



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint®_rate2006 = 428

PRIMERGY BX924 S4, Intel Xeon E5-2620 v2, 2.10 GHz

SPECint_rate_base2006 = 413

CPU2006 license: 19

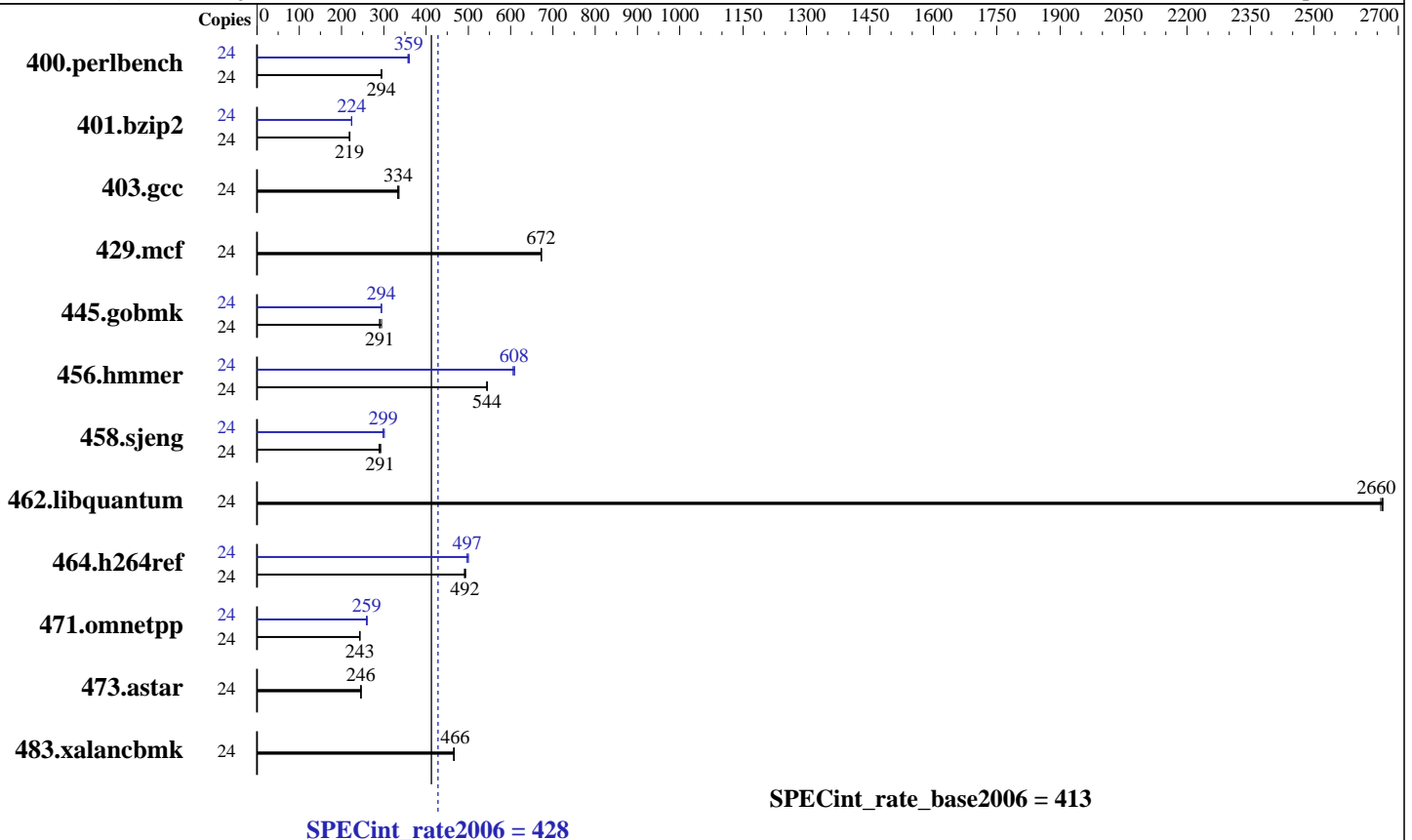
Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Oct-2013

Hardware Availability: Oct-2013

Software Availability: Sep-2013



Hardware

CPU Name: Intel Xeon E5-2620 v2
 CPU Characteristics: Intel Turbo Boost Technology up to 2.60 GHz
 CPU MHz: 2100
 FPU: Integrated
 CPU(s) enabled: 12 cores, 2 chips, 6 cores/chip, 2 threads/core
 CPU(s) orderable: 1,2 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 256 KB I+D on chip per core
 L3 Cache: 15 MB I+D on chip per chip
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC3L-12800R-11, ECC)
 Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.4 (Santiago)
 2.6.32-358.11.1.el6.x86_64
 Compiler: C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux
 Auto Parallel: No
 File System: ext4
 System State: Run level 3 (multi-user)
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V10.0



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 428

PRIMERGY BX924 S4, Intel Xeon E5-2620 v2, 2.10 GHz

SPECint_rate_base2006 = 413

CPU2006 license: 19
Test sponsor: Fujitsu
Tested by: Fujitsu

Test date: Oct-2013
Hardware Availability: Oct-2013
Software Availability: Sep-2013

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	24	<u>797</u>	<u>294</u>	795	295	798	294	24	<u>654</u>	<u>359</u>	657	357	650	361
401.bzip2	24	1054	220	1060	218	<u>1058</u>	<u>219</u>	24	<u>1034</u>	<u>224</u>	1034	224	1035	224
403.gcc	24	575	336	580	333	<u>578</u>	<u>334</u>	24	575	336	580	333	<u>578</u>	<u>334</u>
429.mcf	24	326	672	325	673	<u>326</u>	<u>672</u>	24	326	672	325	673	<u>326</u>	<u>672</u>
445.gobmk	24	<u>866</u>	<u>291</u>	854	295	868	290	24	856	294	855	294	<u>855</u>	<u>294</u>
456.hammer	24	411	545	412	543	<u>411</u>	<u>544</u>	24	<u>368</u>	<u>608</u>	368	609	370	606
458.sjeng	24	1006	289	<u>998</u>	<u>291</u>	992	293	24	964	301	<u>972</u>	<u>299</u>	974	298
462.libquantum	24	187	2660	187	2660	<u>187</u>	<u>2660</u>	24	187	2660	187	2660	<u>187</u>	<u>2660</u>
464.h264ref	24	1076	494	1082	491	<u>1079</u>	<u>492</u>	24	<u>1068</u>	<u>497</u>	1068	497	1062	500
471.omnetpp	24	616	244	<u>617</u>	<u>243</u>	617	243	24	<u>578</u>	<u>259</u>	576	261	578	259
473.astar	24	<u>685</u>	<u>246</u>	687	245	684	246	24	<u>685</u>	<u>246</u>	687	245	684	246
483.xalancbmk	24	<u>355</u>	<u>466</u>	356	465	355	467	24	<u>355</u>	<u>466</u>	356	465	355	467

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

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

BIOS configuration:
Energy Performance = Performance

General Notes

Environment variables set by runspec before the start of the run:
LD_LIBRARY_PATH = "/SPECcpu2006/libs/32:/SPECcpu2006/libs/64:/SPECcpu2006/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RedHat EL 6.4
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 428

PRIMERGY BX924 S4, Intel Xeon E5-2620 v2, 2.10 GHz

SPECint_rate_base2006 = 413

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Oct-2013

Hardware Availability: Oct-2013

Software Availability: Sep-2013

General Notes (Continued)

For information about Fujitsu please visit: <http://www.fujitsu.com>

Base Compiler Invocation

C benchmarks:

`icc -m32`

C++ benchmarks:

`icpc -m32`

Base Portability Flags

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

Base Optimization Flags

C benchmarks:

`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3`

C++ benchmarks:

`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3
-Wl,-z,muldefs -L/sh -lsmartheap`

Base Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

Peak Compiler Invocation

C benchmarks (except as noted below):

`icc -m32`

400.perlbench: `icc -m64`

401.bzip2: `icc -m64`

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 428

PRIMERGY BX924 S4, Intel Xeon E5-2620 v2, 2.10 GHz

SPECint_rate_base2006 = 413

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Oct-2013

Hardware Availability: Oct-2013

Software Availability: Sep-2013

Peak Compiler Invocation (Continued)

456.hmmr: `icc -m64`

458.sjeng: `icc -m64`

C++ benchmarks:

`icpc -m32`

Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64`

401.bzip2: `-DSPEC_CPU_LP64`

456.hmmr: `-DSPEC_CPU_LP64`

458.sjeng: `-DSPEC_CPU_LP64`

462.libquantum: `-DSPEC_CPU_LINUX`

483.xalancbmk: `-DSPEC_CPU_LINUX`

Peak Optimization Flags

C benchmarks:

400.perlbench: `-xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-auto-ilp32`

401.bzip2: `-xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-opt-prefetch -auto-ilp32 -ansi-alias`

403.gcc: `basepeak = yes`

429.mcf: `basepeak = yes`

445.gobmk: `-xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias -opt-mem-layout-trans=3`

456.hmmr: `-xSSE4.2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32`

458.sjeng: `-xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll4 -auto-ilp32`

462.libquantum: `basepeak = yes`

464.h264ref: `-xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll2 -ansi-alias`

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 428

PRIMERGY BX924 S4, Intel Xeon E5-2620 v2, 2.10 GHz

SPECint_rate_base2006 = 413

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Oct-2013

Hardware Availability: Oct-2013

Software Availability: Sep-2013

Peak Optimization Flags (Continued)

C++ benchmarks:

471.omnetpp: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs
-L/sh -lsmartheap

473.astar: basepeak = yes

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-ic14.0-official-linux64.20140128.html>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20131009.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform.20131009.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 v1.2.
Report generated on Thu Jul 24 17:42:46 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 19 November 2013.