



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

### SPECint®\_rate2006 = 194

PRIMERGY RX600 S4, Intel Xeon L7445, 2.13 GHz

### SPECint\_rate\_base2006 = 179

CPU2006 license: 22

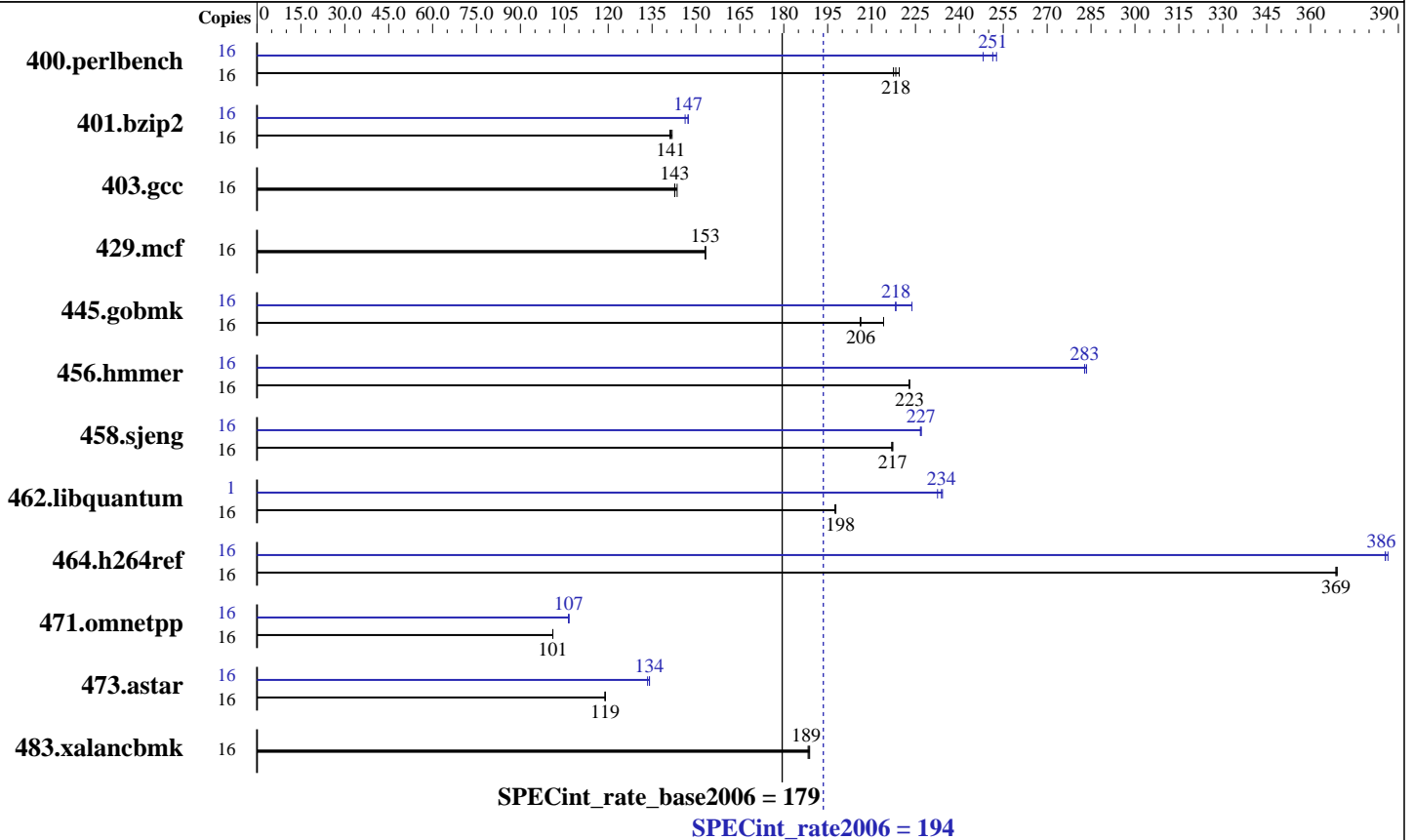
Test date: Oct-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Sep-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2008



### Hardware

CPU Name: Intel Xeon L7445  
 CPU Characteristics: 1067 MHz system bus  
 CPU MHz: 2133  
 FPU: Integrated  
 CPU(s) enabled: 16 cores, 4 chips, 4 cores/chip  
 CPU(s) orderable: 1,2,4 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 6 MB I+D on chip per chip, 3 MB shared / 2 cores  
 L3 Cache: 12 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 64 GB (16x4 GB PC2-5300F, 2 rank, CL5-5-5, ECC)  
 Disk Subsystem: 1x SAS, 36 GB, 10000 rpm  
 Other Hardware: None

### Software

Operating System: SUSE Linux Enterprise Server 10 (x86\_64) SP2, Kernel 2.6.16.60-0.21-smp  
 Compiler: Intel C++ Compiler 11.0 for Linux Build 20080730 Package ID: l\_cproc\_b\_11.0.042  
 Auto Parallel: Yes  
 File System: ext3  
 System State: Multi-User Run Level 3  
 Base Pointers: 32-bit  
 Peak Pointers: 32/64-bit  
 Other Software: Microquill SmartHeap Library, Version 8.1 Binutils 2.18.50.0.7.20080502



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

SPECint\_rate2006 = 194

PRIMERGY RX600 S4, Intel Xeon L7445, 2.13 GHz

SPECint\_rate\_base2006 = 179

CPU2006 license: 22

Test date: Oct-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Sep-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2008

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	16	719	217	712	219	<b>716</b>	<b>218</b>	16	619	253	<b>622</b>	<b>251</b>	630	248
401.bzip2	16	<b>1092</b>	<b>141</b>	1089	142	1095	141	16	<b>1048</b>	<b>147</b>	1055	146	1048	147
403.gcc	16	<b>902</b>	<b>143</b>	897	144	903	143	16	<b>902</b>	<b>143</b>	897	144	903	143
429.mcf	16	953	153	952	153	<b>952</b>	<b>153</b>	16	953	153	952	153	<b>952</b>	<b>153</b>
445.gobmk	16	784	214	814	206	<b>813</b>	<b>206</b>	16	769	218	<b>769</b>	<b>218</b>	750	224
456.hammer	16	670	223	<b>670</b>	<b>223</b>	669	223	16	528	283	527	283	<b>528</b>	<b>283</b>
458.sjeng	16	893	217	891	217	<b>891</b>	<b>217</b>	16	<b>853</b>	<b>227</b>	853	227	854	227
462.libquantum	16	1679	197	<b>1677</b>	<b>198</b>	1676	198	1	88.5	234	<b>88.6</b>	<b>234</b>	89.1	233
464.h264ref	16	959	369	<b>960</b>	<b>369</b>	960	369	16	916	386	<b>918</b>	<b>386</b>	918	386
471.omnetpp	16	989	101	989	101	<b>989</b>	<b>101</b>	16	940	106	<b>939</b>	<b>107</b>	938	107
473.astar	16	944	119	945	119	<b>944</b>	<b>119</b>	16	837	134	842	133	<b>838</b>	<b>134</b>
483.xalancbmk	16	585	189	<b>585</b>	<b>189</b>	586	188	16	585	189	<b>585</b>	<b>189</b>	586	188

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.  
taskset has been used to bind processes to cores except  
for 462.libquantum peak

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run  
OMP\_NUM\_THREADS set to number of cores (default)  
KMP\_AFFINITY set to "physical,0"  
KMP\_STACKSIZE set to 64M

## General Notes

For information about Fujitsu Siemens Computers please see:  
<http://www.fujitsu-siemens.com>

## Base Compiler Invocation

C benchmarks:  
icc

C++ benchmarks:  
icpc



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 194

PRIMERGY RX600 S4, Intel Xeon L7445, 2.13 GHz

SPECint\_rate\_base2006 = 179

CPU2006 license: 22

Test date: Oct-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Sep-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2008

## Base Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
462.libquantum: -DSPEC\_CPU\_LINUX  
483.xalancbmk: -DSPEC\_CPU\_LINUX

## Base Optimization Flags

C benchmarks:

-xSSE4.1 -ipo -O3 -no-prec-div -static -inline-calloc  
-opt-malloc-options=3 -opt-prefetch

C++ benchmarks:

-xSSE4.1 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs  
-L/spec/cpu2006.1.1/lib -lsmartheap

## Base Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

## Peak Compiler Invocation

C benchmarks (except as noted below):

icc

401.bzip2: /opt/intel/Compiler/11.0/042/bin/intel64/icc  
-L/opt/intel/Compiler/11.0/042/ipp/em64t/lib  
-I/opt/intel/Compiler/11.0/042/ipp/em64t/include

456.hmmer: /opt/intel/Compiler/11.0/042/bin/intel64/icc  
-L/opt/intel/Compiler/11.0/042/ipp/em64t/lib  
-I/opt/intel/Compiler/11.0/042/ipp/em64t/include

C++ benchmarks:

icpc

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
401.bzip2: -DSPEC\_CPU\_LP64  
456.hmmer: -DSPEC\_CPU\_LP64

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 194

PRIMERGY RX600 S4, Intel Xeon L7445, 2.13 GHz

SPECint\_rate\_base2006 = 179

CPU2006 license: 22

Test date: Oct-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Sep-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2008

## Peak Portability Flags (Continued)

462.libquantum: -DSPEC\_CPU\_LINUX  
483.xalancbmk: -DSPEC\_CPU\_LINUX

## Peak Optimization Flags

C benchmarks:

400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -static -ansi-alias -opt-prefetch

401.bzp2: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -static -opt-prefetch -ansi-alias

403.gcc: basepeak = yes

429.mcf: basepeak = yes

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -O2 -ipo  
-no-prec-div -ansi-alias

456.hmmer: -xSSE4.1 -ipo -O3 -no-prec-div -static -unroll2  
-ansi-alias

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -static -unroll4

462.libquantum: -xSSE4.1 -ipo -O3 -no-prec-div -static  
-opt-malloc-options=3 -parallel -par-runtime-control  
-opt-prefetch

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -static -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -ansi-alias -opt-ra-region-strategy=block  
-Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3  
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
-Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap

483.xalancbmk: basepeak = yes



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 194

PRIMERGY RX600 S4, Intel Xeon L7445, 2.13 GHz

SPECint\_rate\_base2006 = 179

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Oct-2008

Hardware Availability: Sep-2008

Software Availability: Nov-2008

## Peak Other Flags

C benchmarks:

403.gcc: -Dalloca=\_alloca

The flags file that was used to format this result can be browsed at

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090713.11.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090713.11.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 v1.1.  
Report generated on Tue Jul 22 20:39:19 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 29 October 2008.