Huawei RH2288 V3 (Intel Xeon E5-2618L v3) SPECint®2006 = 60.4
SPECint_base2006 = 57.7

CPU2006 license: 3175
Test sponsor: Huawei
Tested by: Huawei

CPU Name: Intel Xeon E5-2618L v3
CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz
CPU MHz: 2300
FPU: Integrated
CPU(s) enabled: 16 cores, 2 chips, 8 cores/chip
CPU(s) orderable: 1.2 chip
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
Other Cache: None
Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R, running at 1866 MHz)
Disk Subsystem: 1 x 500 GB SATA, 7200 RPM

Software
Operating System: Red Hat Enterprise Linux Server release 7.0 (Maipo) 3.10.0-123.el7.x86_64
Compiler: C/C++: Version 15.0.0.090 of Intel C++ Studio XE for Linux
Auto Parallel: Yes
File System: ext4
System State: Run level 3 (multi-user)
Base Pointers: 32/64-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V10.0
## SPEC CINT2006 Result

**Huawei**

Huawei RH2288 V3 (Intel Xeon E5-2618L v3)

<table>
<thead>
<tr>
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**SPECint2006** = 60.4  
**SPECint_base2006** = 57.7

### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Base</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>248</td>
<td>39.5</td>
<td>247</td>
<td>39.5</td>
<td>246</td>
<td>39.6</td>
<td></td>
</tr>
<tr>
<td>401.bzip2</td>
<td>391</td>
<td>24.7</td>
<td>393</td>
<td>24.6</td>
<td>391</td>
<td>24.7</td>
<td></td>
</tr>
<tr>
<td>403.gcc</td>
<td>238</td>
<td>33.8</td>
<td>237</td>
<td>33.9</td>
<td>238</td>
<td>33.8</td>
<td></td>
</tr>
<tr>
<td>429.mcf</td>
<td>146</td>
<td>62.3</td>
<td>149</td>
<td>61.4</td>
<td>145</td>
<td>62.7</td>
<td></td>
</tr>
<tr>
<td>445.gobmk</td>
<td>371</td>
<td>28.2</td>
<td>372</td>
<td>28.2</td>
<td>372</td>
<td>28.2</td>
<td></td>
</tr>
<tr>
<td>456.hmmer</td>
<td>138</td>
<td>67.4</td>
<td>138</td>
<td>67.4</td>
<td>138</td>
<td>67.4</td>
<td></td>
</tr>
<tr>
<td>458.sjeng</td>
<td>368</td>
<td>32.9</td>
<td>368</td>
<td>32.9</td>
<td>368</td>
<td>32.9</td>
<td></td>
</tr>
<tr>
<td>462.libquantum</td>
<td>4.50</td>
<td>4610</td>
<td>4.60</td>
<td>4500</td>
<td>4.48</td>
<td>4620</td>
<td></td>
</tr>
<tr>
<td>464.h264ref</td>
<td>540</td>
<td>41.0</td>
<td>540</td>
<td>40.9</td>
<td>539</td>
<td>41.1</td>
<td></td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>234</td>
<td>26.7</td>
<td>233</td>
<td>26.8</td>
<td>235</td>
<td>26.6</td>
<td></td>
</tr>
<tr>
<td>473.astar</td>
<td>212</td>
<td>33.1</td>
<td>214</td>
<td>32.7</td>
<td>215</td>
<td>32.6</td>
<td></td>
</tr>
<tr>
<td>483.xalancbmk</td>
<td>108</td>
<td>64.0</td>
<td>107</td>
<td>64.4</td>
<td>107</td>
<td>64.3</td>
<td></td>
</tr>
</tbody>
</table>

### Submit Notes

The config file option 'submit' was used.

### Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

### Platform Notes

BIOS configuration:

- Set Power Efficiency Mode to Custom
- Set Snoop Mode to ES
- Set HT to Disable

Sysinfo program /spec15/config/sysinfo.rev6914

$Rev: 6914 $ $Date:: 2014-06-25 #$ e3fbb8667b5a285932ceab81e28219e1
running on localhost.localdomain Fri Mar 13 05:07:47 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 E5-2618L v3 @ 2.30GHz
- 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.)
SPEC CINT2006 Result

Huawei

Huawei RH2288 V3 (Intel Xeon E5-2618L v3)

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CPU2006 license: 3175
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Tested by: Huawei

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

Platform Notes (Continued)

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

From /proc/meminfo
  MemTotal: 263721488 kB
  HugePages_Total: 0
  Hugepagesize: 2048 kB

From /etc/*release* /etc/*version*
  os-release:
    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 localhost.localdomain 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 Mar 12 05:21

SPEC is set to: /spec15

Filesystem  Type  Size  Used  Avail  Use% Mounted on
/dev/sda1    ext4  443G   162G  259G   39%  /

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 Insyde Corp. 1.17 09/03/2014
Memory:
  8x Micron 36ASF2G72PZ-2G1A2 16 GB 1 rank 2133 MHz, configured at 1867 MHz
  8x Micron 36ASF2G72PZ-2G1A2 16 GB 2 rank 2133 MHz, configured at 1867 MHz

(End of data from sysinfo program)
Huawei

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General Notes

Environment variables set by runspec before the start of the run:
KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/spec15/libs/32:/spec15/libs/64:/spec15/sh"
OMP_NUM_THREADS = "16"

Binaries compiled on a system with 1x Core i5-4670K CPU + 16GB memory using RedHat EL 7.0
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/transparent_hugepage/enabled
runspec command invoked through numactl i.e.:
umactl --interleave=all runspec <etc>

Base Compiler Invocation

C benchmarks:
   icc -m64

C++ benchmarks:
   icpc -m64

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -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

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 -lsmartheap64
SPEC CINT2006 Result

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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
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(pass 2) -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: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div -prof-use(pass 2) -auto-ilp32
-opt-prefetch -ansi-alias

Continued on next page
Huawei RH2288 V3 (Intel Xeon E5-2618L v3) SPECint2006 = 60.4
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Peak Optimization Flags (Continued)

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

429.mcf: -xCORE-AVX2 -ipo -O3 -no-prec-div -parallel
-opt-prefetch -auto-p32

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

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)
-opt-ra-region-strategy=block -ansi-alias
-Wl,-z,muldefs -L/sh -lsmartheap

473.astar: -xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-auto-p32 -Wl,-z,muldefs -L/sh -lsmartheap64

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/Huawei-Platform-Settings-HASWELL-V1.4.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/Huawei-Platform-Settings-HASWELL-V1.4.xml
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For questions about this result, please contact the tester. For other inquiries, please contact webmaster@spec.org.

Tested with SPEC CPU2006 v1.2.