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

Fujitsu Siemens Computers

PRIMERGY RX600 S4, Intel Xeon X7460, 2.66 GHz

SPECint®_rate2006 = 291

SPECint_rate_base2006 = 269
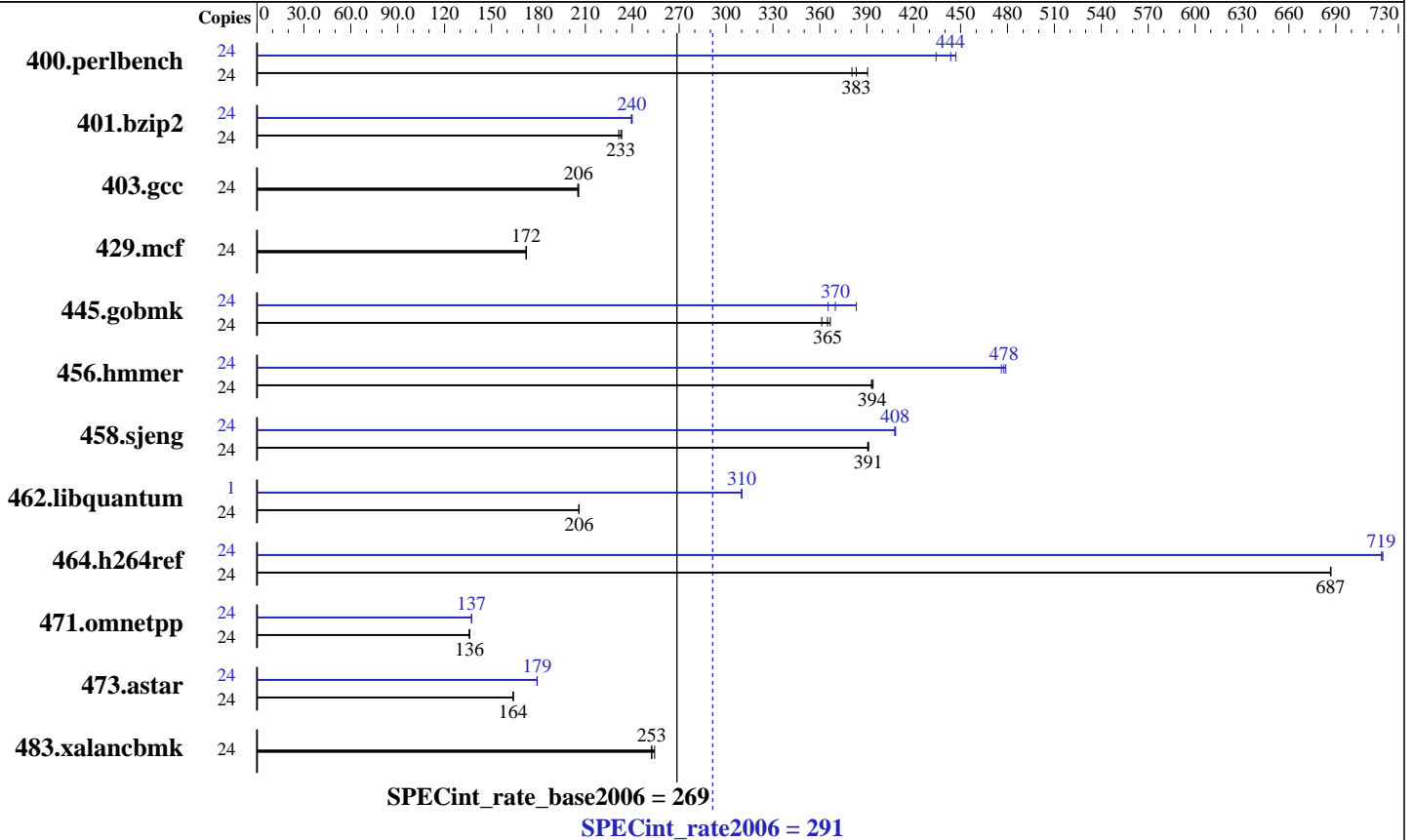
CPU2006 license: 22

Test sponsor: Fujitsu Siemens Computers

Tested by: Fujitsu Siemens Computers

Test date: Sep-2008

Hardware Availability: Sep-2008

Software Availability: Nov-2008

Benchmark	Copies	Result
400.perlbench	24	444
400.perlbench	24	383
401.bzip2	24	240
401.bzip2	24	233
403.gcc	24	206
429.mcf	24	172
445.gobmk	24	370
445.gobmk	24	365
456.hmmer	24	478
456.hmmer	24	394
458.sjeng	24	408
458.sjeng	24	391
462.libquantum	1	310
462.libquantum	24	206
464.h264ref	24	719
464.h264ref	24	687
471.omnetpp	24	137
471.omnetpp	24	136
473.astar	24	179
473.astar	24	164
483.xalancbmk	24	253

SPECint_rate_base2006 = 269

SPECint_rate2006 = 291

Hardware

CPU Name: Intel Xeon X7460

CPU Characteristics: 1066 MHz system bus

CPU MHz: 2667

FPU: Integrated

CPU(s) enabled: 24 cores, 4 chips, 6 cores/chip

CPU(s) orderable: 1,2,4 chips

Primary Cache: 32 KB I + 32 KB D on chip per core

Secondary Cache: 9 MB I+D on chip per chip, 3 MB shared / 2 cores

L3 Cache: 16 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, 73 GB, 15000 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 RX600 S4, Intel Xeon X7460, 2.66 GHz

SPECint_rate2006 =   291

SPECint_rate_base2006 = 269

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

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

Results Table

Benchmark	Copies	Base Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Peak Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	600	391	**612**	**383**	616	381	24	540	434	525	447	**528**	**444**
401.bzip2	24	**996**	**233**	1001	231	993	233	24	968	239	**966**	**240**	965	240
403.gcc	24	**940**	**206**	939	206	942	205	24	**940**	**206**	939	206	942	205
429.mcf	24	1272	172	**1271**	**172**	1270	172	24	1272	172	**1271**	**172**	1270	172
445.gobmk	24	**690**	**365**	687	367	697	361	24	689	365	657	383	**681**	**370**
456.hmmer	24	570	393	**569**	**394**	568	394	24	468	479	470	476	**469**	**478**
458.sjeng	24	742	391	744	391	**743**	**391**	24	712	408	**712**	**408**	711	408
462.libquantum	24	2417	206	2413	206	**2414**	**206**	1	66.8	310	**66.8**	**310**	66.9	310
464.h264ref	24	773	687	774	687	**774**	**687**	24	738	720	**738**	**719**	738	719
471.omnetpp	24	1105	136	**1103**	**136**	1102	136	24	**1093**	**137**	1093	137	1093	137
473.astar	24	1028	164	1029	164	**1028**	**164**	24	941	179	**941**	**179**	940	179
483.xalancbmk	24	**656**	**253**	651	254	656	252	24	**656**	**253**	651	254	656	252

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.

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

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

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

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu Siemens Computers

PRIMERGY RX600 S4, Intel Xeon X7460, 2.66 GHz

SPECint_rate2006 =   291

SPECint_rate_base2006 = 269

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

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

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

    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

SPEC CINT2006 Result

Fujitsu Siemens Computers

SPECint_rate2006 = 291

PRIMERGY RX600 S4, Intel Xeon X7460, 2.66 GHz

SPECint_rate_base2006 = 269

CPU2006 license: 22		**Test date:**	Sep-2008
Test sponsor:	Fujitsu Siemens Computers	**Hardware Availability:**	Sep-2008
Tested by:	Fujitsu Siemens Computers	**Software Availability:**	Nov-2008

Peak Compiler Invocation (Continued)

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: 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

Continued on next page

Fujitsu Siemens Computers

PRIMERGY RX600 S4, Intel Xeon X7460, 2.66 GHz

SPECint_rate2006 =   291

SPECint_rate_base2006 = 269

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

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

Peak Optimization Flags (Continued)

```
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 file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revD.20090714.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic10.1-int-linux64-revD.20090714.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 19:36:43 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 16 September 2008.