SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

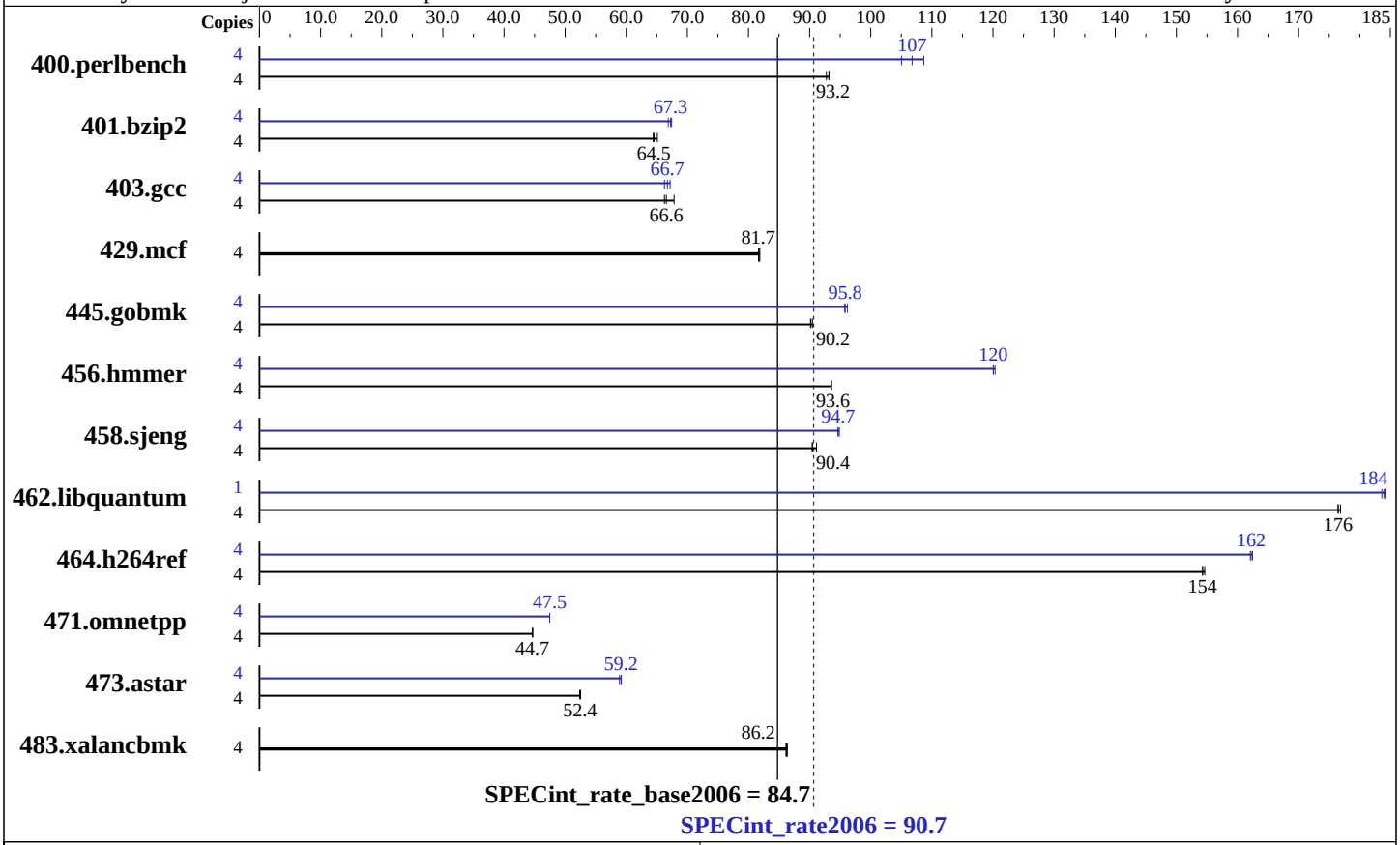
PRIMERGY RX200 S4, Intel Xeon X5270, 3.50 GHz

SPECint®_rate2006 = 90.7

SPECint_rate_base2006 = 84.7

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Sep-2008
Hardware Availability: Oct-2008
Software Availability: Nov-2008



Hardware

CPU Name:	Intel Xeon X5270
CPU Characteristics:	1333 MHz system bus
CPU MHz:	3500
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	6 MB I+D on chip per chip
L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8x2 GB PC2-5300F, 2 rank, CL5-5-5, ECC)
Disk Subsystem:	1x SATA, 160 GB, 7200 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

PRIMERGY RX200 S4, Intel Xeon X5270, 3.50 GHz

SPECint_rate2006 = 90.7

SPECint_rate_base2006 = 84.7

CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Sep-2008
Hardware Availability: Oct-2008
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	4	**419**	**93.2**	421	92.7	419	93.2	4	372	105	360	109	**366**	**107**
401.bzip2	4	**598**	**64.5**	593	65.1	599	64.4	4	573	67.4	**574**	**67.3**	577	66.9
403.gcc	4	486	66.3	**484**	**66.6**	475	67.8	4	479	67.2	486	66.3	**483**	**66.7**
429.mcf	4	447	81.6	**446**	**81.7**	446	81.8	4	447	81.6	**446**	**81.7**	446	81.8
445.gobmk	4	465	90.1	**465**	**90.2**	464	90.5	4	**438**	**95.8**	438	95.7	436	96.2
456.hmmer	4	399	93.6	**399**	**93.6**	399	93.5	4	**311**	**120**	311	120	310	120
458.sjeng	4	**535**	**90.4**	531	91.1	535	90.4	4	510	94.9	511	94.6	**511**	**94.7**
462.libquantum	4	**470**	**176**	470	176	469	177	1	113	184	112	184	**113**	**184**
464.h264ref	4	572	155	**574**	**154**	574	154	4	545	162	**546**	**162**	546	162
471.omnetpp	4	560	44.6	559	44.7	**560**	**44.7**	4	**527**	**47.5**	527	47.5	527	47.5
473.astar	4	536	52.4	535	52.5	**536**	**52.4**	4	**475**	**59.2**	474	59.2	477	58.9
483.xalancbmk	4	320	86.4	**320**	**86.2**	320	86.1	4	320	86.4	**320**	**86.2**	320	86.1

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 mode except:
401.bzip2 and 456.hmmer in peak were built with 64-bit mode.
```

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
```

Platform Notes

```
BIOS configuration:
Adjacent Sector Prefetch = Disable
Memory Throttling = Enable
```

General Notes

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

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

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

Continued on next page

Peak Compiler Invocation (Continued)

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
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.bzip2: -prof-gen(pass 1) -prof-use(pass 2) -xSSE4.1 -ipo -O3
-no-prec-div -static -opt-prefetch -ansi-alias

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

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

Continued on next page

Peak Optimization Flags (Continued)

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`

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-ic11.0-int-linux64-revA.20090713.02.html
http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.00.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090713.02.xml
http://www.spec.org/cpu2006/flags/Intel-Linux64-Platform.20090713.00.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.

Tested with SPEC CPU2006 v1.1.
Report generated on Tue Jul 22 20:53:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 1 October 2008.