



SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint®2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

CPU2006 license: 3175

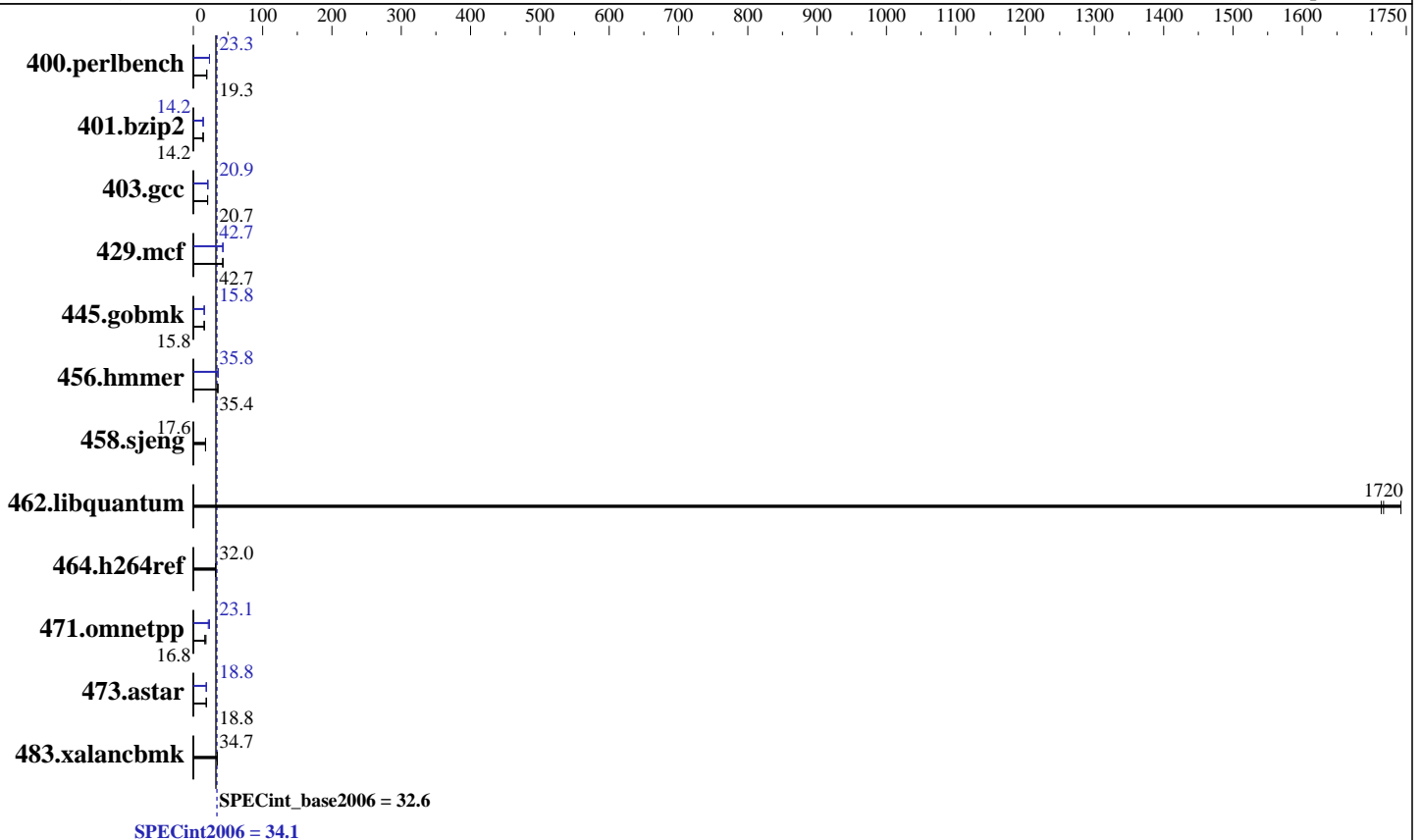
Test sponsor: Huawei

Tested by: Huawei

Test date: Dec-2014

Hardware Availability: Sep-2013

Software Availability: Sep-2014



Hardware

CPU Name: Intel Xeon E5-2618L v2
 CPU Characteristics: 2000
 CPU MHz: Integrated
 FPU: 12 cores, 2 chips, 6 cores/chip
 CPU(s) enabled: 1,2 chip
 CPU(s) orderable: 32 KB I + 32 KB D on chip per core
 Primary Cache: 256 KB I+D on chip per core
 Secondary Cache: 15 MB I+D on chip per chip
 L3 Cache: None
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC3-14900R-13, ECC, running at 1333 MHz)
 Disk Subsystem: 1 x 300 GB SAS, 10000 RPM
 Other Hardware: None

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

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

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

Test date: Dec-2014
Hardware Availability: Sep-2013
Software Availability: Sep-2014

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	506	19.3	<u>506</u>	<u>19.3</u>	504	19.4	419	23.3	419	23.3	<u>419</u>	<u>23.3</u>
401.bzip2	<u>680</u>	<u>14.2</u>	678	14.2	681	14.2	<u>679</u>	<u>14.2</u>	677	14.2	679	14.2
403.gcc	389	20.7	<u>390</u>	<u>20.7</u>	392	20.5	386	20.9	<u>385</u>	<u>20.9</u>	385	20.9
429.mcf	215	42.4	<u>214</u>	<u>42.7</u>	213	42.7	214	42.6	<u>213</u>	<u>42.7</u>	213	42.7
445.gobmk	665	15.8	<u>665</u>	<u>15.8</u>	664	15.8	663	15.8	665	15.8	<u>664</u>	<u>15.8</u>
456.hmmer	<u>264</u>	<u>35.4</u>	264	35.4	264	35.3	<u>261</u>	<u>35.8</u>	261	35.8	261	35.7
458.sjeng	686	17.6	685	17.7	<u>686</u>	<u>17.6</u>	686	17.6	685	17.7	<u>686</u>	<u>17.6</u>
462.libquantum	12.1	1710	11.9	1740	<u>12.1</u>	<u>1720</u>	12.1	1710	11.9	1740	<u>12.1</u>	<u>1720</u>
464.h264ref	691	32.0	<u>692</u>	<u>32.0</u>	692	32.0	691	32.0	<u>692</u>	<u>32.0</u>	692	32.0
471.omnetpp	<u>372</u>	<u>16.8</u>	342	18.3	373	16.8	270	23.1	<u>270</u>	<u>23.1</u>	290	21.6
473.astar	374	18.8	<u>374</u>	<u>18.8</u>	374	18.8	374	18.8	<u>374</u>	<u>18.8</u>	375	18.7
483.xalancbmk	199	34.6	<u>199</u>	<u>34.7</u>	199	34.7	199	34.6	<u>199</u>	<u>34.7</u>	199	34.7

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"

Platform Notes

BIOS configuration:
Set Power Efficiency Mode to Custom
Baseboard Management Controller used to adjust the fan speed to 100%
Set Hyper-Threading to Disabled
Sysinfo program /spec15/config/sysinfo.rev6914
\$Rev: 6914 \$ \$Date:: 2014-06-25 #\$ e3fbb8667b5a285932ceab81e28219e1
running on localhost.localdomain Fri Dec 12 10:29:44 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/cpu2006/Docs/config.html#sysinfo>

From /proc/cpuinfo
model name : Intel(R) Xeon(R) CPU E5-2618L v2 @ 2.00GHz
2 "physical id"s (chips)
12 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

CPU2006 license: 3175

Test sponsor: Huawei

Tested by: Huawei

Test date: Dec-2014

Hardware Availability: Sep-2013

Software Availability: Sep-2014

Platform Notes (Continued)

```

cpu cores : 6
siblings  : 6
physical 0: cores 0 1 2 3 4 5
physical 1: cores 0 1 2 3 4 5
cache size : 15360 KB

```

From /proc/meminfo

```

MemTotal:      263924204 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 Dec 12 10:27

SPEC is set to: /spec15

```

Filesystem      Type      Size      Used Avail Use% Mounted on
/dev/mapper/rhel-root ext4    256G    6.5G  236G   3% /

```

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. RMIBV629 05/12/2014

Memory:

```

16x Hynix HMT42GR7BFR4C-RD 16 GB 2 rank 1867 MHz, configured at 1333 MHz
8x NO DIMM NO DIMM

```

(End of data from sysinfo program)



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

CPU2006 license: 3175

Test date: Dec-2014

Test sponsor: Huawei

Hardware Availability: Sep-2013

Tested by: Huawei

Software Availability: Sep-2014

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 = "12"
```

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.:

```
numactl --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:

```
-xSSE4.2 -ipo -O3 -no-prec-div -parallel -opt-prefetch -auto-p32
```

C++ benchmarks:

```
-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -auto-p32
-Wl,-z,muldefs -L/sh -lsmartheap64
```



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

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

Test date: Dec-2014
Hardware Availability: Sep-2013
Software Availability: Sep-2014

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: -xSSE4.2(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: -xSSE4.2(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



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

CPU2006 license: 3175

Test date: Dec-2014

Test sponsor: Huawei

Hardware Availability: Sep-2013

Tested by: Huawei

Software Availability: Sep-2014

Peak Optimization Flags (Continued)

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -inline-calloc
-opt-malloc-options=3 -auto-ilp32

429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -parallel -opt-prefetch
-auto-p32

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias

456.hmmr: -xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32
-ansi-alias

458.sjeng: basepeak = yes

462.libquantum: basepeak = yes

464.h264ref: basepeak = yes

C++ benchmarks:

471.omnetpp: -xSSE4.2(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: -xSSE4.2 -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-V1.0-IVB-RevG.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-V1.0-IVB-RevG.xml>



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Huawei

SPECint2006 = 34.1

Huawei RH2288H v2 (Intel Xeon E5-2618L v2)

SPECint_base2006 = 32.6

CPU2006 license: 3175

Test sponsor: Huawei

Tested by: Huawei

Test date: Dec-2014

Hardware Availability: Sep-2013

Software Availability: Sep-2014

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

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

Tested with SPEC CPU2006 v1.2.
Report generated on Wed Jan 14 10:27:15 2015 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 13 January 2015.