



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

### SPECint®\_rate2006 = 62.4

PRIMERGY RX200 S4, Intel Xeon L5410, 2.33 GHz

### SPECint\_rate\_base2006 = 52.6

CPU2006 license: 22

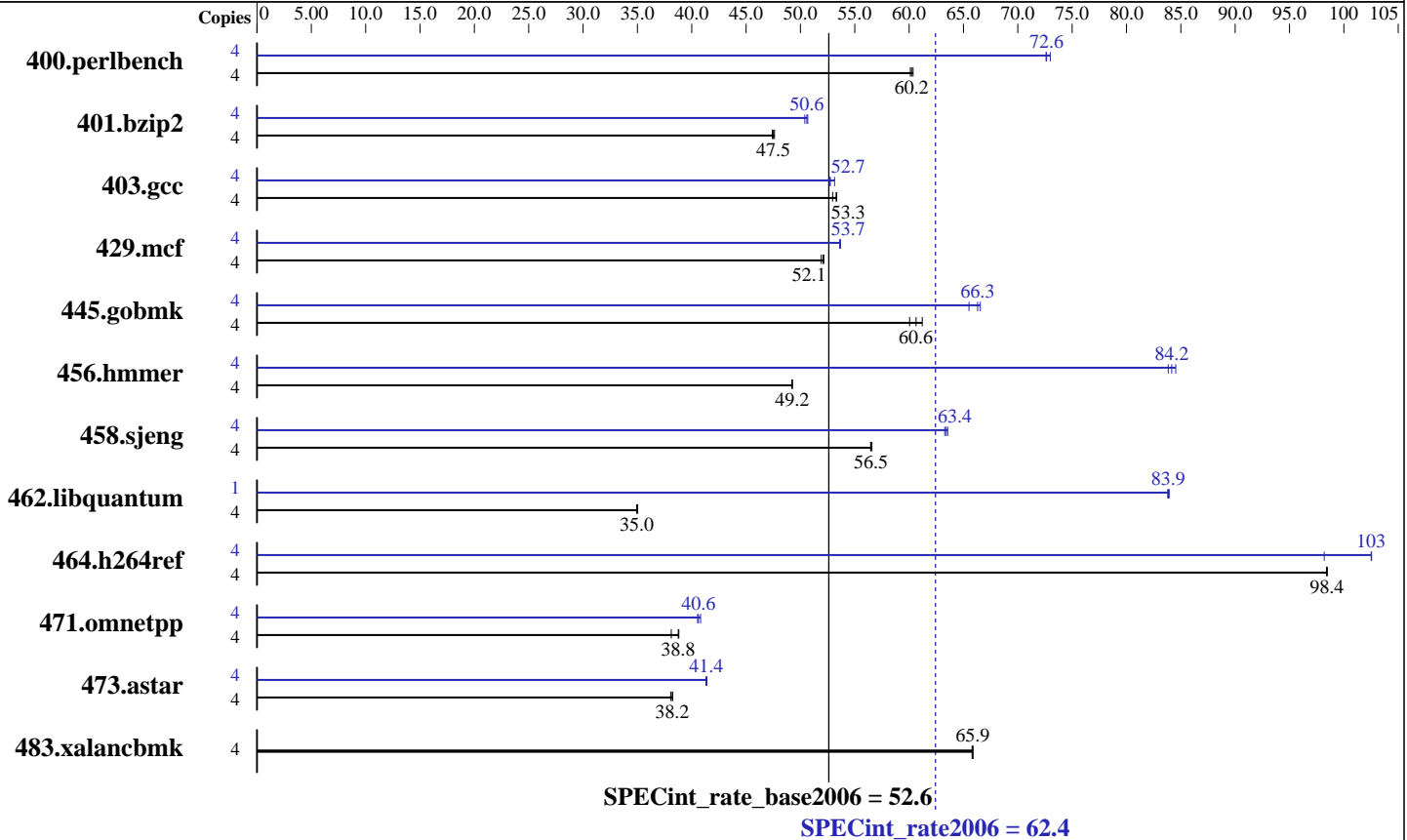
Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Sep-2008

Hardware Availability: Dec-2007

Software Availability: May-2008



### Hardware

CPU Name: Intel Xeon L5410  
 CPU Characteristics: 1333 MHz system bus  
 CPU MHz: 2333  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Primary Cache: 32 KB I + 32 KB D on chip per core  
 Secondary Cache: 12 MB I+D on chip per chip, 6 MB shared / 2 cores  
 L3 Cache: None  
 Other Cache: None  
 Memory: 16 GB (8x2 GB PC2-5300F, 2 rank, CL 5-5-5, ECC)  
 Disk Subsystem: 1x SAS, 73 GB, 15000 rpm  
 Other Hardware: None

### Software

Operating System: SuSE Linux Enterprise Server 10 (x86\_64) with SP2, kernel 2.6.16.60-0.21-smp  
 Compiler: Intel C++ Compiler for Linux32 and Linux64, Version 10.1, Build 20070913  
 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-2.17.50.0.5-0.1.x86\_64



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

SPECint\_rate2006 = 62.4

PRIMERGY RX200 S4, Intel Xeon L5410, 2.33 GHz

SPECint\_rate\_base2006 = 52.6

CPU2006 license: 22

Test date: Sep-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Dec-2007

Tested by: Fujitsu Siemens Computers

Software Availability: May-2008

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	<b>649</b>	<b>60.2</b>	647	60.4	650	60.1	4	538	72.6	<b>538</b>	<b>72.6</b>	535	73.0
401.bzip2	4	814	47.4	811	47.6	<b>812</b>	<b>47.5</b>	4	766	50.4	<b>763</b>	<b>50.6</b>	762	50.7
403.gcc	4	608	53.0	604	53.3	<b>604</b>	<b>53.3</b>	4	611	52.7	<b>610</b>	<b>52.7</b>	606	53.1
429.mcf	4	700	52.2	703	51.9	<b>700</b>	<b>52.1</b>	4	680	53.6	680	53.7	<b>680</b>	<b>53.7</b>
445.gobmk	4	699	60.0	686	61.2	<b>692</b>	<b>60.6</b>	4	<b>633</b>	<b>66.3</b>	641	65.5	630	66.6
456.hmmmer	4	<b>758</b>	<b>49.2</b>	758	49.3	758	49.2	4	445	83.8	<b>443</b>	<b>84.2</b>	442	84.5
458.sjeng	4	<b>857</b>	<b>56.5</b>	855	56.6	857	56.5	4	765	63.3	762	63.6	<b>763</b>	<b>63.4</b>
462.libquantum	4	<b>2371</b>	<b>35.0</b>	2373	34.9	2366	35.0	1	<b>247</b>	<b>83.9</b>	247	83.9	247	83.8
464.h264ref	4	<b>899</b>	<b>98.4</b>	900	98.4	899	98.5	4	902	98.2	<b>864</b>	<b>103</b>	863	103
471.omnetpp	4	656	38.1	644	38.8	<b>645</b>	<b>38.8</b>	4	617	40.5	<b>615</b>	<b>40.6</b>	613	40.8
473.astar	4	<b>735</b>	<b>38.2</b>	734	38.2	738	38.1	4	678	41.4	680	41.3	<b>679</b>	<b>41.4</b>
483.xalancbmk	4	<b>419</b>	<b>65.9</b>	420	65.8	419	65.9	4	<b>419</b>	<b>65.9</b>	420	65.8	419	65.9

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

## Compiler Invocation Notes

All binaries were built with 32-bit Intel compiler except:  
401.bzip2 and 456.hmmmer in peak were built with 64-bit Intel compiler.

## 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)

## Platform Notes

BIOS configuration:  
Hardware Prefetch = Enable, Adjacent Sector Prefetch = Disable

## General Notes

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

## Base Compiler Invocation

C benchmarks:  
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib  
-I/opt/intel/cc/10.1.008/include

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 62.4

PRIMERGY RX200 S4, Intel Xeon L5410, 2.33 GHz

SPECint\_rate\_base2006 = 52.6

CPU2006 license: 22

Test date: Sep-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Dec-2007

Tested by: Fujitsu Siemens Computers

Software Availability: May-2008

## Base Compiler Invocation (Continued)

C++ benchmarks:

```
/opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

## Base Portability Flags

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

## Base Optimization Flags

C benchmarks:

```
-fast -inline-alloc -opt-malloc-options=3
```

C++ benchmarks:

```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/opt/SmartHeap_8.1/lib -lsmartheap
```

## Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

## Peak Compiler Invocation

C benchmarks (except as noted below):

```
/opt/intel/cc/10.1.008/bin/icc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```

```
401.bzip2: icc
```

```
456.hmmer: icc
```

C++ benchmarks:

```
/opt/intel/cc/10.1.008/bin/icpc -L/opt/intel/cc/10.1.008/lib
-I/opt/intel/cc/10.1.008/include
```



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 62.4

PRIMERGY RX200 S4, Intel Xeon L5410, 2.33 GHz

SPECint\_rate\_base2006 = 52.6

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Sep-2008

Hardware Availability: Dec-2007

Software Availability: May-2008

## Peak Portability Flags

400.perlbench: -DSPEC\_CPU\_LINUX\_IA32  
 401.bzip2: -DSPEC\_CPU\_LP64  
 456.hmmer: -DSPEC\_CPU\_LP64  
 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) -fast -ansi-alias  
 -prefetch

401.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch

403.gcc: -fast -inline-calloc -opt-malloc-options=3

429.mcf: -fast -prefetch

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

456.hmmer: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4

462.libquantum: -fast -unroll4 -Ob0 -prefetch  
 -opt-streaming-stores always -vec-guard-write  
 -opt-malloc-options=3 -parallel -par-runtime-control

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
 -no-prec-div -ansi-alias -opt-ra-region-strategy=block  
 -Wl,-z,muldefs -L/opt/SmartHeap\_8.1/lib -lsmarheap

473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo  
 -no-prec-div -ansi-alias -opt-ra-region-strategy=routine  
 -Wl,-z,muldefs -L/opt/SmartHeap\_8.1/lib -lsmarheap

483.xalancbmk: basepeak = yes



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 62.4

PRIMERGY RX200 S4, Intel Xeon L5410, 2.33 GHz

SPECint\_rate\_base2006 = 52.6

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Sep-2008

Hardware Availability: Dec-2007

Software Availability: May-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/flags-ic101-linux-intel64.html>

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

<http://www.spec.org/cpu2006/flags/flags-ic101-linux-intel64.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 22:11:23 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 14 October 2008.