SPEC® CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

SGI Altix XE 320 (Intel Xeon E5472, 3.00 GHz)

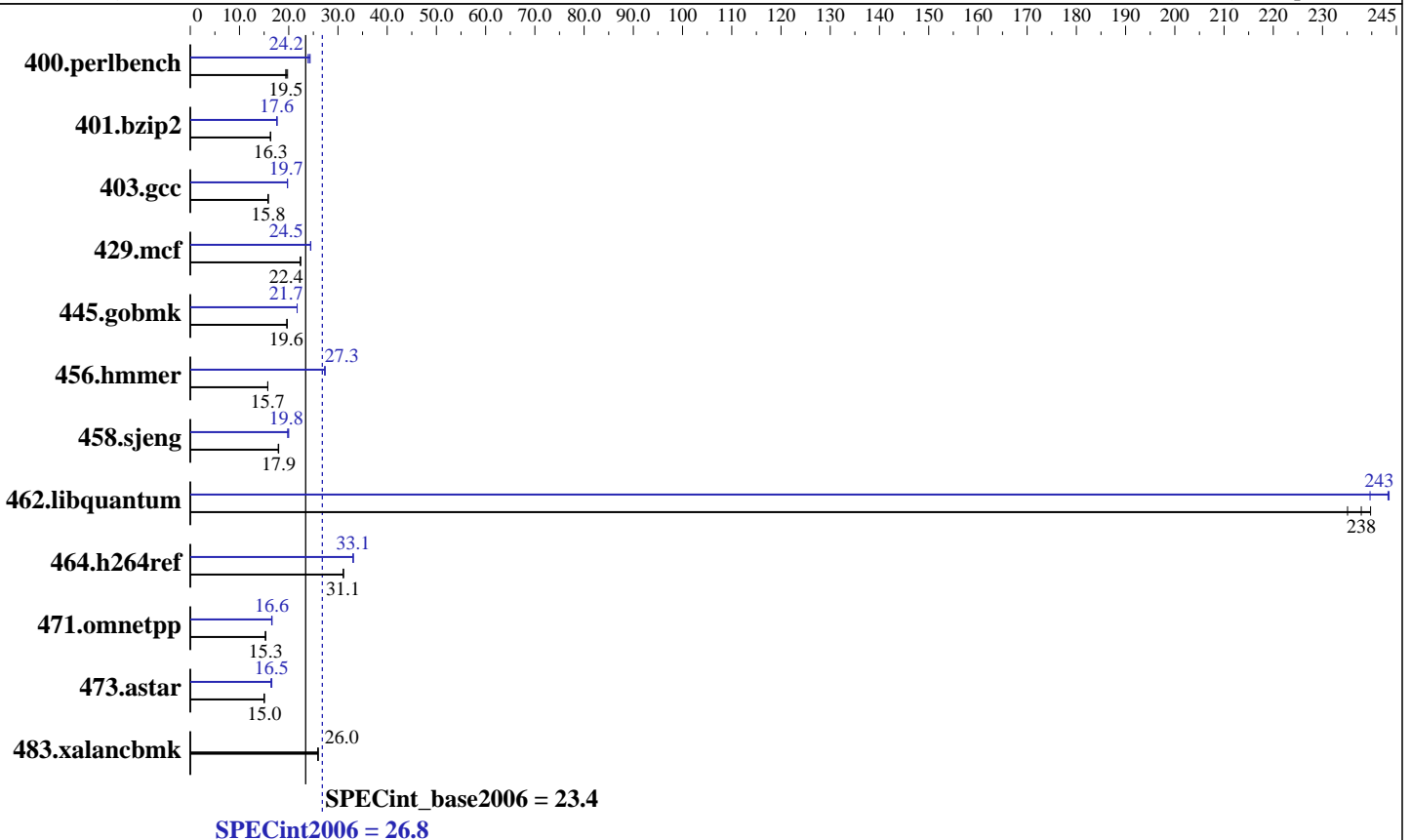SPECint®2006 = 26.8

SPECint_base2006 = 23.4

CPU2006 license: 4
Test sponsor: SGI
Tested by: SGI

Test date: May-2008
Hardware Availability: Feb-2008
Software Availability: Apr-2008

Benchmark	Peak	Base
400.perlbench	24.2	19.5
401.bzip2	17.6	16.3
403.gcc	19.7	15.8
429.mcf	24.5	22.4
445.gobmk	21.7	19.6
456.hmmer	27.3	15.7
458.sjeng	19.8	17.9
462.libquantum	243	238
464.h264ref	33.1	31.1
471.omnetpp	16.6	15.3
473.astar	16.5	15.0
483.xalancbmk		26.0

SPECint_base2006 = 23.4

SPECint2006 = 26.8

Hardware

CPU Name:	Intel Xeon E5472
CPU Characteristics:	Quad Core, 3.0 GHz
CPU MHz:	2992
FPU:	Integrated
CPU(s) enabled:	8 cores, 2 chips, 4 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	12 MB I+D on chip per chip, 6 MB shared / 2 cores
L3 Cache:	None
Other Cache:	None
Memory:	16 GB (8*2GB PC2-6400 CL5-5-5 FB-DIMMs)
Disk Subsystem:	1 x 250 GB SATA (Hitachi Deskstar 7200rpm)
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 10 (x86_64) SP1 Kernel 2.6.16.46-0.12-smp
Compiler:	Intel C++ and Fortran Compiler for Linux Version 10.1, Build 20070913
Auto Parallel:	Yes
File System:	xfs
System State:	Multi-user, run level 3
Base Pointers:	32-bit
Peak Pointers:	32/64-bit
Other Software:	SGI ProPack 5 for Linux Service Pack 5 Binutils 2.17 SmartHeap library V8.1

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

SGI Altix XE 320 (Intel Xeon E5472, 3.00 GHz)

SPECint2006 = 26.8

SPECint_base2006 = 23.4

CPU2006 license: 4	**Test date:** May-2008
Test sponsor: SGI	**Hardware Availability:** Feb-2008
Tested by: SGI	**Software Availability:** Apr-2008

Results Table

Benchmark	Base						Peak					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	503	19.4	494	19.8	**502**	**19.5**	408	23.9	401	24.3	**404**	**24.2**
401.bzip2	590	16.3	**591**	**16.3**	593	16.3	549	17.6	**548**	**17.6**	547	17.6
403.gcc	511	15.8	507	15.9	**508**	**15.8**	408	19.7	**408**	**19.7**	408	19.7
429.mcf	**407**	**22.4**	407	22.4	408	22.4	373	24.4	372	24.5	**373**	**24.5**
445.gobmk	534	19.6	534	19.6	**534**	**19.6**	**483**	**21.7**	483	21.7	483	21.7
456.hmmer	592	15.7	592	15.7	**592**	**15.7**	341	27.3	**341**	**27.3**	341	27.4
458.sjeng	677	17.9	674	18.0	**674**	**17.9**	**610**	**19.8**	611	19.8	605	20.0
462.libquantum	88.1	235	86.4	240	**87.1**	**238**	85.1	244	86.5	240	**85.2**	**243**
464.h264ref	711	31.1	**712**	**31.1**	712	31.1	669	33.1	668	33.1	**669**	**33.1**
471.omnetpp	**409**	**15.3**	408	15.3	410	15.3	**377**	**16.6**	377	16.6	378	16.5
473.astar	467	15.0	469	15.0	**467**	**15.0**	428	16.4	**424**	**16.5**	424	16.6
483.xalancbmk	265	26.0	**266**	**26.0**	266	25.9	265	26.0	**266**	**26.0**	266	25.9

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

General Notes

```
BIOS settings:
  Snoop Filter:          Enabled
  Hardware Prefetcher:    Enabled
  Adjacent Sector Prefetch: Disabled
All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer,
for peak, are compiled in 64-bit mode
Benchmarks compiled with automatic parallelization use
the following environment settings:
  OMP_NUM_THREADS = 8
  KMP_AFFINITY = physical,0
  KMP_STACKSIZE = 64M
```

Base Compiler Invocation

C benchmarks:
```
icc
```

C++ benchmarks:
```
icpc
```

Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32

SGI

SGI Altix XE 320 (Intel Xeon E5472, 3.00 GHz)

$SPECint2006 =$ 26.8

$SPECint\_base2006 =$ 23.4

CPU2006 license: 4
Test sponsor: SGI
Tested by: SGI

Test date: May-2008
Hardware Availability: Feb-2008
Software Availability: Apr-2008

Base Portability Flags (Continued)

```
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX
```

Base Optimization Flags

C benchmarks:
```
-fast -vec-guard-write -parallel -par-runtime-control
```

C++ benchmarks:
```
-xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap
```

Base Other Flags

C benchmarks:

```
403.gcc: -Dalloca=_alloca
```

Peak Compiler Invocation

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

```
401.bzip2: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc
          -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib
          -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/include
```

```
456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/bin/icc
          -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/lib
          -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070824/Linux64/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
```

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

SGI Altix XE 320 (Intel Xeon E5472, 3.00 GHz)

SPECint2006 =　26.8

SPECint_base2006 =　23.4

CPU2006 license: 4
Test sponsor: SGI
Tested by: SGI

Test date: May-2008
Hardware Availability: Feb-2008
Software Availability: Apr-2008

Peak Optimization Flags

C benchmarks:

>　400.perlbench: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -ansi-alias`
>　　　　`-prefetch`

>　401.bzip2: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -prefetch`
>　　　　`-auto-ilp32`

>　403.gcc: `-fast -inline-calloc -opt-malloc-options=3`

>　429.mcf: `-fast -prefetch`

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

>　456.hmmer: `-fast -unroll2 -ansi-alias -opt-multi-version-aggressive`
>　　　　`-auto-ilp32`

>　458.sjeng: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll4`

>　462.libquantum: `-fast -unroll4 -Ob0 -prefetch`
>　　　　`-opt-streaming-stores always -vec-guard-write`
>　　　　`-opt-malloc-options=3 -parallel -par-runtime-control`

>　464.h264ref: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-fast -unroll2`
>　　　　`-ansi-alias`

C++ benchmarks:

>　471.omnetpp: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-xT -O3 -ipo`
>　　　　`-no-prec-div -ansi-alias -opt-ra-region-strategy=block`
>　　　　`-Wl,-z,muldefs`
>　　　　`-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

>　473.astar: `-prof-gen`(pass 1) `-prof-use`(pass 2) `-xT -O3 -ipo`
>　　　　`-no-prec-div -ansi-alias -opt-ra-region-strategy=routine`
>　　　　`-Wl,-z,muldefs`
>　　　　`-L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap`

>　483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

>　403.gcc: `-Dalloca=_alloca`

SPEC CINT2006 Result
Copyright 2006-2014 Standard Performance Evaluation Corporation

SGI

SGI Altix XE 320 (Intel Xeon E5472, 3.00 GHz)

$SPECint2006 =$ 26.8

$SPECint\_base2006 =$ 23.4

The flags file that was used to format this result can be browsed at

`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.05.html`

You can also download the XML flags source by saving the following link:

`http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.05.xml`

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

Tested with SPEC CPU2006 v1.0.
Report generated on Tue Jul 22 17:33:14 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 11 June 2008.