SPEC® CINT2006 Result

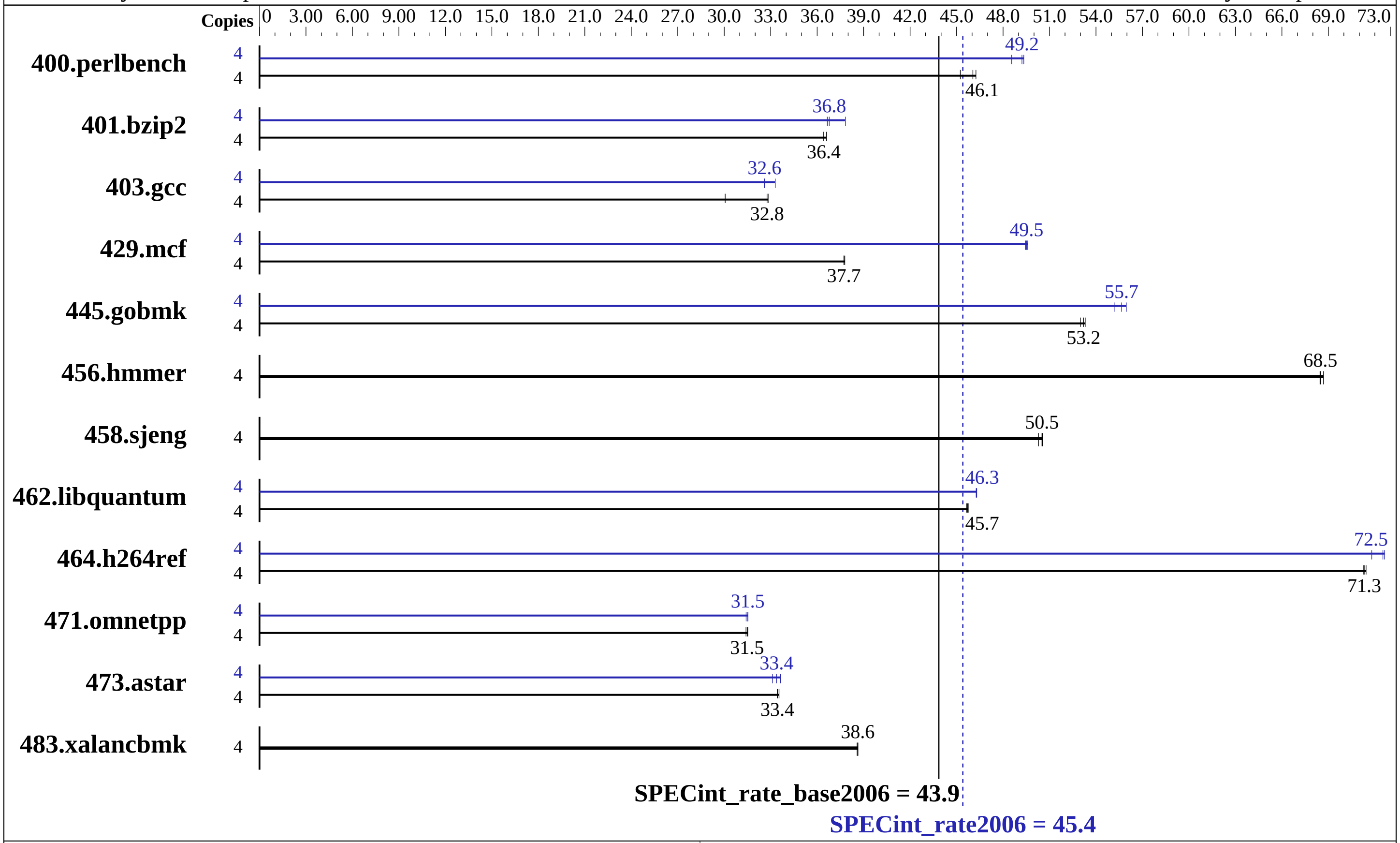
Supermicro
Motherboard H8DM8-2

SPECint®_rate2006 = 45.4

SPECint_rate_base2006 = 43.9

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Mar-2007
Hardware Availability: Jan-2007
Software Availability: Sep-2006



Hardware

CPU Name:	AMD Opteron 2220 SE
CPU Characteristics:	2.8GHz
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	64 KB I + 64 KB D on chip per core
Secondary Cache:	1 MB I+D on chip per core
L3 Cache:	None
Other Cache:	None
Memory:	64 GB (16x4GB, ECC REG PC25300 CLS)
Disk Subsystem:	250GB IDE, 7200RPM
Other Hardware:	None

Software

Operating System:	SuSE 10.0 (Kernel 2.6.16.21-0.8-smp x86_64)
Compiler:	The Portland Group (PGI) PGI pgcc 6.2-4 C Compiler PGI pgCC 6.2-4 C++ Compiler
Auto Parallel:	No
File System:	ext3
System State:	Multi-user
Base Pointers:	32/64-bit
Peak Pointers:	32/64-bit
Other Software:	None

SPEC CINT2006 Result

Supermicro Motherboard H8DM8-2

SPECint_rate2006 = 45.4

SPECint_rate_base2006 = 43.9

CPU2006 license: 001176
Test sponsor: Supermicro
Tested by: Supermicro

Test date: Mar-2007
Hardware Availability: Jan-2007
Software Availability: Sep-2006

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	4	864	45.2	**849**	**46.1**	845	46.2	4	805	48.6	792	49.3	**794**	**49.2**
401.bzip2	4	1061	36.4	1055	36.6	**1060**	**36.4**	4	1053	36.7	**1049**	**36.8**	1021	37.8
403.gcc	4	**983**	**32.8**	1071	30.1	981	32.8	4	**988**	**32.6**	967	33.3	988	32.6
429.mcf	4	965	37.8	967	37.7	**967**	**37.7**	4	738	49.5	736	49.6	**737**	**49.5**
445.gobmk	4	**789**	**53.2**	787	53.3	792	53.0	4	750	56.0	**754**	**55.7**	761	55.2
456.hmmer	4	543	68.7	545	68.5	**545**	**68.5**	4	543	68.7	545	68.5	**545**	**68.5**
458.sjeng	4	962	50.3	**958**	**50.5**	957	50.5	4	962	50.3	**958**	**50.5**	957	50.5
462.libquantum	4	**1813**	**45.7**	1811	45.8	1815	45.7	4	1790	46.3	**1791**	**46.3**	1791	46.3
464.h264ref	4	1239	71.4	1242	71.3	**1241**	**71.3**	4	1233	71.8	1219	72.6	**1221**	**72.5**
471.omnetpp	4	796	31.4	793	31.5	**794**	**31.5**	4	796	31.4	**793**	**31.5**	793	31.5
473.astar	4	840	33.4	837	33.5	**840**	**33.4**	4	835	33.6	848	33.1	**841**	**33.4**
483.xalancbmk	4	714	38.6	**715**	**38.6**	715	38.6	4	714	38.6	**715**	**38.6**	715	38.6

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

General Notes

```
 Environment stack size set to 'unlimited'
Tested systems can be used with CSE-825S2-560LPV case,
To ensure system stability, a 550W (minimum) ATX power supply [ 4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Product description located as of http://www.supermicro.com/Aplus/motherboard/Opteron2000/MCP55/H8DM8-2.cfm
```

Base Compiler Invocation

C benchmarks:
`/opt/pgi/624/linux86-64/6.2/bin/pgcc`

C++ benchmarks:
`/opt/pgi/624/linux86-64/6.2/bin/pgCC`

Base Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64 -DSPEC_CPU_HAVE_BOOL
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
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
-fastsse -Mipa=fast -Mipa=inline -Msmartalloc -tp k8-64

C++ benchmarks:
-fastsse -Mipa=fast -Mipa=inline -Msmartalloc -tp k8-32

Base Other Flags

C benchmarks:
-w

C++ benchmarks:
-w

Peak Compiler Invocation

C benchmarks:
/opt/pgi/624/linux86-64/6.2/bin/pgcc

C++ benchmarks:
/opt/pgi/624/linux86-64/6.2/bin/pgCC

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
403.gcc: -DSPEC_CPU_LP64 -DSPEC_CPU_HAVE_BOOL
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
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: `-Mpfi`(pass 1) `-Mipa=fast`(pass 2) `-Mipa=inline`(pass 2) `-Mpfo`(pass 2) `-fastsse -Msmartalloc -Mnounroll -tp k8-64`

401.bzip2: `-Mpfi`(pass 1) `-Mipa=fast`(pass 2) `-Mipa=inline`(pass 2) `-Mpfo`(pass 2) `-fastsse -Msmartalloc -tp k8-64`

403.gcc: `Same as 401.bzip2`

429.mcf: `-Mpfi`(pass 1) `-Mipa=fast`(pass 2) `-Mipa=inline`(pass 2) `-Mpfo`(pass 2) `-fastsse -tp k8-32`

445.gobmk: `-Mpfi`(pass 1) `-Mipa=fast`(pass 2) `-Mipa=inline`(pass 2) `-Mpfo`(pass 2) `-fastsse -Msmartalloc -Msafeptr -tp k8-64`

456.hmmer: `basepeak = yes`

458.sjeng: `basepeak = yes`

462.libquantum: `-fastsse -Msafeptr -Mfprelaxed -Msmartalloc -Mprefetch=distance:8 -Mprefetch=nta -Mipa=fast -Mipa=inline -Mipa=nolocalarg -tp k8-64`

464.h264ref: `-Mpfi`(pass 1) `-Mipa=fast`(pass 2) `-Mipa=inline`(pass 2) `-Mpfo`(pass 2) `-fastsse -Msmartalloc -Mvect=noaltcode -tp k8-64`

C++ benchmarks:

471.omnetpp: `-fastsse -Msmartalloc -Mfprelaxed=rsqrt -Mfprelaxed=sqrt -Mfprelaxed=div -Mipa=fast -Mipa=inline -tp k8-32`

473.astar: `-fastsse -Mipa=fast -Mipa=inline -Msmartalloc -tp k8-64`

483.xalancbmk: `basepeak = yes`

Peak Other Flags

C benchmarks:
`-w`

C++ benchmarks:
`-w`

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/pgi62_flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/pgi62_flags.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 11:27:53 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 1 May 2007.