Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/

SPEC® OMPG2012 Result

(Cray) Cray XE6
(Test Sponsor: Indiana University)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 3.92

OMP2012 license: 3440A
Test sponsor: Indiana University
Tested by: Indiana University
Test date: Feb-2014
Hardware Availability: Apr-2013
Software Availability: Aug-2013

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Hardware
CPU Name: AMD Opteron 6380
CPU Characteristics: AMD Turbo CORE Technology up to 3.4GHz, Turbo CORE off
CPU MHz: 2500
CPU MHz Maximum: 3400
FPU: Integrated
CPU(s) enabled: 32 cores, 2 chips, 16 cores/chip
CPU(s) orderable: 1-2 chips
Primary Cache: 512 KB I on chip per chip, 64 KB I shared / 2 cores; 16 KB D on chip per core
Secondary Cache: 16 MB I+D on chip per chip, 2 MB shared / 2 cores
L3 Cache: 16 MB I+D on chip per chip, 8 MB shared / 8 cores
Other Cache: None
Memory: 64 GB (8 x 8 GB 2Rx4 PC3L-12800R-11, ECC)
Disk Subsystem: None
Other Hardware: None

Software
Operating System: SUSE Linux Enterprise Server 11 (x86_64), Cray Linux Environment 4.1
Kernel 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c
Compiler: C/C++/Fortran: Version 13.7-0 of PGI compilers 64-bit target on x86-64 Linux
Auto Parallel: No
File System: NFSv3 (IBM N5500 NAS) over Gb ethernet
System State: Multi-user, run level 3
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other Software: None

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Base Threads Run: 32
Minimum Peak Threads: --
Maximum Peak Threads: --

Results Table

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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/omp2012_br2/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on nid00929 Wed Feb 12 22:07:08 2014

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 : AMD Opteron(tm) Processor 6380
  2 "physical id"s (chips)
  32 "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 : 16
siblings : 16
physical 0: cores 0 1 2 3 4 5 6 7
physical 1: cores 0 1 2 3 4 5 6 7
cache size : 2048 KB

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Platform Notes (Continued)

From /proc/meminfo
  MemTotal:       66178284 kB
  HugePages_Total:       0
  Hugepagesize:       2048 kB

/usr/bin/lsb_release -d
  SuSE Linux Enterprise Server 11 (x86_64)

From /etc/*release* /etc/*version*
  SuSE-release:
    SUSE Linux Enterprise Server 11 (x86_64)
    VERSION = 11
    PATCHLEVEL = 1
  mazama-release:
    Mazama Wed Aug 28 02:06:30 CDT 2013 on hssbld0 by bwdev
    lsb-cray-mazama-7.1.0

uname -a:
  Linux nid00929 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c #1 SMP Thu Nov 15 00:24:59 UTC 2012 x86_64 x86_64 x86_64 GNU/Linux

SPEC is set to: /N/soft/mason/omp2012-1.0/omp2012_br2

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

(End of data from sysinfo program)

General Notes

Environment:
  ENV_OMP_NESTED=FALSE
  OMP_NESTED=FALSE
  OMP_DYNAMIC=FALSE
  OMP_NUM_THREADS=32
  threads = 32

Base Compiler Invocation

C benchmarks:
  pgcc

C++ benchmarks:
  pgCC

Fortran benchmarks:
  pgfortran
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Base Portability Flags

350.md: -Mfree
357.bt331: -mcmodel=medium
363.swim: -mcmodel=medium

Base Optimization Flags

C benchmarks:
- -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge -Mfprelaxed

C++ benchmarks:
- -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge -Mfprelaxed

Fortran benchmarks:
  350.md: -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge
  -Mfprelaxed
  351.bwaves: Same as 350.md
  357.bt331: -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge
  -Mfprelaxed -Bdynamic(*)
  360.ilbdc: Same as 350.md
  362.fma3d: Same as 350.md
  363.swim: Same as 357.bt331
  370.mgrid331: Same as 350.md
  371.applu331: Same as 350.md

(*) Indicates an optimization flag that was found in a portability variable.

The flags file that was used to format this result can be browsed at

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/pgi2013_linux_flags.xml
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For questions about this result, please contact the tester.  
For other inquiries, please contact webmaster@spec.org.

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