



SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

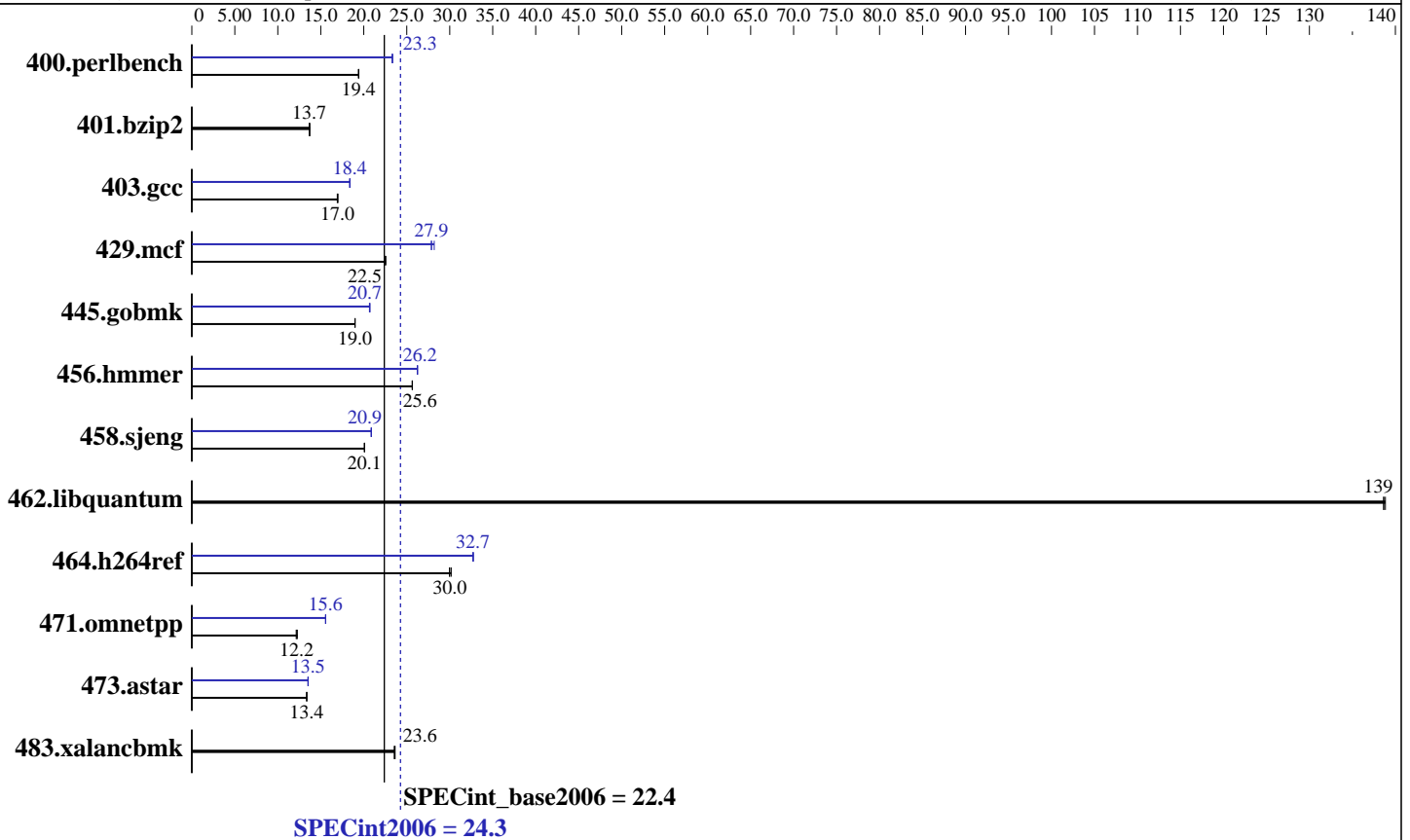
Express5800/GT110b-S
(Intel Pentium G6950)

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-S
(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	503	19.4	504	19.4	<u>504</u>	<u>19.4</u>	419	23.3	418	23.4	<u>419</u>	<u>23.3</u>
401.bzip2	703	13.7	707	13.7	<u>705</u>	<u>13.7</u>	703	13.7	707	13.7	<u>705</u>	<u>13.7</u>
403.gcc	474	17.0	<u>475</u>	<u>17.0</u>	476	16.9	438	18.4	438	18.4	<u>438</u>	<u>18.4</u>
429.mcf	404	22.6	<u>405</u>	<u>22.5</u>	405	22.5	327	27.9	<u>327</u>	<u>27.9</u>	323	28.2
445.gobmk	<u>553</u>	<u>19.0</u>	552	19.0	553	19.0	508	20.7	506	20.7	<u>507</u>	<u>20.7</u>
456.hammer	364	25.7	<u>364</u>	<u>25.6</u>	364	25.6	355	26.3	356	26.2	<u>356</u>	<u>26.2</u>
458.sjeng	<u>602</u>	<u>20.1</u>	603	20.1	602	20.1	579	20.9	580	20.9	<u>579</u>	<u>20.9</u>
462.libquantum	<u>149</u>	<u>139</u>	149	139	149	139	<u>149</u>	<u>139</u>	149	139	149	139
464.h264ref	738	30.0	<u>738</u>	<u>30.0</u>	733	30.2	<u>677</u>	<u>32.7</u>	676	32.8	677	32.7
471.omnetpp	509	12.3	515	12.1	<u>512</u>	<u>12.2</u>	401	15.6	<u>401</u>	<u>15.6</u>	402	15.5
473.astar	525	13.4	<u>525</u>	<u>13.4</u>	525	13.4	519	13.5	<u>519</u>	<u>13.5</u>	520	13.5
483.xalancbmk	<u>292</u>	<u>23.6</u>	293	23.5	292	23.6	<u>292</u>	<u>23.6</u>	293	23.5	292	23.6

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



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b-S
(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

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.hmmr: -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

```



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b-S
(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

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.hmmr: -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-alloc
         -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.hmmr: -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



SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/GT110b-S
(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

Peak Optimization Flags (Continued)

483.xalanbmk: 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 07:05:14 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 May 2010.