



SPEC[®] CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

SPECint[®]_rate2006 = 730

PRIMERGY BX2580 M1, Intel Xeon E5-2640 v3, 2.6 GHz

SPECint_rate_base2006 = 704

CPU2006 license: 19

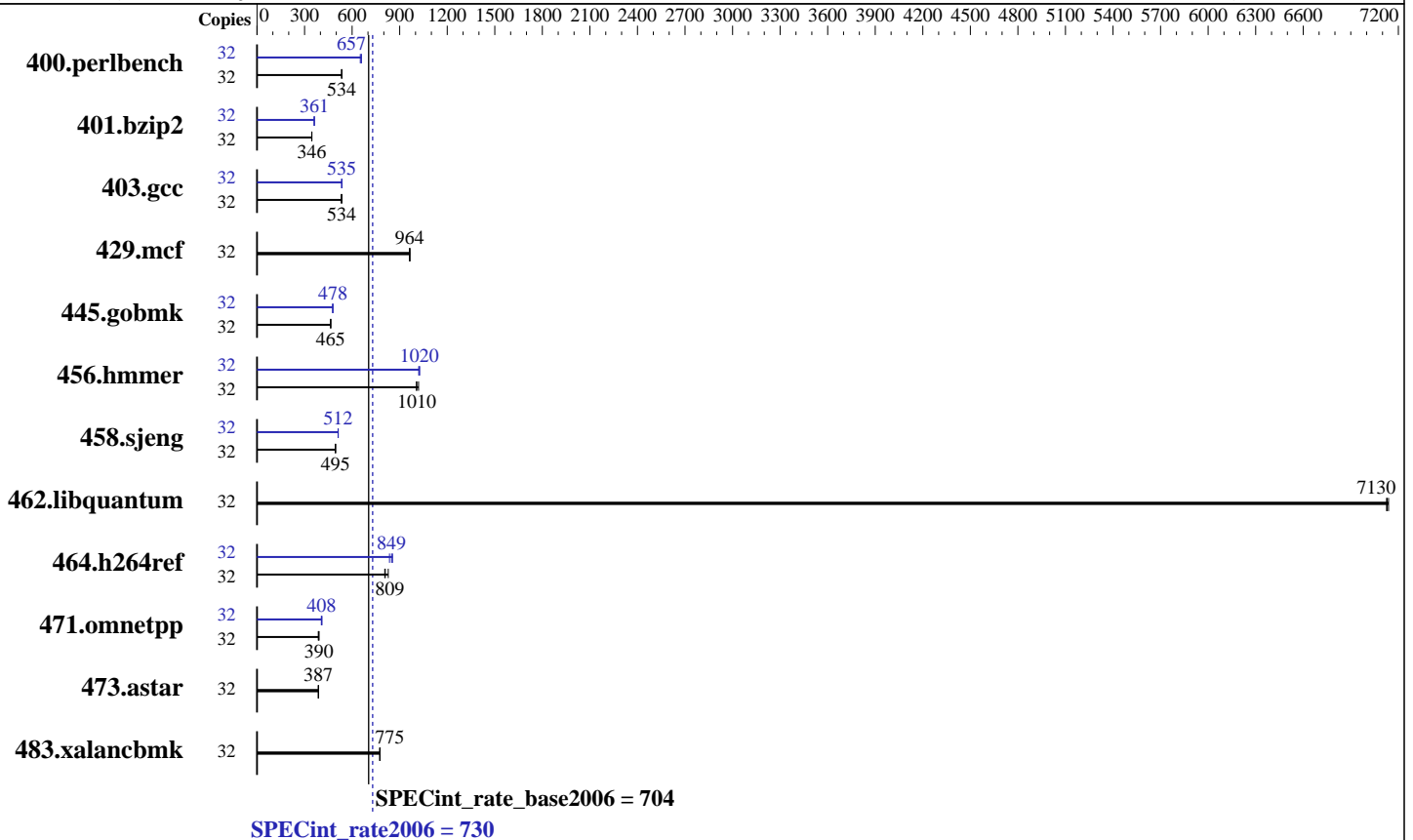
Test date: Mar-2015

Test sponsor: Fujitsu

Hardware Availability: Mar-2015

Tested by: Fujitsu

Software Availability: Nov-2013



Hardware

CPU Name: Intel Xeon E5-2640 v3
 CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz
 CPU MHz: 2600
 FPU: Integrated
 CPU(s) enabled: 16 cores, 2 chips, 8 cores/chip, 2 threads/core
 CPU(s) orderable: 1,2 chip
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 256 KB I+D on chip per core
 L3 Cache: 20 MB I+D on chip per chip
 Other Cache: None
 Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2133P-R, running at 1866 MHz)
 Disk Subsystem: 1 x SATA, 500 GB, 7200 RPM
 Other Hardware: None

Software

Operating System: Red Hat Enterprise Linux Server release 6.6 (Santiago)
 2.6.32-504.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 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 730

PRIMERGY BX2580 M1, Intel Xeon E5-2640 v3, 2.6 GHz

SPECint_rate_base2006 = 704

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

Test date: Mar-2015
Hardware Availability: Mar-2015
Software Availability: Nov-2013

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	32	585	534	585	534	584	535	32	475	658	480	652	476	657
401.bzip2	32	893	346	895	345	893	346	32	855	361	855	361	854	362
403.gcc	32	485	531	481	536	483	534	32	482	535	481	536	483	534
429.mcf	32	303	964	303	962	302	965	32	303	964	303	962	302	965
445.gobmk	32	722	465	722	465	722	465	32	702	478	702	478	703	477
456.hammer	32	296	1010	293	1020	297	1010	32	291	1030	293	1020	291	1020
458.sjeng	32	782	495	782	495	782	495	32	757	511	755	513	757	512
462.libquantum	32	93.0	7130	93.0	7130	92.9	7140	32	93.0	7130	93.0	7130	92.9	7140
464.h264ref	32	855	828	875	809	879	806	32	847	836	828	855	834	849
471.omnetpp	32	513	390	517	387	512	391	32	488	410	490	408	493	406
473.astar	32	580	387	580	387	579	388	32	580	387	580	387	579	388
483.xalancbmk	32	285	775	285	774	285	775	32	285	775	285	774	285	775

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
Utilization Profile = Unbalanced
QPI snoop mode: Early Snoop
COD Enable = Disabled, Early Snoop = Enabled
CPU C1E Support = Disabled

General Notes

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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 730

PRIMERGY BX2580 M1, Intel Xeon E5-2640 v3, 2.6 GHz

SPECint_rate_base2006 = 704

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Mar-2015

Hardware Availability: Mar-2015

Software Availability: Nov-2013

General Notes (Continued)

Filesystem page cache cleared with:
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

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:

-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
-opt-mem-layout-trans=3

C++ benchmarks:

-xCORE-AVX2 -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

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 730

PRIMERGY BX2580 M1, Intel Xeon E5-2640 v3, 2.6 GHz

SPECint_rate_base2006 = 704

CPU2006 license: 19

Test date: Mar-2015

Test sponsor: Fujitsu

Hardware Availability: Mar-2015

Tested by: Fujitsu

Software Availability: Nov-2013

Peak Compiler Invocation (Continued)

400.perlbench: icc -m64

401.bzip2: icc -m64

456.hmmer: 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.hmmer: -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: -xCORE-AVX2(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: -xCORE-AVX2(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: -xCORE-AVX2 -ipo -O3 -no-prec-div

429.mcf: basepeak = yes

445.gobmk: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias -opt-mem-layout-trans=3

456.hmmer: -xCORE-AVX2 -ipo -O3 -no-prec-div -unroll2 -auto-ilp32

458.sjeng: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll14 -auto-ilp32

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2015 Standard Performance Evaluation Corporation

Fujitsu

SPECint_rate2006 = 730

PRIMERGY BX2580 M1, Intel Xeon E5-2640 v3, 2.6 GHz

SPECint_rate_base2006 = 704

CPU2006 license: 19

Test sponsor: Fujitsu

Tested by: Fujitsu

Test date: Mar-2015

Hardware Availability: Mar-2015

Software Availability: Nov-2013

Peak Optimization Flags (Continued)

462.libquantum: basepeak = yes

464.h264ref: -xCORE-AVX2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -xCORE-AVX2(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-revB.html>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-HSW-RevA.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-revB.xml>

<http://www.spec.org/cpu2006/flags/Fujitsu-Platform-Settings-V1.2-HSW-RevA.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 Tue May 19 18:15:48 2015 by SPEC CPU2006 PS/PDF formatter v6932.

Originally published on 19 May 2015.