



# SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Fujitsu Siemens Computers

### SPECint®\_rate2006 = 134

PRIMERGY BX620 S4, Intel Xeon X5460, 3.16 GHz

### SPECint\_rate\_base2006 = 108

CPU2006 license: 22

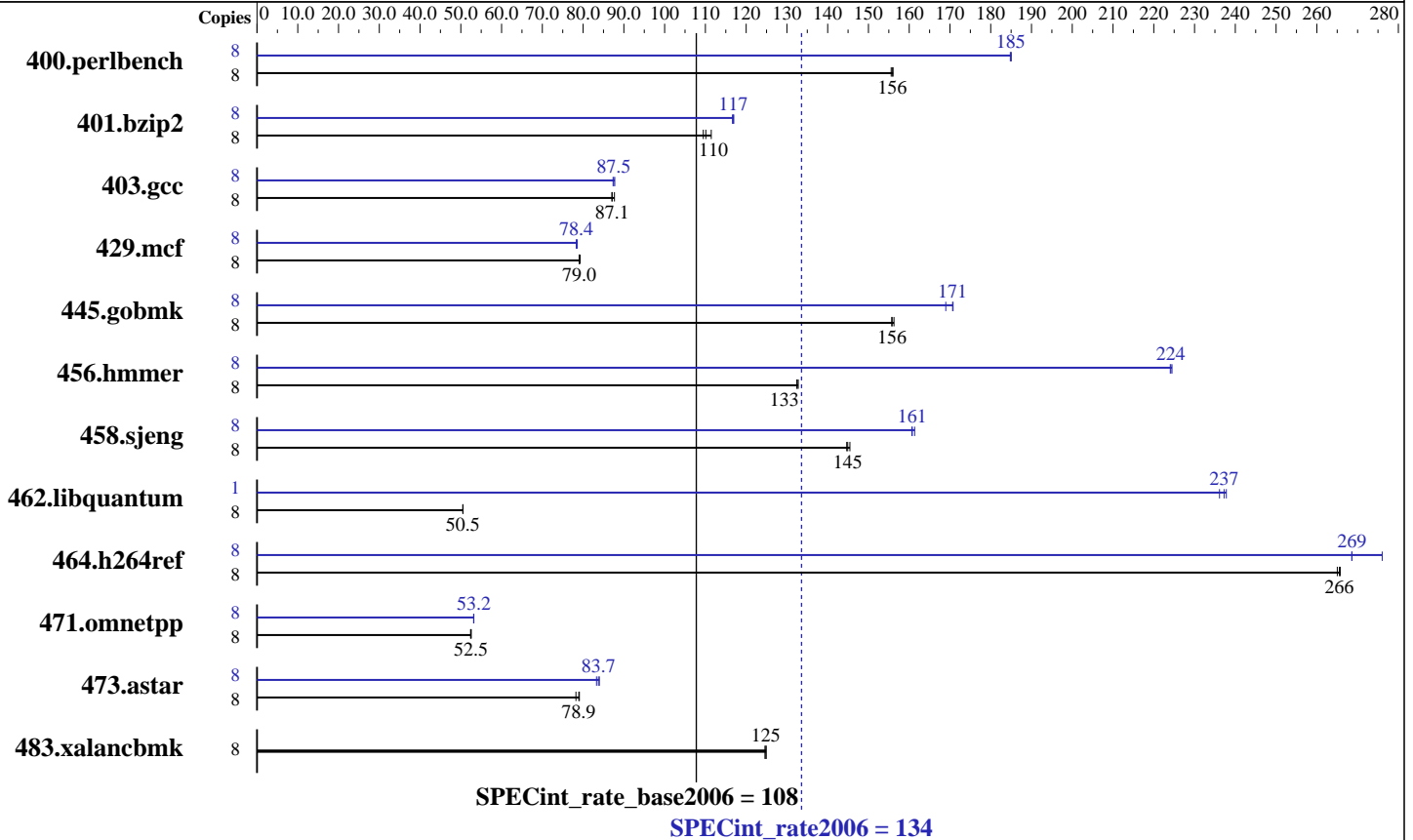
Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Feb-2008

Hardware Availability: Mar-2008

Software Availability: Nov-2007



### Hardware

CPU Name: Intel Xeon X5460  
 CPU Characteristics: 1333 MHz system bus  
 CPU MHz: 3167  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 2 chips, 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) SP1, Kernel 2.6.16.46-0.12-smp  
 Compiler: Intel C++ Compiler for Linux32 and Linux64, Version 10.1, Build 20070913  
 Auto Parallel: Yes  
 File System: ext2  
 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 = 134

PRIMERGY BX620 S4, Intel Xeon X5460, 3.16 GHz

SPECint\_rate\_base2006 = 108

CPU2006 license: 22

Test date: Feb-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Mar-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	8	502	156	<u>502</u>	<u>156</u>	501	156	8	423	185	422	185	<u>423</u>	<u>185</u>
401.bzip2	8	693	111	705	109	<u>701</u>	<u>110</u>	8	<u>661</u>	<u>117</u>	662	117	660	117
403.gcc	8	740	87.1	<u>739</u>	<u>87.1</u>	734	87.7	8	734	87.8	<u>736</u>	<u>87.5</u>	737	87.4
429.mcf	8	920	79.3	923	79.0	<u>923</u>	<u>79.0</u>	8	<u>931</u>	<u>78.4</u>	929	78.6	931	78.3
445.gobmk	8	539	156	<u>539</u>	<u>156</u>	537	156	8	491	171	497	169	<u>492</u>	<u>171</u>
456.hammer	8	562	133	<u>563</u>	<u>133</u>	564	132	8	333	224	<u>333</u>	<u>224</u>	333	224
458.sjeng	8	669	145	<u>668</u>	<u>145</u>	666	145	8	<u>602</u>	<u>161</u>	603	161	600	161
462.libquantum	8	3283	50.5	<u>3281</u>	<u>50.5</u>	3280	50.5	1	87.1	238	<u>87.3</u>	<u>237</u>	87.7	236
464.h264ref	8	666	266	668	265	<u>667</u>	<u>266</u>	8	659	269	641	276	<u>659</u>	<u>269</u>
471.omnetpp	8	<u>953</u>	<u>52.5</u>	952	52.5	954	52.4	8	<u>940</u>	<u>53.2</u>	941	53.1	940	53.2
473.astar	8	718	78.2	<u>711</u>	<u>78.9</u>	710	79.1	8	674	83.3	<u>671</u>	<u>83.7</u>	669	84.0
483.xalancbmk	8	442	125	443	125	<u>442</u>	<u>125</u>	8	442	125	443	125	<u>442</u>	<u>125</u>

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

## 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:  
Adjacent Sector Prefetch = Enable

## General Notes

All binaries were built with 32-bit Intel compiler except:  
401.bzip2 and 456.hammer in peak were built with 64-bit Intel compiler by changing the path for include and library files.

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 = 134

PRIMERGY BX620 S4, Intel Xeon X5460, 3.16 GHz

SPECint\_rate\_base2006 = 108

CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Feb-2008

Hardware Availability: Mar-2008

Software Availability: Nov-2007

## 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-calloc -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):  
icc

401.bzip2: /opt/intel/cce/10.1.008/bin/icc  
-L/opt/intel/cce/10.1.008/lib  
-I/opt/intel/cce/10.1.008/include

456.hmmer: /opt/intel/cce/10.1.008/bin/icc  
-L/opt/intel/cce/10.1.008/lib  
-I/opt/intel/cce/10.1.008/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

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

SPECint\_rate2006 = 134

PRIMERGY BX620 S4, Intel Xeon X5460, 3.16 GHz

SPECint\_rate\_base2006 = 108

CPU2006 license: 22

Test date: Feb-2008

Test sponsor: Fujitsu Siemens Computers

Hardware Availability: Mar-2008

Tested by: Fujitsu Siemens Computers

Software Availability: Nov-2007

## Peak Portability Flags (Continued)

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

## Peak Other Flags

C benchmarks:

Continued on next page



# SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Fujitsu Siemens Computers**

**SPECint\_rate2006 = 134**

PRIMERGY BX620 S4, Intel Xeon X5460, 3.16 GHz

**SPECint\_rate\_base2006 = 108**

**CPU2006 license:** 22

**Test date:** Feb-2008

**Test sponsor:** Fujitsu Siemens Computers

**Hardware Availability:** Mar-2008

**Tested by:** Fujitsu Siemens Computers

**Software Availability:** Nov-2007

## Peak Other Flags (Continued)

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-ic10-ia32-intel64-linux-flags.20090713.01.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090713.01.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 v1.0.  
Report generated on Tue Jul 22 15:35:09 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 19 March 2008.