



# SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Fujitsu

**SPECint®\_rate2006 = 1260**

PRIMERGY RX2530 M1, Intel Xeon E5-2697 v3, 2.6 GHz

**SPECint\_rate\_base2006 = 1220**

CPU2006 license: 19

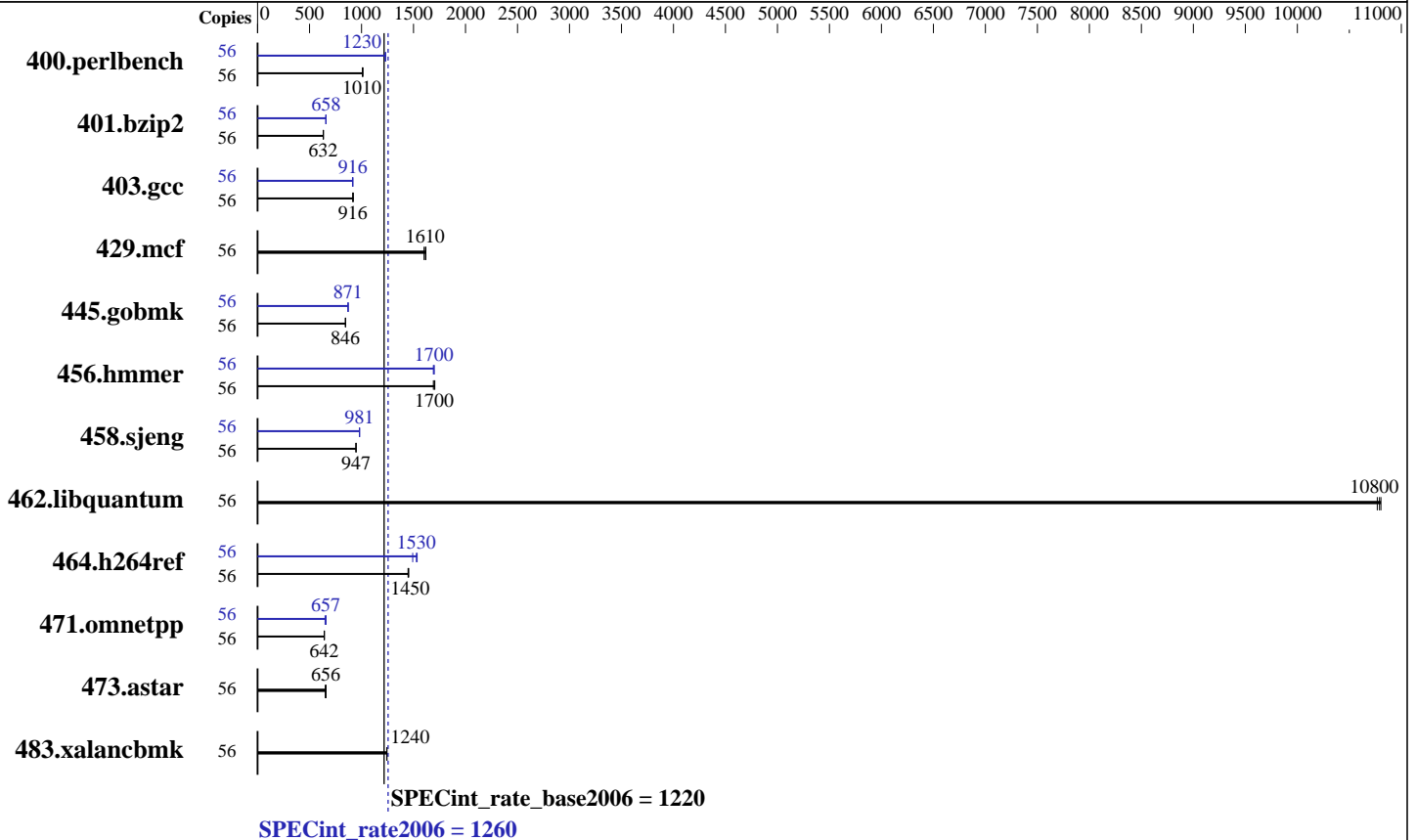
Test date: Mar-2015

Test sponsor: Fujitsu

Hardware Availability: Feb-2015

Tested by: Fujitsu

Software Availability: Nov-2013



### Hardware

CPU Name: Intel Xeon E5-2697 v3  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz  
 CPU MHz: 2600  
 FPU: Integrated  
 CPU(s) enabled: 28 cores, 2 chips, 14 cores/chip, 2 threads/core  
 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: 35 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R)  
 Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM  
 Other Hardware: None

### Software

Operating System: Red Hat Enterprise Linux Server release 6.5 (Santiago)  
 2.6.32-431.23.3.el6.x86\_64  
 Compiler: C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux  
 Auto Parallel: No  
 File System: ext4  
 System State: Run level 3 (multi-user)  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap V10.0



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

## Fujitsu

SPECint\_rate2006 = 1260

PRIMERGY RX2530 M1, Intel Xeon E5-2697 v3, 2.6 GHz

SPECint\_rate\_base2006 = 1220

CPU2006 license: 19  
Test sponsor: Fujitsu  
Tested by: Fujitsu

Test date: Mar-2015  
Hardware Availability: Feb-2015  
Software Availability: Nov-2013

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	56	<b>541</b>	<b>1010</b>	540	1010	543	1010	56	445	1230	444	1230	<b>445</b>	<b>1230</b>
401.bzip2	56	856	631	<b>855</b>	<b>632</b>	852	634	56	<b>821</b>	<b>658</b>	820	659	823	656
403.gcc	56	490	921	492	916	<b>492</b>	<b>916</b>	56	492	917	<b>492</b>	<b>916</b>	494	913
429.mcf	56	316	1620	<b>316</b>	<b>1610</b>	319	1600	56	316	1620	<b>316</b>	<b>1610</b>	319	1600
445.gobmk	56	694	846	695	846	<b>695</b>	<b>846</b>	56	<b>675</b>	<b>871</b>	675	870	674	871
456.hammer	56	309	1690	<b>307</b>	<b>1700</b>	307	1700	56	308	1700	309	1690	<b>308</b>	<b>1700</b>
458.sjeng	56	715	948	716	947	<b>716</b>	<b>947</b>	56	691	981	691	980	<b>691</b>	<b>981</b>
462.libquantum	56	107	10800	<b>108</b>	<b>10800</b>	108	10800	56	107	10800	<b>108</b>	<b>10800</b>	108	10800
464.h264ref	56	852	1450	856	1450	<b>855</b>	<b>1450</b>	56	831	1490	807	1530	<b>811</b>	<b>1530</b>
471.omnetpp	56	545	643	<b>545</b>	<b>642</b>	546	641	56	<b>533</b>	<b>657</b>	532	658	539	649
473.astar	56	597	659	604	651	<b>599</b>	<b>656</b>	56	597	659	604	651	<b>599</b>	<b>656</b>
483.xalancbmk	56	<b>311</b>	<b>1240</b>	311	1240	311	1240	56	<b>311</b>	<b>1240</b>	311	1240	311	1240

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

## Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

## Operating System Notes

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

## Platform Notes

BIOS configuration:  
Energy Performance = Performance  
QPI snoop mode: Cluster on Die  
COD Enable = Enabled, Early Snoop = Disabled  
CPU ClE Support = Disabled

## General Notes

Environment variables set by runspec before the start of the run:  
LD\_LIBRARY\_PATH = "/home/SPECcpu2006/libs/32:/home/SPECcpu2006/libs/64:/home/SPECcpu2006/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.4  
Transparent Huge Pages enabled with:  
echo always > /sys/kernel/mm/redhat\_transparent\_hugepage/enabled  
Filesystem page cache cleared with:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint\_rate2006 = 1260**

PRIMERGY RX2530 M1, Intel Xeon E5-2697 v3, 2.6 GHz

**SPECint\_rate\_base2006 = 1220**

**CPU2006 license:** 19

**Test date:** Mar-2015

**Test sponsor:** Fujitsu

**Hardware Availability:** Feb-2015

**Tested by:** Fujitsu

**Software Availability:** Nov-2013

## General Notes (Continued)

```
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>
```

For information about Fujitsu please visit: <http://www.fujitsu.com>

## Base Compiler Invocation

C benchmarks:  
icc -m32

C++ benchmarks:  
icpc -m32

## Base Portability Flags

```
400.perlbench: -DSPEC_CPU_LINUX_IA32
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

## Base Optimization Flags

C benchmarks:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch  
-opt-mem-layout-trans=3

C++ benchmarks:  
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch  
-opt-mem-layout-trans=3 -Wl,-z,muldefs -L/sh -lsmartheap

## Base Other Flags

C benchmarks:  
403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks (except as noted below):  
icc -m32

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint\_rate2006 = 1260**

PRIMERGY RX2530 M1, Intel Xeon E5-2697 v3, 2.6 GHz

**SPECint\_rate\_base2006 = 1220**

**CPU2006 license:** 19

**Test date:** Mar-2015

**Test sponsor:** Fujitsu

**Hardware Availability:** Feb-2015

**Tested by:** Fujitsu

**Software Availability:** Nov-2013

## Peak Compiler Invocation (Continued)

400.perlbench: `icc -m64`

401.bzip2: `icc -m64`

456.hmmer: `icc -m64`

458.sjeng: `icc -m64`

C++ benchmarks:

`icpc -m32`

## Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64`

401.bzip2: `-DSPEC_CPU_LP64`

456.hmmer: `-DSPEC_CPU_LP64`

458.sjeng: `-DSPEC_CPU_LP64`

462.libquantum: `-DSPEC_CPU_LINUX`

483.xalancbmk: `-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)  
-auto-ilp32`

401.bzip2: `-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 -auto-ilp32 -ansi-alias`

403.gcc: `-xCORE-AVX2 -ipo -O3 -no-prec-div`

429.mcf: `basepeak = yes`

445.gobmk: `-xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)  
-ansi-alias -opt-mem-layout-trans=3`

456.hmmer: `-xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32`

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 -auto-ilp32`

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

**Fujitsu**

**SPECint\_rate2006 = 1260**

PRIMERGY RX2530 M1, Intel Xeon E5-2697 v3, 2.6 GHz

**SPECint\_rate\_base2006 = 1220**

**CPU2006 license:** 19

**Test sponsor:** Fujitsu

**Tested by:** Fujitsu

**Test date:** Mar-2015

**Hardware Availability:** Feb-2015

**Software Availability:** Nov-2013

## Peak Optimization Flags (Continued)

462.libquantum: basepeak = yes

464.h264ref: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)  
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)  
-unroll2 -ansi-alias

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)  
-ansi-alias -opt-ra-region-strategy=block -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-ic14.0-official-linux64-revB.html>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-HSW-RevA.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64-revB.xml>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-HSW-RevA.xml>

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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.2.

Report generated on Tue May 19 18:14:04 2015 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 19 May 2015.