SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX300 S4, Intel Xeon E5405, 2.0 GHz

$SPECint^{®}\_rate2006 =$ 56.3

$SPECint\_rate\_base2006 =$ 47.4

Benchmark	Copies	Result
400.perlbench	4	63.3
	4	52.0
401.bzip2	4	44.0
	4	41.5
403.gcc	4	49.1
	4	49.0
429.mcf	4	52.8
	4	50.3
445.gobmk	4	56.8
	4	52.9
456.hmmer	4	72.9
	4	42.2
458.sjeng	4	55.0
	4	49.1
462.libquantum	1	80.1
	4	34.6
464.h264ref	4	87.9
	4	84.4
471.omnetpp	4	39.4
	4	37.1
473.astar	4	37.4
	4	34.3
483.xalancbmk	4	59.8

SPECint_rate_base2006 = 47.4

SPECint_rate2006 = 56.3

Hardware

CPU Name: Intel Xeon E5405
CPU Characteristics: 1333 MHz system bus
CPU MHz: 2000
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

PRIMERGY RX300 S4, Intel Xeon E5405, 2.0 GHz

SPECint_rate2006 = 56.3

SPECint_rate_base2006 = 47.4
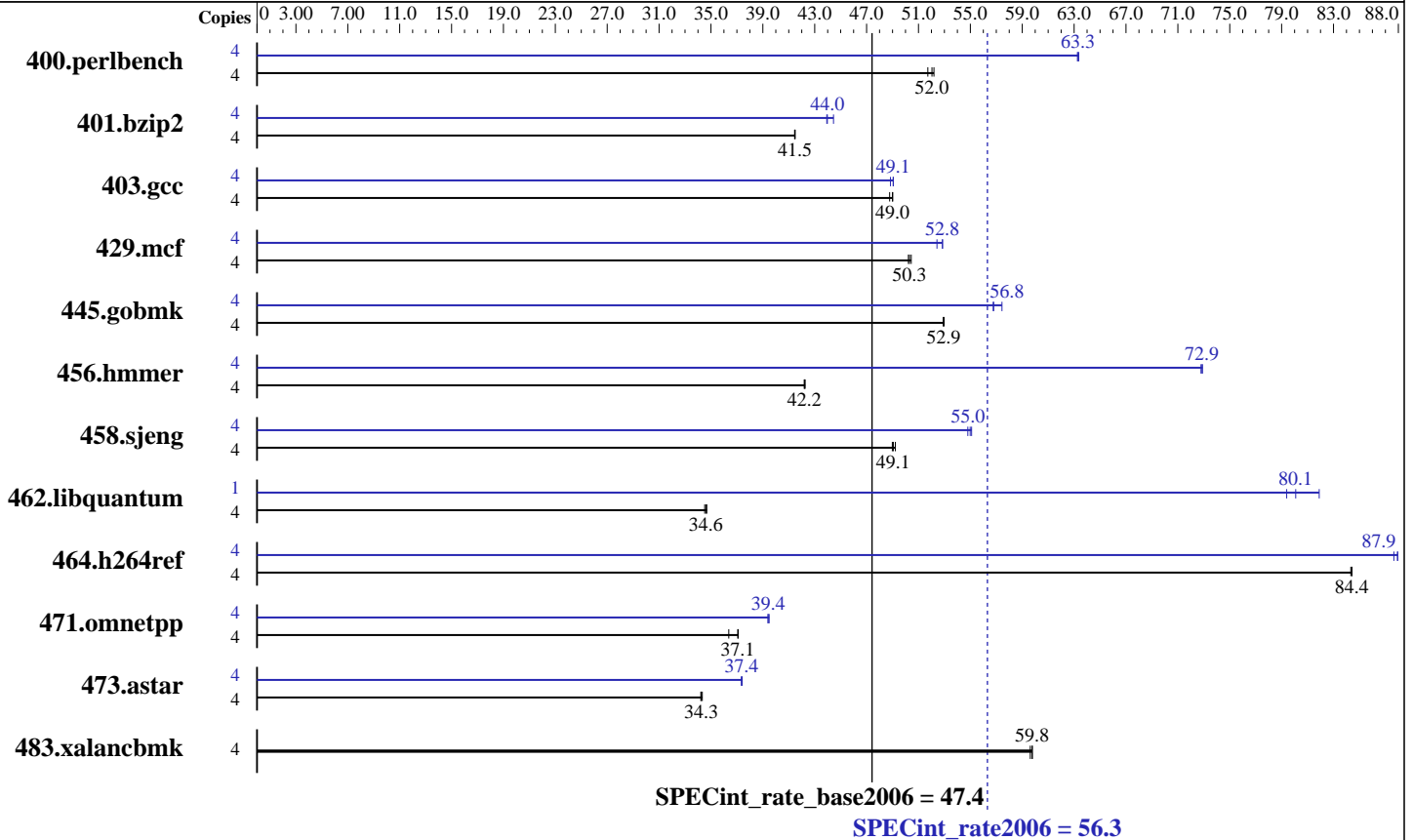
CPU2006 license: 22
Test sponsor: Fujitsu Siemens Computers
Tested by: Fujitsu Siemens Computers

Test date: Aug-2008
Hardware Availability: Dec-2007
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	**751**	**52.0**	756	51.7	749	52.2	4	**617**	**63.3**	617	63.4	618	63.3
401.bzip2	4	931	41.4	930	41.5	**931**	**41.5**	4	879	43.9	868	44.4	**878**	**44.0**
403.gcc	4	657	49.0	**657**	**49.0**	660	48.8	4	659	48.8	656	49.1	**656**	**49.1**
429.mcf	4	726	50.2	723	50.4	**725**	**50.3**	4	696	52.4	690	52.9	**690**	**52.8**
445.gobmk	4	**793**	**52.9**	792	53.0	793	52.9	4	**739**	**56.8**	739	56.8	731	57.4
456.hmmer	4	883	42.3	**884**	**42.2**	884	42.2	4	**512**	**72.9**	512	72.9	513	72.8
458.sjeng	4	983	49.2	988	49.0	**987**	**49.1**	4	883	54.8	**880**	**55.0**	878	55.1
462.libquantum	4	2401	34.5	**2395**	**34.6**	2390	34.7	1	**259**	**80.1**	261	79.4	253	81.9
464.h264ref	4	1049	84.4	**1049**	**84.4**	1050	84.3	4	1010	87.7	1007	87.9	**1007**	**87.9**
471.omnetpp	4	674	37.1	**675**	**37.1**	687	36.4	4	**634**	**39.4**	633	39.5	634	39.4
473.astar	4	821	34.2	**820**	**34.3**	818	34.3	4	752	37.3	751	37.4	**752**	**37.4**
483.xalancbmk	4	463	59.6	462	59.8	**462**	**59.8**	4	463	59.6	462	59.8	**462**	**59.8**

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.hmmer 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
```

SPEC CINT2006 Result

Fujitsu Siemens Computers

SPECint_rate2006 =   56.3

PRIMERGY RX300 S4, Intel Xeon E5405, 2.0 GHz

SPECint_rate_base2006 = 47.4

CPU2006 license: 22	**Test date:** Aug-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-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):
```
/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

PRIMERGY RX300 S4, Intel Xeon E5405, 2.0 GHz

SPECint_rate2006 =   56.3

SPECint_rate_base2006 = 47.4

CPU2006 license: 22		**Test date:**	Aug-2008
Test sponsor:	Fujitsu Siemens Computers	**Hardware Availability:**	Dec-2007
Tested by:	Fujitsu Siemens Computers	**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 -lsmartheap

     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 -lsmartheap

   483.xalancbmk: basepeak = yes
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX300 S4, Intel Xeon E5405, 2.0 GHz

SPECint_rate2006 =   56.3

SPECint_rate_base2006 = 47.4

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

Test date: Aug-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`

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 22:20:04 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 14 October 2008.