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.

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Results Table

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</tbody>
</table>

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

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

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.

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 Home 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
$Rev: 6914 $ $Date:: 2014-06-25 #$ e3fbb8667b5a285932ceab81e28219e1
running on W-bl460c_gen9-VP2.1 Wed Jan 7 14:03:02 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/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:"
core 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
  siblings 0 1 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*
Continued on next page
SPEC CFP2006 Result

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

SPECfp2006 = NC
SPECfp_base2006 = NC

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

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 7 11:36

SPEC is set to: /cpu2006
Filesysterm     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 determined", 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 HP 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.
**SPEC CFP2006 Result**

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

<table>
<thead>
<tr>
<th>SPECfp2006 =</th>
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</thead>
<tbody>
<tr>
<td>SPECfp_base2006 =</td>
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</table>

**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.**

### Base Portability Flags (Continued)

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>453.povray</td>
<td>-DSPEC_CPU_LP64</td>
</tr>
<tr>
<td>454.calculix</td>
<td>-DSPEC_CPU_LP64 -nofor_main</td>
</tr>
<tr>
<td>459.GemsFDTD</td>
<td>-DSPEC_CPU_LP64</td>
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<tr>
<td>465.tonto</td>
<td>-DSPEC_CPU_LP64 -nofor_main</td>
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<td>470.lbm</td>
<td>-DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX</td>
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<td>481.wrf</td>
<td>-DSPEC_CPU_LP64</td>
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<td>482.sphinx3</td>
<td>-DSPEC_CPU_LP64</td>
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</table>

### Base Optimization Flags

**C benchmarks:**

-xCORE-AVX2  -ipo  -O3  -no-prec-div  -parallel  -opt-prefetch  -ansi-alias

**C++ benchmarks:**

-xCORE-AVX2  -ipo  -O3  -no-prec-div  -opt-prefetch -ansi-alias

**Fortran benchmarks:**

-xCORE-AVX2  -ipo  -O3  -no-prec-div  -parallel  -opt-prefetch

**Benchmarks using both Fortran and C:**

-xCORE-AVX2  -ipo  -O3  -no-prec-div  -parallel  -opt-prefetch  -ansi-alias

### Peak Compiler Invocation

**C benchmarks:**

icc  -m64

**C++ benchmarks:**

icpc  -m64

Continued on next page
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Peak Compiler Invocation (Continued)

Fortran benchmarks:
ifort -m64

Benchmarks using both Fortran and C:
icc -m64 ifort -m64

Peak Portability Flags
Same as Base Portability Flags.

Peak Optimization Flags
C benchmarks:
433.milc: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-auto-ilp32 -ansi-alias
470.lbm: basepeak = yes
482.sphinx3: basepeak = yes

C++ benchmarks:
444.namd: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-fno-alias -auto-ilp32
447.dealII: basepeak = yes
450.soplex: basepeak = yes

Continued on next page
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)

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<tr>
<td>410.bwaves</td>
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<td>416.gamess</td>
<td>-xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -unroll2 -inline-level=0 -opt-malloc-options=3 -auto -unroll4</td>
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<td>434.zeusmp</td>
<td>basepeak = yes</td>
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<td>437.leslie3d</td>
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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 source 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

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For other inquiries, please contact webmaster@spec.org.

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