SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

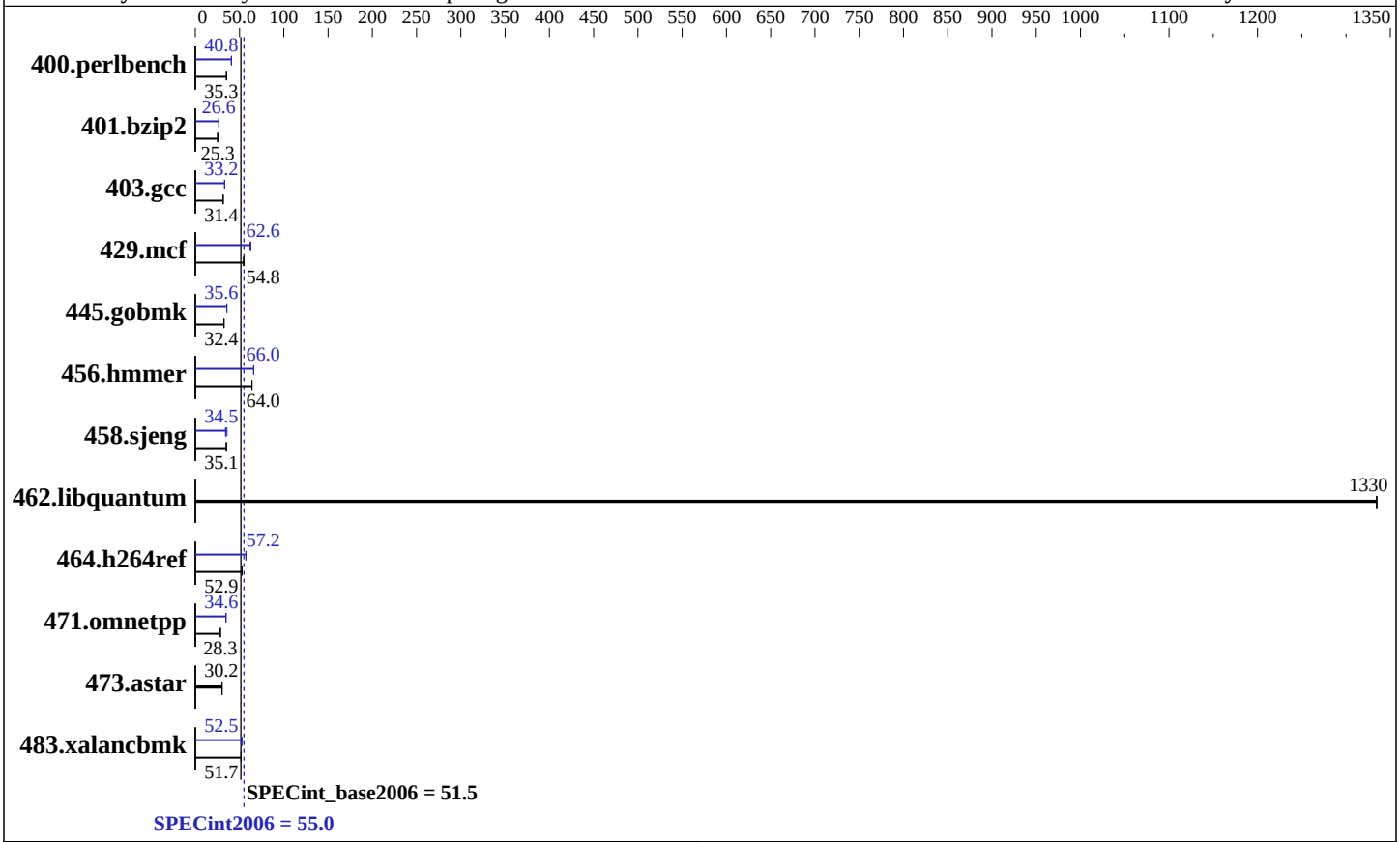
Cryo Performance Computing Ltd
Cryo Octane EDP-WS

SPECint®2006 = 55.0

SPECint_base2006 = 51.5

CPU2006 license: 3979
Test sponsor: Cryo Performance Computing Ltd
Tested by: Cryo Performance Computing Ltd

Test date: Mar-2011
Hardware Availability: Dec-2010
Software Availability: Dec-2010



Hardware

CPU Name:	Intel Xeon X5680
CPU Characteristics:	Intel Turbo Boost Technology disabled
CPU MHz:	4500
FPU:	Integrated
CPU(s) enabled:	12 cores, 2 chips, 6 cores/chip
CPU(s) orderable:	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:	12 MB I+D on chip per chip
Other Cache:	None
Memory:	24 GB (6 x 4 GB 2Rx4 PC3-12800U-9, running at 1440 MHz and CL8)
Disk Subsystem:	1 x 120 GB Corsair Force Series SSD
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 11 (x86_64) SP1, Kernel 2.6.32.12-0.7-default
Compiler:	Intel C++ Professional Compiler for IA32 and Intel 64, Version 12 Build 12.0.2.137 Package ID: l_ccompxe_2011.2.137, l_fcompxe_2011.2.137
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 V9.01

SPEC CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Cryo Performance Computing Ltd
Cryo Octane EDP-WS

SPECint2006 = 55.0

SPECint_base2006 = 51.5

CPU2006 license: 3979
Test sponsor: Cryo Performance Computing Ltd
Tested by: Cryo Performance Computing Ltd

Test date: Mar-2011
Hardware Availability: Dec-2010
Software Availability: Dec-2010

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	277	35.3	278	35.1	**277**	**35.3**	240	40.8	**240**	**40.8**	239	40.8
401.bzip2	**381**	**25.3**	381	25.3	381	25.3	**363**	**26.6**	363	26.6	363	26.6
403.gcc	257	31.4	**256**	**31.4**	256	31.5	**243**	**33.2**	243	33.1	243	33.2
429.mcf	167	54.6	**167**	**54.8**	166	54.8	**146**	**62.6**	147	61.9	146	62.6
445.gobmk	324	32.4	324	32.4	**324**	**32.4**	295	35.6	294	35.6	**295**	**35.6**
456.hmmer	146	64.0	146	64.0	**146**	**64.0**	141	66.0	**141**	**66.0**	141	66.0
458.sjeng	345	35.1	**345**	**35.1**	345	35.1	**350**	**34.5**	338	35.8	354	34.1
462.libquantum	15.5	1330	15.5	1330	**15.5**	**1330**	15.5	1330	15.5	1330	**15.5**	**1330**
464.h264ref	420	52.7	**418**	**52.9**	418	53.0	**387**	**57.2**	386	57.3	387	57.2
471.omnetpp	221	28.3	221	28.3	**221**	**28.3**	180	34.6	181	34.6	**181**	**34.6**
473.astar	**232**	**30.2**	232	30.2	233	30.1	**232**	**30.2**	232	30.2	233	30.1
483.xalancbmk	**133**	**51.7**	133	51.9	133	51.7	**132**	**52.5**	132	52.5	131	52.5

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

General Notes

```
OMP_NUM_THREADS set to number of cores
Hyper-Threading Technology Disabled
KMP_AFFINITY set to granularity=fine,scatter
KMP_STACKSIZE set to 200M
```

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`

Continued on next page

Base Portability Flags (Continued)

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/cryo/cpu2006/lib -lsmartheap64`

Base Other Flags

C benchmarks:

403.gcc: `-Dalloca=_alloca`

Peak Compiler Invocation

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

400.perlbench: `icc -m32`

429.mcf: `icc -m32`

445.gobmk: `icc -m32`

464.h264ref: `icc -m32`

C++ benchmarks (except as noted below):
`icpc -m32`

473.astar: `icpc -m64`

Peak Portability Flags

400.perlbench: `-DSPEC_CPU_LINUX_IA32`

Continued on next page

Peak Portability Flags (Continued)

401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX
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 -opt-prefetch

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

403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc
-opt-malloc-options=3 -auto-ilp32

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

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/home/cryo/cpu2006/lib -lsmartheap

Continued on next page

Peak Optimization Flags (Continued)

473.astar: `basepeak = yes`

483.xalancbmk: `-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs -L/home/cryo/cpu2006/lib -lsmartheap`

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-ic12.0-linux64-revB.html`
`http://www.spec.org/cpu2006/flags/Cryo-platform-linux64-revA.html`

You can also download the XML flags sources by saving the following links:
`http://www.spec.org/cpu2006/flags/Intel-ic12.0-linux64-revB.xml`
`http://www.spec.org/cpu2006/flags/Cryo-platform-linux64-revA.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 17:24:36 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 8 April 2011.