SPEC® CINT2006 Result

IBM Corporation

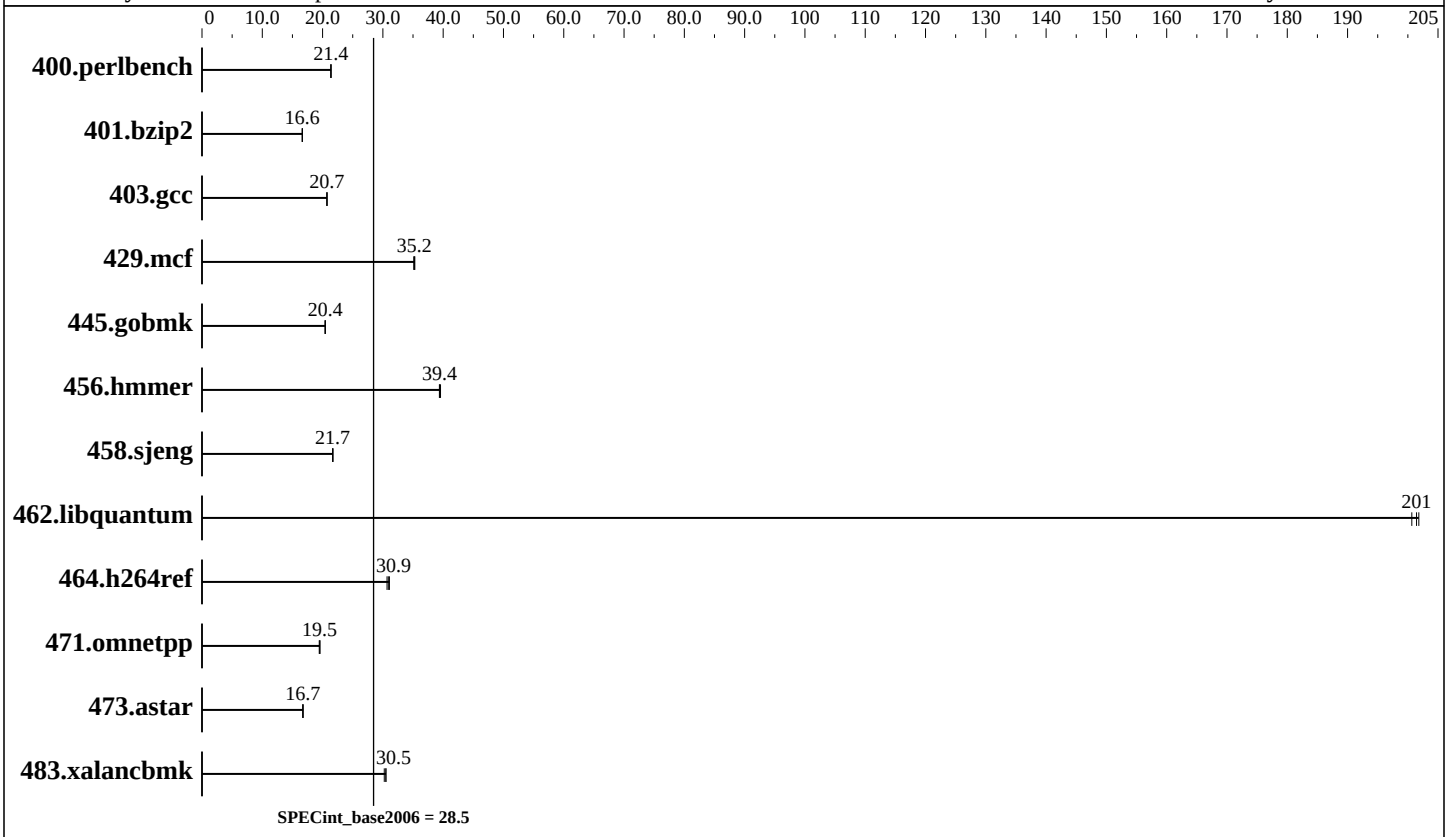
IBM BladeCenter HS22 (Intel Xeon E5540)

SPECint®2006 = Not Run

SPECint_base2006 = 28.5

CPU2006 license: 11
Test sponsor: IBM Corporation
Tested by: IBM Corporation

Test date: Dec-2010
Hardware Availability: Apr-2009
Software Availability: Jan-2010



Hardware

CPU Name:	Intel Xeon E5540
CPU Characteristics:	Intel Turbo Boost Technology up to 2.80 GHz
CPU MHz:	2533
FPU:	Integrated
CPU(s) enabled:	4 cores, 1 chip, 4 cores/chip, 2 threads/core
CPU(s) orderable:	1,2 chips
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 (2 x 4 GB 2Rx8 PC3-10600R, ECC, running at 1066 MHz and CL7)
Disk Subsystem:	2 x 146 GB SAS, 10000 RPM, RAID 1
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 20091130 Package ID: l_cproc_p_11.1.064
Auto Parallel:	Yes
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

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	457	21.4	457	21.4	**457**	**21.4**						
401.bzip2	580	16.6	580	16.6	**580**	**16.6**						
403.gcc	**388**	**20.7**	389	20.7	388	20.7						
429.mcf	258	35.3	**259**	**35.2**	260	35.1						
445.gobmk	513	20.5	514	20.4	**513**	**20.4**						
456.hmmer	237	39.4	236	39.6	**237**	**39.4**						
458.sjeng	557	21.7	558	21.7	**558**	**21.7**						
462.libquantum	103	202	**103**	**201**	103	201						
464.h264ref	712	31.1	721	30.7	**716**	**30.9**						
471.omnetpp	**320**	**19.5**	321	19.4	320	19.6						
473.astar	**420**	**16.7**	420	16.7	418	16.8						
483.xalancbmk	228	30.2	226	30.5	**226**	**30.5**						

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

Platform Notes

```
Turbo Mode enabled in BIOS
Turbo Boost set to Traditional in BIOS
Power C-states enabled in BIOS
Demand scrub enabled in BIOS
```

General Notes

```
'ulimit -s unlimited' was used to set the stack size prior to run
Binaries were compiled on SLES 10 with Binutils 2.18.50.0.7.20080502
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`
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:
`-xSSE4.2 -ipo -O3 -no-prec-div -static -parallel -opt-prefetch`

C++ benchmarks:
`-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs`
`-L/home/cmplr/usr3/alrahate/cpu2006.1.1.ic11.1/libic11.1-64bit -lsmartheap64`

Base 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-linux64-revE.20100316.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/Intel-ic11.1-linux64-revE.20100316.xml`

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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