  -opt-malloc-options=1 -fp-model fast=2 -no-prec-div
  -no-prec-sqrt -align array64byte
- 351.bwaves: -O3 -openmp -ipo -xCORE-AVX2 -fno-alias -fp-model fast=2
  -no-prec-div -no-prec-sqrt -align array64byte
- 357.bt331: Same as 351.bwaves
- 360.ilbdc: -O3 -openmp -ipo -xCORE-AVX2 -fno-alias
  -align array64byte
- 362.fma3d: Same as 360.ilbdc
  -O3 -openmp -ipo -xCORE-AVX2 -fno-alias
  -opt-streaming-stores always -opt-malloc-options=3
  -align array64byte
- 370.mgrid331: -O3 -openmp -ipo -xCORE-AVX2 -fno-alias
  -opt-malloc-options=3 -align array64byte
- 371.applu331: -O3 -qopenmp -ipo -xCORE-AVX2 -align array64byte
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The flags file that was used to format this result can be browsed at:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20160331.00.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20160331.00.xml