



SPEC[®] CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b
(Intel Xeon X3430)

SPECint[®]_rate2006 = 92.0

SPECint_rate_base2006 = 85.5

CPU2006 license: 9006

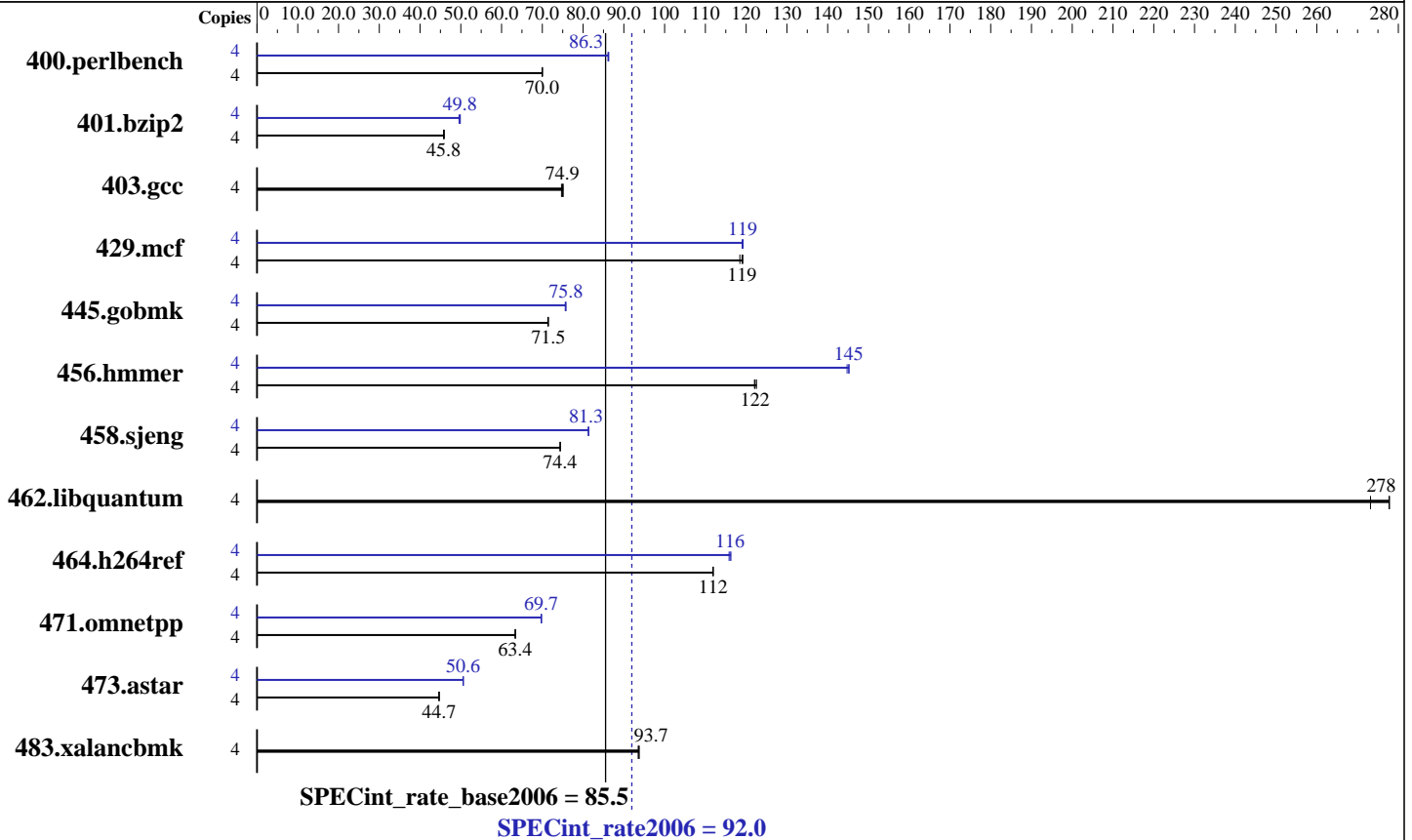
Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Feb-2010

Hardware Availability: Apr-2010

Software Availability: Nov-2009



Hardware

CPU Name: Intel Xeon X3430
 CPU Characteristics: Intel Turbo Boost Technology up to 2.80 GHz
 CPU MHz: 2400
 FPU: Integrated
 CPU(s) enabled: 4 cores, 1 chip, 4 cores/chip
 CPU(s) orderable: 1 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: 8 MB I+D on chip per chip
 Other Cache: None
 Memory: 8 GB (4 x 2 GB PC3-10600E, 2 rank, CL9, ECC)
 Disk Subsystem: 1x160 GB SATA, 7200 RPM
 Other Hardware: None

Software

Operating System: SUSE Linux Enterprise Server 11 (x86_64), Kernel 2.6.27.19-5-default
 Compiler: Intel C++ Professional Compiler for IA32 and Intel 64, Version 11.1 Build 20091012 Package ID: l_cproc_p_11.1.059
 Auto Parallel: No
 File System: ext3
 System State: Run level 3 (multi-user)
 Base Pointers: 32-bit
 Peak Pointers: 32/64-bit
 Other Software: Microquill SmartHeap V8.1



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b
(Intel Xeon X3430)

SPECint_rate2006 = 92.0

SPECint_rate_base2006 = 85.5

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Feb-2010

Hardware Availability: Apr-2010

Software Availability: Nov-2009

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	559	69.9	<u>559</u>	<u>70.0</u>	558	70.1	4	<u>453</u>	<u>86.3</u>	454	86.1	453	86.3
401.bzip2	4	<u>843</u>	<u>45.8</u>	840	46.0	843	45.8	4	<u>775</u>	<u>49.8</u>	779	49.6	774	49.9
403.gcc	4	<u>430</u>	<u>74.9</u>	431	74.7	429	75.1	4	<u>430</u>	<u>74.9</u>	431	74.7	429	75.1
429.mcf	4	308	118	<u>307</u>	<u>119</u>	306	119	4	306	119	<u>306</u>	<u>119</u>	306	119
445.gobmk	4	<u>587</u>	<u>71.5</u>	588	71.3	587	71.5	4	554	75.8	<u>554</u>	<u>75.8</u>	555	75.6
456.hammer	4	306	122	<u>305</u>	<u>122</u>	305	123	4	<u>257</u>	<u>145</u>	257	145	258	145
458.sjeng	4	651	74.4	651	74.4	<u>651</u>	<u>74.4</u>	4	<u>595</u>	<u>81.3</u>	595	81.3	595	81.3
462.libquantum	4	<u>298</u>	<u>278</u>	298	278	303	273	4	<u>298</u>	<u>278</u>	298	278	303	273
464.h264ref	4	<u>791</u>	<u>112</u>	791	112	791	112	4	764	116	761	116	<u>763</u>	<u>116</u>
471.omnetpp	4	394	63.4	<u>395</u>	<u>63.4</u>	395	63.3	4	358	69.8	<u>359</u>	<u>69.7</u>	359	69.7
473.astar	4	<u>629</u>	<u>44.7</u>	629	44.6	628	44.7	4	555	50.6	<u>555</u>	<u>50.6</u>	555	50.6
483.xalancbmk	4	294	93.7	295	93.5	<u>295</u>	<u>93.7</u>	4	294	93.7	295	93.5	<u>295</u>	<u>93.7</u>

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

Submit Notes

The config file option 'submit' was used.
numactl was used to bind copies to the cores

Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run

Platform Notes

Default BIOS settings were used.

Base Compiler Invocation

C benchmarks:
icc -m32

C++ benchmarks:
icpc -m32

Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b
(Intel Xeon X3430)

SPECint_rate2006 = 92.0

SPECint_rate_base2006 = 85.5

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Feb-2010

Hardware Availability: Apr-2010

Software Availability: Nov-2009

Base Portability Flags (Continued)

462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

C++ benchmarks:

-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -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 -m32

401.bzip2: icc -m64

456.hmmer: icc -m64

458.sjeng: icc -m64

C++ benchmarks (except as noted below):

icpc -m32

473.astar: icpc -m64

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b
(Intel Xeon X3430)

SPECint_rate2006 = 92.0

SPECint_rate_base2006 = 85.5

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Feb-2010

Hardware Availability: Apr-2010

Software Availability: Nov-2009

Peak Portability Flags (Continued)

473.astar: -DSPEC_CPU_LP64
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) -static(pass 2)
-prof-use(pass 2) -ansi-alias

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

403.gcc: basepeak = yes

429.mcf: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2) -O2
-ipo -no-prec-div -ansi-alias

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2
-ansi-alias -auto-ilp32

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -static(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) -static(pass 2)
-prof-use(pass 2) -unroll2 -ansi-alias

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/opt/SmartHeap_8.1/lib -lsmartheap

473.astar: -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=routine -Wl,-z,muldefs
-L/opt/SmartHeap_8.1/lib64 -lsmartheap64

Continued on next page



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b
(Intel Xeon X3430)

SPECint_rate2006 = 92.0

SPECint_rate_base2006 = 85.5

CPU2006 license: 9006

Test sponsor: NEC Corporation

Tested by: NEC Corporation

Test date: Feb-2010

Hardware Availability: Apr-2010

Software Availability: Nov-2009

Peak Optimization Flags (Continued)

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-ic11.1-int-linux64-revE.20100302.html>

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

<http://www.spec.org/cpu2006/flags/Intel-ic11.1-int-linux64-revE.20100302.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 Wed Jul 23 07:01:38 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 May 2010.