SPEC® CINT2006 Result

NEC Corporation

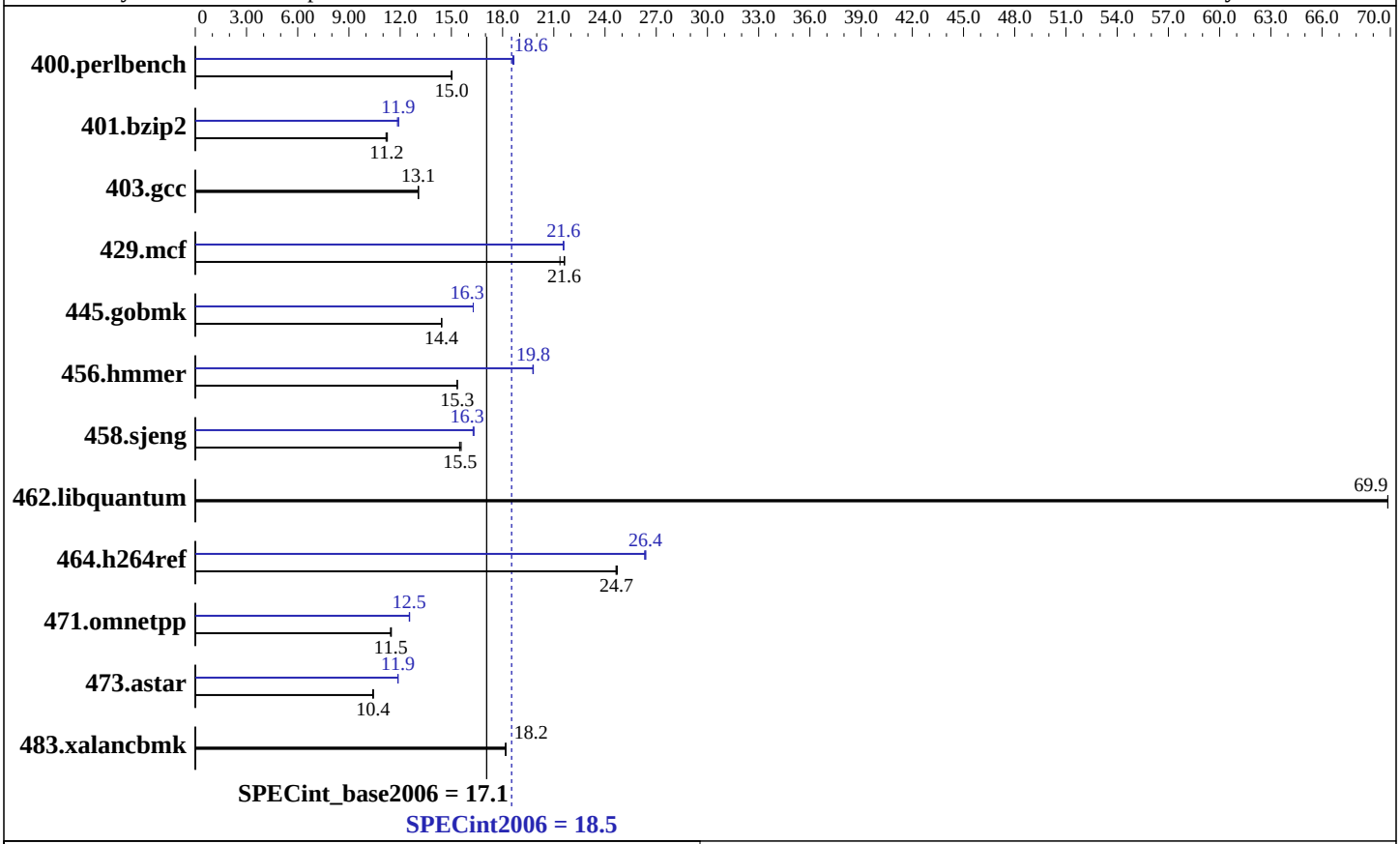
Express5800/iR110a-1H
(Intel Core 2 Duo P8400)

SPECint®2006 = 18.5

SPECint_base2006 = 17.1

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

Test date: Nov-2009
Hardware Availability: Jul-2009
Software Availability: Feb-2009



Hardware

CPU Name:	Intel Core 2 Duo P8400
CPU Characteristics:	1066 MHz system bus
CPU MHz:	2266
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:	3 MB I+D on chip per chip
L3 Cache:	None
Other Cache:	None
Memory:	8 GB (4x2 GB PC2-5300P, 1 rank, CL5-5-5, ECC)
Disk Subsystem:	1x73.2 GB SAS, 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 Professional 11.0 for Linux Build 20090131 Package ID: l_cproc_p_11.0.081
Auto Parallel:	Yes
File System:	ReiserFS
System State:	Run level 3 (multi-user)
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	MicroQuill SmartHeap Library 8.1 Binutils 2.18.50.0.7.20080502

SPEC CINT2006 Result

NEC Corporation

Express5800/iR110a-1H
(Intel Core 2 Duo P8400)

SPECint2006 = 18.5

SPECint_base2006 = 17.1

CPU2006 license: 9006
Test sponsor: NEC Corporation
Tested by: NEC Corporation

Test date: Nov-2009
Hardware Availability: Jul-2009
Software Availability: Feb-2009

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	**650**	**15.0**	651	15.0	650	15.0	525	18.6	523	18.7	**525**	**18.6**
401.bzip2	**861**	**11.2**	858	11.3	864	11.2	**811**	**11.9**	815	11.8	810	11.9
403.gcc	615	13.1	617	13.1	**616**	**13.1**	615	13.1	617	13.1	**616**	**13.1**
429.mcf	427	21.4	421	21.6	**422**	**21.6**	**423**	**21.6**	423	21.5	423	21.6
445.gobmk	**727**	**14.4**	727	14.4	727	14.4	**644**	**16.3**	644	16.3	644	16.3
456.hmmer	608	15.3	608	15.3	**608**	**15.3**	472	19.8	**471**	**19.8**	471	19.8
458.sjeng	782	15.5	777	15.6	**780**	**15.5**	**742**	**16.3**	742	16.3	744	16.3
462.libquantum	297	69.9	297	69.9	**297**	**69.9**	297	69.9	297	69.9	**297**	**69.9**
464.h264ref	**897**	**24.7**	895	24.7	898	24.6	841	26.3	**839**	**26.4**	839	26.4
471.omnetpp	547	11.4	544	11.5	**545**	**11.5**	498	12.6	**498**	**12.5**	499	12.5
473.astar	673	10.4	**674**	**10.4**	676	10.4	**591**	**11.9**	591	11.9	592	11.9
483.xalancbmk	379	18.2	380	18.2	**380**	**18.2**	379	18.2	380	18.2	**380**	**18.2**

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
OMP_NUM_THREADS set to number of cores
KMP_AFFINITY set to "physical,0"
```

Platform Notes

```
Bios settings:
Hardware Prefetcher:            Enabled
Adjacent Cache Line Prefetch:   Enabled
```

Base Compiler Invocation

C benchmarks:
`icc`

C++ benchmarks:
`icpc`

Base Portability Flags

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

Continued on next page

Base Portability Flags (Continued)

483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-xSSE4.1 -ipo -O3 -no-prec-div -static -parallel
-par-runtime-control -opt-prefetch

C++ benchmarks:
-xSSE4.1 -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

401.bzip2: /opt/intel/Compiler/11.0/081/bin/intel64/icc
-L/opt/intel/Compiler/11.0/081/ipp/em64t/lib
-I/opt/intel/Compiler/11.0/081/ipp/em64t/include

456.hmmer: /opt/intel/Compiler/11.0/081/bin/intel64/icc
-L/opt/intel/Compiler/11.0/081/ipp/em64t/lib
-I/opt/intel/Compiler/11.0/081/ipp/em64t/include

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 -auto-ilp32 -opt-prefetch -ansi-alias`

403.gcc: `basepeak = yes`

429.mcf: `-xSSE4.1 -ipo -O3 -no-prec-div -static -opt-prefetch`

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 -auto-ilp32`

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

462.libquantum: `basepeak = yes`

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/opt/SmartHeap_8.1/lib -lsmartheap`

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/opt/SmartHeap_8.1/lib -lsmartheap`

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-ic11.0-int-linux64-revG.html
http://www.spec.org/cpu2006/flags/NEC-Intel-Linux-Settings-flags-revE.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revG.xml
http://www.spec.org/cpu2006/flags/NEC-Intel-Linux-Settings-flags-revE.xml

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 05:52:03 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 2 February 2010.