SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

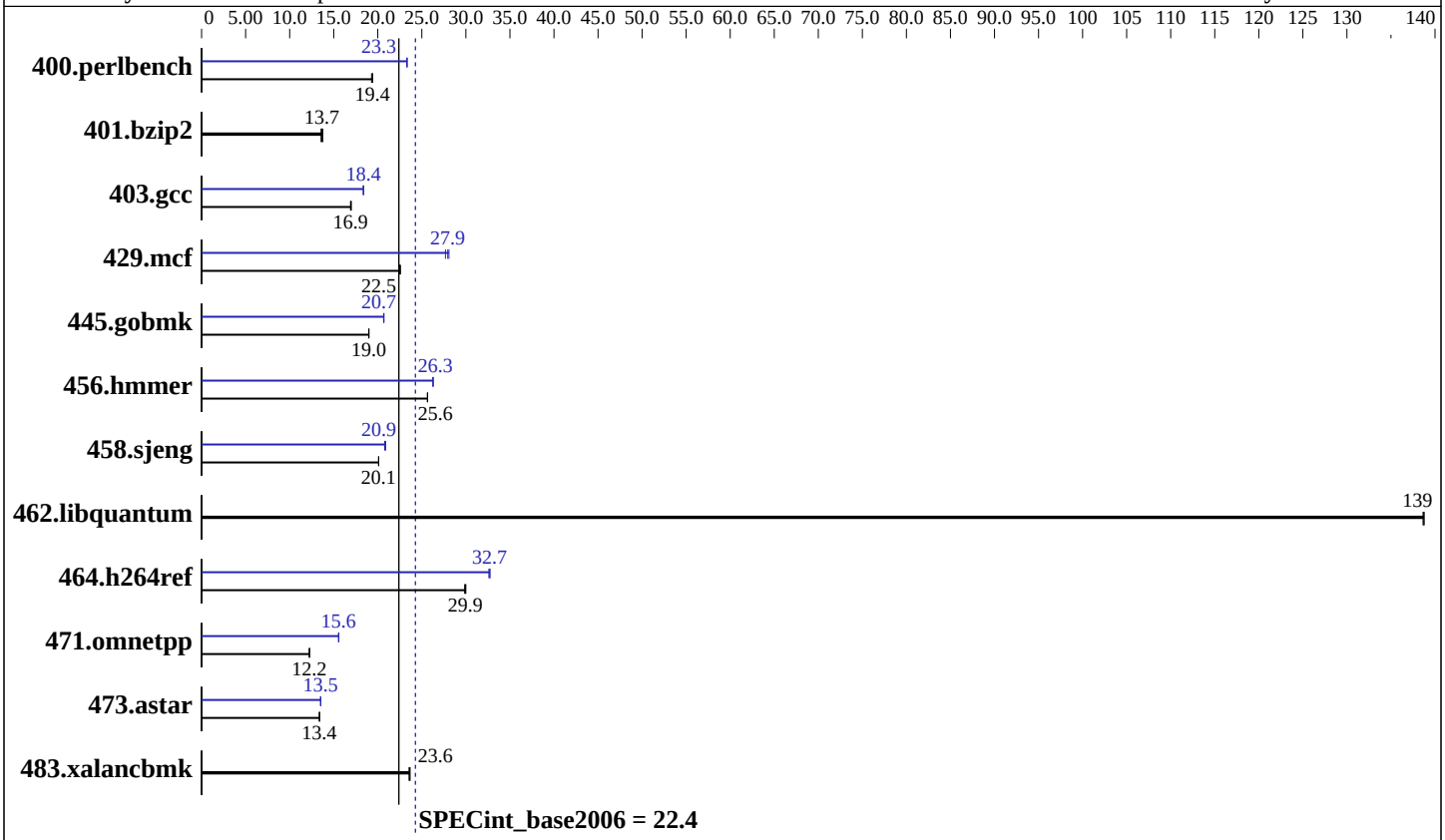
Express5800/GT110b
(Intel Pentium G6950)

SPECint®2006 = 24.3

SPECint_base2006 = 22.4

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 Pentium G6950
CPU Characteristics:	
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 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:	3 MB I+D on chip per chip
Other Cache:	None
Memory:	8 GB (4 x 2 GB PC3-10600E running at 1066 MHz)
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:	Yes
File System:	ext3
System State:	Run level 3 (multi-user)
Base Pointers:	64-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 Pentium G6950)

SPECint2006 = 24.3

SPECint_base2006 = 22.4

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					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	506	19.3	**504**	**19.4**	503	19.4	419	23.3	**419**	**23.3**	419	23.3
401.bzip2	702	13.8	712	13.6	**707**	**13.7**	702	13.8	712	13.6	**707**	**13.7**
403.gcc	474	17.0	**476**	**16.9**	476	16.9	**438**	**18.4**	438	18.4	439	18.4
429.mcf	**405**	**22.5**	404	22.6	405	22.5	**326**	**27.9**	329	27.7	325	28.1
445.gobmk	**552**	**19.0**	552	19.0	553	19.0	507	20.7	508	20.7	**507**	**20.7**
456.hmmer	364	25.7	**364**	**25.6**	364	25.6	**355**	**26.3**	355	26.3	355	26.3
458.sjeng	602	20.1	602	20.1	**602**	**20.1**	579	20.9	582	20.8	**580**	**20.9**
462.libquantum	149	139	149	139	**149**	**139**	149	139	149	139	**149**	**139**
464.h264ref	741	29.9	738	30.0	**739**	**29.9**	676	32.7	679	32.6	**676**	**32.7**
471.omnetpp	**510**	**12.2**	510	12.3	512	12.2	401	15.6	**402**	**15.6**	402	15.5
473.astar	524	13.4	525	13.4	**525**	**13.4**	518	13.5	520	13.5	**519**	**13.5**
483.xalancbmk	**292**	**23.6**	292	23.7	293	23.5	**292**	**23.6**	292	23.7	293	23.5

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

Operating System Notes

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

Platform Notes

Default BIOS settings were used.

General Notes

OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to granularity=fine,scatter

Base Compiler Invocation

C benchmarks:
icc -m64

C++ benchmarks:
icpc -m64

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64

Continued on next page

Base Portability Flags (Continued)

401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
429.mcf: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
471.omnetpp: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xSSSE3 -ipo -O3 -no-prec-div -static -parallel
-par-runtime-control -opt-prefetch

C++ benchmarks:
-xSSSE3 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs
-L/opt/SmartHeap_8.1/lib64 -lsmartheap64

Base Other Flags

C benchmarks:

403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icc -m64

429.mcf: icc -m32

C++ benchmarks (except as noted below):
icpc -m64

471.omnetpp: icpc -m32

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
445.gobmk: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
464.h264ref: -DSPEC_CPU_LP64
473.astar: -DSPEC_CPU_LP64
483.xalancbmk: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -ansi-alias -opt-prefetch

401.bzip2: basepeak = yes

403.gcc: -xSSSE3 -ipo -O3 -no-prec-div -static -inline-calloc
-opt-malloc-options=3

429.mcf: -xSSSE3 -ipo -O3 -no-prec-div -static -opt-prefetch

445.gobmk: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -O2 -ipo
-no-prec-div -ansi-alias

456.hmmer: -xSSSE3 -ipo -O3 -no-prec-div -static -unroll2
-ansi-alias -auto-ilp32

458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll4

462.libquantum: basepeak = yes

464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-no-prec-div -static -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xSSSE3 -ipo -O3
-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) -xSSSE3 -ipo -O3
-no-prec-div -ansi-alias -opt-ra-region-strategy=routine
-Wl,-z,muldefs -L/opt/SmartHeap_8.1/lib64 -lsmartheap64

Continued on next page

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 06:55:36 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 May 2010.