



# SPEC® CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

**SPECint®\_rate2006 = 843**

PRIMERGY CX2570 M1, Intel Xeon E5-2667 v3, 3.2 GHz

**SPECint\_rate\_base2006 = 815**

CPU2006 license: 19

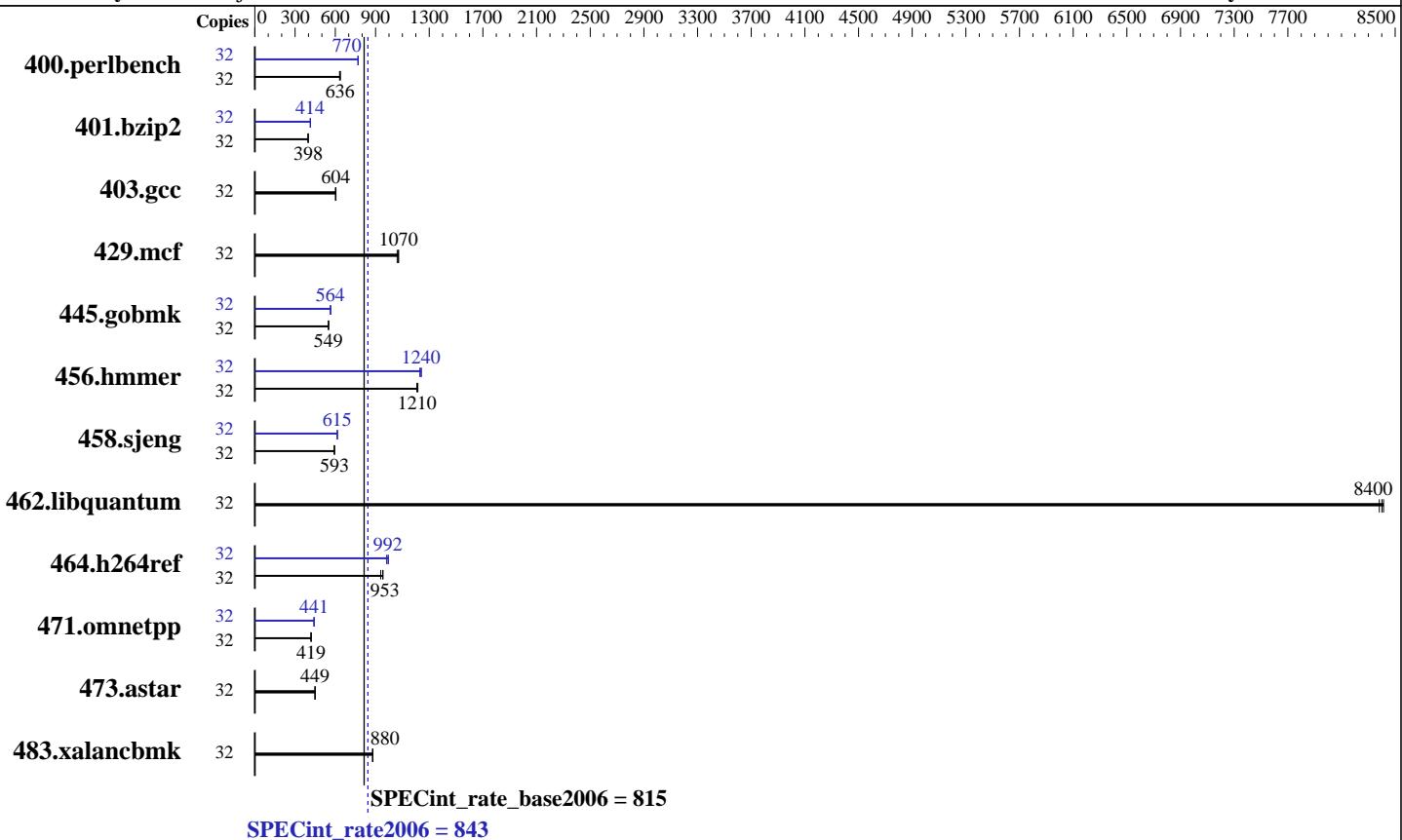
**Test date:** Nov-2014

**Test sponsor:** Fujitsu

**Hardware Availability:** Sep-2014

**Tested by:** Fujitsu

**Software Availability:** Nov-2013



## Hardware

CPU Name: Intel Xeon E5-2667 v3  
CPU Characteristics: Intel Turbo Boost Technology up to 3.60 GHz  
CPU MHz: 3200  
FPU: Integrated  
CPU(s) enabled: 16 cores, 2 chips, 8 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: 20 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)  
Compiler: 2.6.32-431.23.3.el6.x86\_64  
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

PRIMERGY CX2570 M1, Intel Xeon E5-2667 v3, 3.2 GHz

**SPECint\_rate2006 = 843**

**SPECint\_rate\_base2006 = 815**

CPU2006 license: 19

Test date: Nov-2014

Test sponsor: Fujitsu

Hardware Availability: Sep-2014

Tested by: Fujitsu

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	32	491	637	495	631	<b>491</b>	<b>636</b>	32	406	769	<b>406</b>	<b>770</b>	406	770
401.bzip2	32	<b>777</b>	<b>398</b>	779	396	776	398	32	<b>745</b>	414	747	413	<b>746</b>	<b>414</b>
403.gcc	32	<b>427</b>	<b>604</b>	429	600	426	605	32	<b>427</b>	<b>604</b>	429	600	426	605
429.mcf	32	<b>273</b>	<b>1070</b>	272	1070	275	1060	32	<b>273</b>	<b>1070</b>	272	1070	275	1060
445.gobmk	32	612	549	<b>611</b>	<b>549</b>	611	550	32	<b>595</b>	<b>564</b>	596	563	593	566
456.hammer	32	246	1220	247	1210	<b>247</b>	<b>1210</b>	32	240	1240	243	1230	<b>241</b>	<b>1240</b>
458.sjeng	32	653	593	652	594	<b>653</b>	<b>593</b>	32	629	615	630	614	<b>630</b>	<b>615</b>
462.libquantum	32	<b>78.9</b>	<b>8400</b>	78.8	8410	79.1	8380	32	<b>78.9</b>	<b>8400</b>	78.8	8410	<b>79.1</b>	8380
464.h264ref	32	741	955	755	938	<b>743</b>	<b>953</b>	32	721	982	<b>714</b>	<b>992</b>	711	996
471.omnetpp	32	<b>477</b>	<b>419</b>	477	419	477	419	32	452	443	<b>453</b>	<b>441</b>	454	441
473.astar	32	<b>500</b>	<b>449</b>	501	448	500	449	32	<b>500</b>	<b>449</b>	501	448	500	449
483.xalancbmk	32	251	880	<b>251</b>	<b>880</b>	252	877	32	251	880	<b>251</b>	<b>880</b>	252	877

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

Utilization Profile = Unbalanced

QPI snoop mode: Early Snoop

COD Enable = Disabled, Early Snoop = Enabled

CPU C1E 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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY CX2570 M1, Intel Xeon E5-2667 v3, 3.2 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

**SPECint\_rate2006 = 843**

**SPECint\_rate\_base2006 = 815**

Test date: Nov-2014

Hardware Availability: Sep-2014

Software Availability: Nov-2013

## General Notes (Continued)

Filesystem page cache cleared with:  
echo 1> /proc/sys/vm/drop\_caches  
runspec command invoked through numactl i.e.:  
numactl --interleave=all runspec <etc>

This result was measured on the PRIMERGY CX2550 M1. The PRIMERGY CX2550 M1 and the PRIMERGY CX2570 M1 are electronically equivalent.  
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



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY CX2570 M1, Intel Xeon E5-2667 v3, 3.2 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECint\_rate2006 = 843

SPECint\_rate\_base2006 = 815

Test date: Nov-2014

Hardware Availability: Sep-2014

Software Availability: Nov-2013

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc -m32

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: basepeak = yes

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 -unroll12 -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)  
-unroll14 -auto-ilp32

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

PRIMERGY CX2570 M1, Intel Xeon E5-2667 v3, 3.2 GHz

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

SPECint\_rate2006 = 843

SPECint\_rate\_base2006 = 815

Test date: Nov-2014

Hardware Availability: Sep-2014

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)  
-unroll12 -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 Feb 10 18:32:15 2015 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 10 February 2015.