SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

| 400.perlbench | 401.bzip2 | 403.gcc | 429.mcf | 445.gobmk | 456.hmmer | 458.sjeng | 462.libquantum | 464.h264ref | 471.omnetpp | 473.astar | 483.a2l

### Hardware
- **CPU Name:** Intel Xeon E5-2699 v3
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.60 GHz
- **CPU MHz:** 2300
- **CPU(s) enabled:** 36 cores, 2 chips, 18 cores/chip
- **CPU(s) orderable:** 1,2 chip
- **Primary Cache:** 32 KB I + 32 KB D on chip per core

### Software
- **Operating System:** Red Hat Enterprise Linux Server release 7.0 (Maipo)
- **Compiler:** Kernel 3.10.0-123.el7.x86_64
- **Auto Parallel:** C/C++: Version 15.0.0.090 of Intel C++ Studio XE for Linux
- **File System:** Yes
- **System State:** xfs
- **System State:** Run level 3 (multi-user)
SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

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

Submit Notes

The config file option 'submit' was used.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/transparent_hugepage/enabled
SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Platform Notes

BIOS Configuration:
- HP Power Profile set to Custom
- HP Power Regulator to HP Static High Performance Mode
- Minimum Processor Idle Power Core State set to C6 State
- Minimum Processor Idle Power Package State set to No Package State
- QPI Snoop Configuration set to Early Snoop
- Thermal Configuration set to Maximum Cooling
- Collaborative Power Control set to Disabled
- Processor Power and Utilization Monitoring set to Disabled
- Intel Hyperthreading Options set to Disabled
- Sysinfo program /cpu2006/config.sysinfo.rev6914

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/cpu2006/Docs/config.html#sysinfo

From /proc/cpuinfo:
- model name : Intel(R) Xeon(R) CPU E5-2699 v3 @ 2.30GHz
- 2 "physical id"s (chips)
- 16 "processor"
- 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 : 18
- siblings : 18
- physical 0: cores 0 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
- physical 1: cores 0 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
- cache size : 46080 KB

From /proc/meminfo:
- MemTotal: 263843900 kb
- HugePages_Total: 0
- Hugepagesize: 2048 kb

From /etc/*release* /etc/*version*:
- os-release:
Continued on next page
SPEC CINT2006 Result

Hewlett-Packard Company

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

SPECint2006 = NC
SPECint_base2006 = NC

Test date: Jan-2015
Hardware Availability: Sep-2014
Software Availability: Sep-2014

SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Platform Notes (Continued)

NAME="Red Hat Enterprise Linux Server"
VERSION="7.0 (Maipo)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="7.0"
PRETTY_NAME="Red Hat Enterprise Linux Server 7.0 (Maipo)"
ANSI_COLOR="0;31"
CPE_NAME="cpe:/o:redhat:enterprise_linux:7.0:GA:server"
redhat-release: Red Hat Enterprise Linux Server release 7.0 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.0 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.0:ga:server

uname -a:
Linux W-bl460c_gen9-VP2.1 3.10.0-123.el7.x86_64 #1 SMP Mon May 5 11:16:57 EDT 2014 x86_64 x86_64 x86_64 GNU/Linux
run-level 3 Jan 6 11:23

SPEC is set to: /cpu2006

Filesystem     Type Size  Used Avail Use% Mounted on
/dev/sda4      xfs   277G   96G  182G  35% /
Additional information from dmidecode:
Warning: Use caution when you interpret this section. The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately identified", but the intent may not be met, as there are frequent changes to hardware, firmware, and the "DMTF SMBIOS" standard.

BIOS HP I36 08/26/2014
Memory:
16x NOT AVAILABLE 16 GB 2 rank 2133 MHz
(End of data from sysinfo program)
SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/cpu2006/libs/32:/cpu2006/libs/64:/cpu2006/sh"
OMP_NUM_THREADS = "36"

Binaries compiled on a system with 1x Core i5-4670K CPU + 16GB memory using RedHat EL 7.0

Base Compiler Invocation

C benchmarks:
icc  -m64

C++ benchmarks:
icpc -m64

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64  -DSPEC_CPU_LINUX_X64
411.bzip2: -DSPEC_CPU_LP64
425.gcc: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64  -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64  -DSPEC_CPU_LINUX
SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Base Optimization Flags
C benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32
C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32
-Wl,-z,muldefs -L/sh -l_martheap64

Base Other Flags
C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation
C benchmarks (except as noted below):
icc -m64
400.perlbench: icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32
445.gobmk: icc -m32 -L/opt/intel/composer_xe_2015/lib/ia32
C benchmarks (except as noted below):
icpc -m64
471.omnetpp: icpc -m32 -L/opt/intel/composer_xe_2015/lib/ia32

Peak Portability Flags
400.perlbench: -DSPEC_CPU_LINUX_IA32

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SPEC CINT2006 Result

Hewlett-Packard Company
ProLiant BL460c Gen9
(2.30 GHz, Intel Xeon E5-2699 v3)

SPECint2006 = NC
SPECint_base2006 = NC

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Jan-2015
Hardware Availability: Sep-2014
Software Availability: Sep-2014

SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Peak Portability Flags (Continued)

401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:
400.perlbench: -xCORE-AVX2 -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -opt-prefetch -ansi-alias

401.bzip2: basepeak = yes

403.gcc: -xCORE-AVX2 -ipo -O3 -no-prec-div -inline-calloc -opt-malloc-options=3 -auto-ilp32 -opec malleallocoptions=3 -auto-ilp32

basepeak = yes

445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -ansi-alias

456.hmmer: basepeak = yes

458.sjeng: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -unroll4

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SPEC CINT2006 Result

Hewlett-Packard Company
ProLiant BL460c Gen9
(2.30 GHz, Intel Xeon E5-2699 v3)

SPECint2006 = NC
SPECint_base2006 = NC

CPU2006 license: 3
Test sponsor: Hewlett-Packard Company
Tested by: Hewlett-Packard Company

Test date: Jan-2015
Hardware Availability: Sep-2014
Software Availability: Sep-2014

SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Peak Optimization Flags (Continued)

462.libquantum: basepeak = yes
464.h264ref: basepeak = yes

C++ benchmarks:
471.omnetpp: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-o3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-optim-reg-strategy=block -ansi-alias
-Wl,-z,muldefs -L/sh -lsmartheap

473.astar: basepeak = yes
483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic15.0-official-linux64.html
http://www.spec.org/cpu2006/flags/HP-Platform-Flags-Intel-V1.2-HSW-revE.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic15.0-official-linux64.xml
http://www.spec.org/cpu2006/flags/HP-Platform-Flags-Intel-V1.2-HSW-revE.xml

Non-Compliant
SPEC has determined that this result is not in compliance with the SPEC OSG Guidelines for General Availability and the SPEC CPU2006 run and reporting rules. Specifically, the submitter has notified SPEC that the system was run with a memory configuration that is not supported by Hewlett-Packard with the given processor configuration.

Non-Compliant