SPEC® OMPG2012 Result

IBM

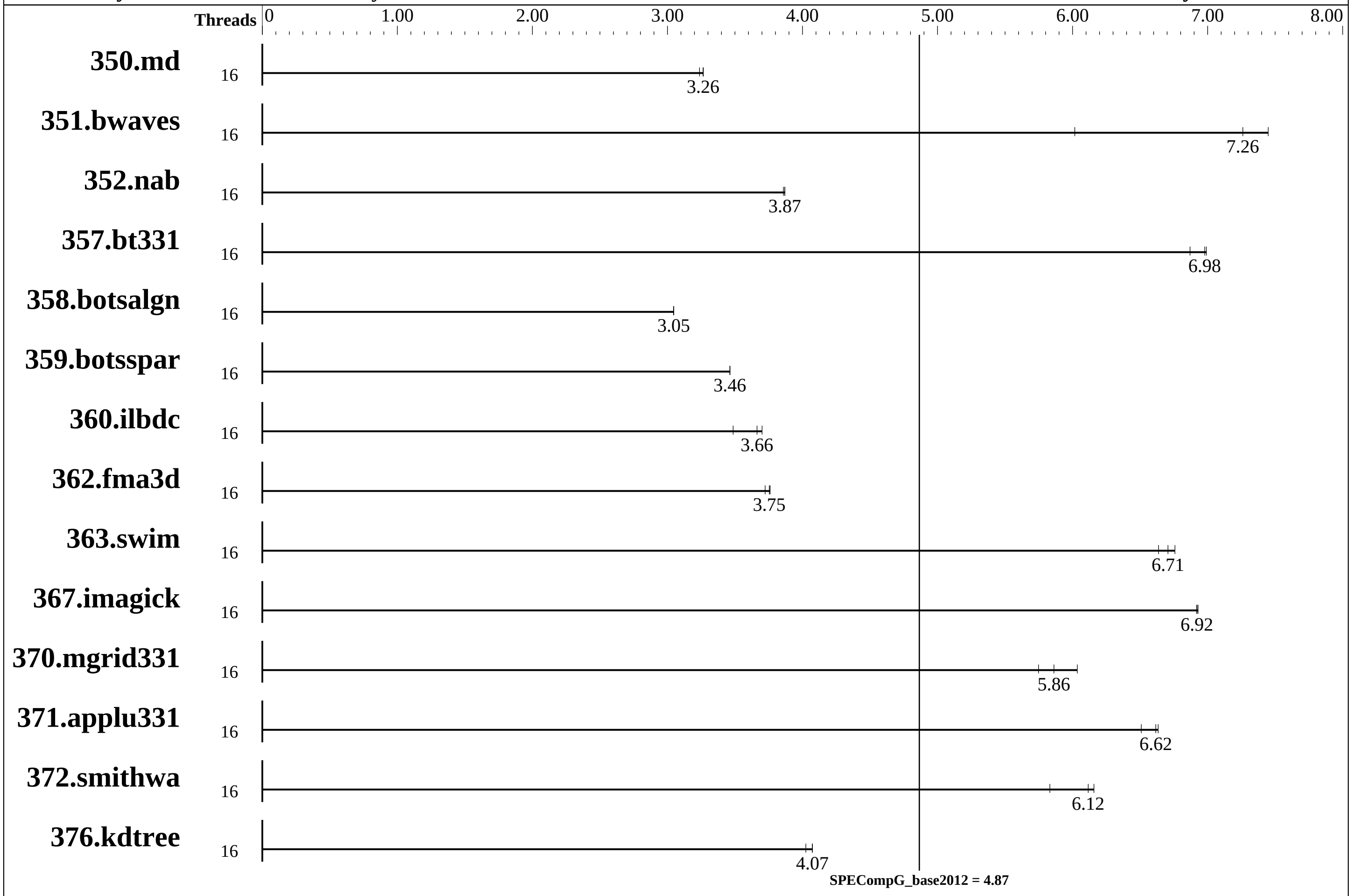
(Test Sponsor: Indiana University)

IBM NeXtScale nx360 M4 server

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 4.87

OMP2012 license:	3440A	**Test date:**	Mar-2015
Test sponsor:	Indiana University	**Hardware Availability:**	Aug-2014
Tested by:	Indiana University	**Software Availability:**	Jan-2015



Hardware

CPU Name:	Intel Xeon E5-2650 v2
CPU Characteristics:	Intel Turbo Boost Technology up to 3.4GHz, Hyper-Threading off
CPU MHz:	2600
CPU MHz Maximum:	3400
FPU:	Integrated
CPU(s) enabled:	16 cores, 2 chips, 8 cores/chip
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:	20 MB I+D on chip per chip, 20 MB shared / 8 cores
Other Cache:	None
Memory:	32 GB (8 x 4 GB 1Rx4 PC3-14900R-13, ECC)
Disk Subsystem:	250 GB 7200 RPM 2.5" SAS hard drives
Other Hardware:	None
Base Threads Run:	16

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Software

Operating System:	Red Hat Enterprise Linux Server release 6.6 (Santiago) Kernel 2.6.32-504.3.3.el6.x86_64 2.6.32-504.3.3.el6.x86_64
Compiler:	C/C++/Fortran: Version 15.0.1.133 of Intel Composer XE for Linux Build 20141023
Auto Parallel:	No
File System:	NFSv3 (IBM N5500 NAS) over 10 Gb ethernet
System State:	Multi-user, run level 3
Base Pointers:	64-bit
Peak Pointers:	Not Applicable
Other Software:	None

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Minimum Peak Threads: --
Maximum Peak Threads: --

Results Table

	Base							Peak						
Benchmark	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
350.md	16	1430	3.24	1418	3.27	**1419**	**3.26**							
351.bwaves	16	753	6.02	608	7.45	**624**	**7.26**							
352.nab	16	1008	3.86	1005	3.87	**1005**	**3.87**							
357.bt331	16	690	6.87	678	6.99	**679**	**6.98**							
358.botsalgn	16	**1428**	**3.05**	1428	3.05	1428	3.05							
359.botsspar	16	**1516**	**3.46**	1516	3.46	1516	3.46							
360.ilbdc	16	962	3.70	**972**	**3.66**	1021	3.49							
362.fma3d	16	1011	3.76	1020	3.72	**1012**	**3.75**							
363.swim	16	670	6.76	**675**	**6.71**	683	6.64							
367.imagick	16	1015	6.93	1016	6.92	**1016**	**6.92**							
370.mgrid331	16	**754**	**5.86**	732	6.03	769	5.75							
371.applu331	16	**916**	**6.62**	914	6.63	931	6.51							
372.smithwa	16	919	5.83	870	6.16	**876**	**6.12**							
376.kdtree	16	1118	4.02	**1105**	**4.07**	1105	4.07							

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Platform Notes

```
Sysinfo program /N/soft/mason/omp2012-1.0/SPEC_OMP2012v1.0_KARST/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on c105.karst.uits.iu.edu Sun Mar 22 13:20:52 2015

This section contains SUT (System Under Test) info as seen by
some common utilities.  To remove or add to this section, see:
  http://www.spec.org/omp2012/Docs/config.html#sysinfo

From /proc/cpuinfo
   model name : Intel(R) Xeon(R) CPU E5-2650 v2 @ 2.60GHz
      2 "physical id"s (chips)
      16 "processors"
   cores, siblings (Caution: counting these is hw and system dependent.  The
   following excerpts from /proc/cpuinfo might not be reliable.  Use with
   caution.)
      cpu cores : 8
      siblings  : 8
      physical 0: cores 0 1 2 3 4 5 6 7
      physical 1: cores 0 1 2 3 4 5 6 7
   cache size : 20480 KB

From /proc/meminfo
```

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Platform Notes (Continued)

```
    MemTotal:        32982456 kB
    HugePages_Total:        0
    Hugepagesize:        2048 kB

 From /etc/*release* /etc/*version*
    redhat-release: Red Hat Enterprise Linux Server release 6.6 (Santiago)
    system-release: Red Hat Enterprise Linux Server release 6.6 (Santiago)
    system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

 uname -a:
    Linux c105.karst.uits.iu.edu 2.6.32-504.3.3.el6.x86_64 #1 SMP Fri Dec 12
    16:05:43 EST 2014 x86_64 x86_64 x86_64 GNU/Linux

 run-level Sep 18 15:22

 SPEC is set to: /N/soft/mason/omp2012-1.0/SPEC_OMP2012v1.0_KARST
    Filesystem           Type  Size  Used Avail Use% Mounted on
    researchfs.iu.edu:/gs/hps/soft
                         nfs   599T  102T  498T  17% /N/soft

 Cannot run dmidecode; consider saying 'chmod +s /usr/sbin/dmidecode'

 (End of data from sysinfo program)
```

General Notes

```
 Environment:
```

Base Compiler Invocation

C benchmarks:
`icc`

C++ benchmarks:
`icpc`

Fortran benchmarks:
`ifort`

Base Portability Flags

350.md: `-free`
367.imagick: `-std=c99`

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Base Optimization Flags

C benchmarks:
`-O3 -ansi-alias -no-prec-div -openmp -mcmodel=medium -ipo -xCORE-AVX-I`

C++ benchmarks:
`-O3 -ansi-alias -no-prec-div -openmp -mcmodel=medium -ipo -xCORE-AVX-I`

Fortran benchmarks:
`-O3 -no-prec-div -openmp -mcmodel=medium -ipo -xCORE-AVX-I`

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20150415.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20150415.xml

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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