SPEC® CINT2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

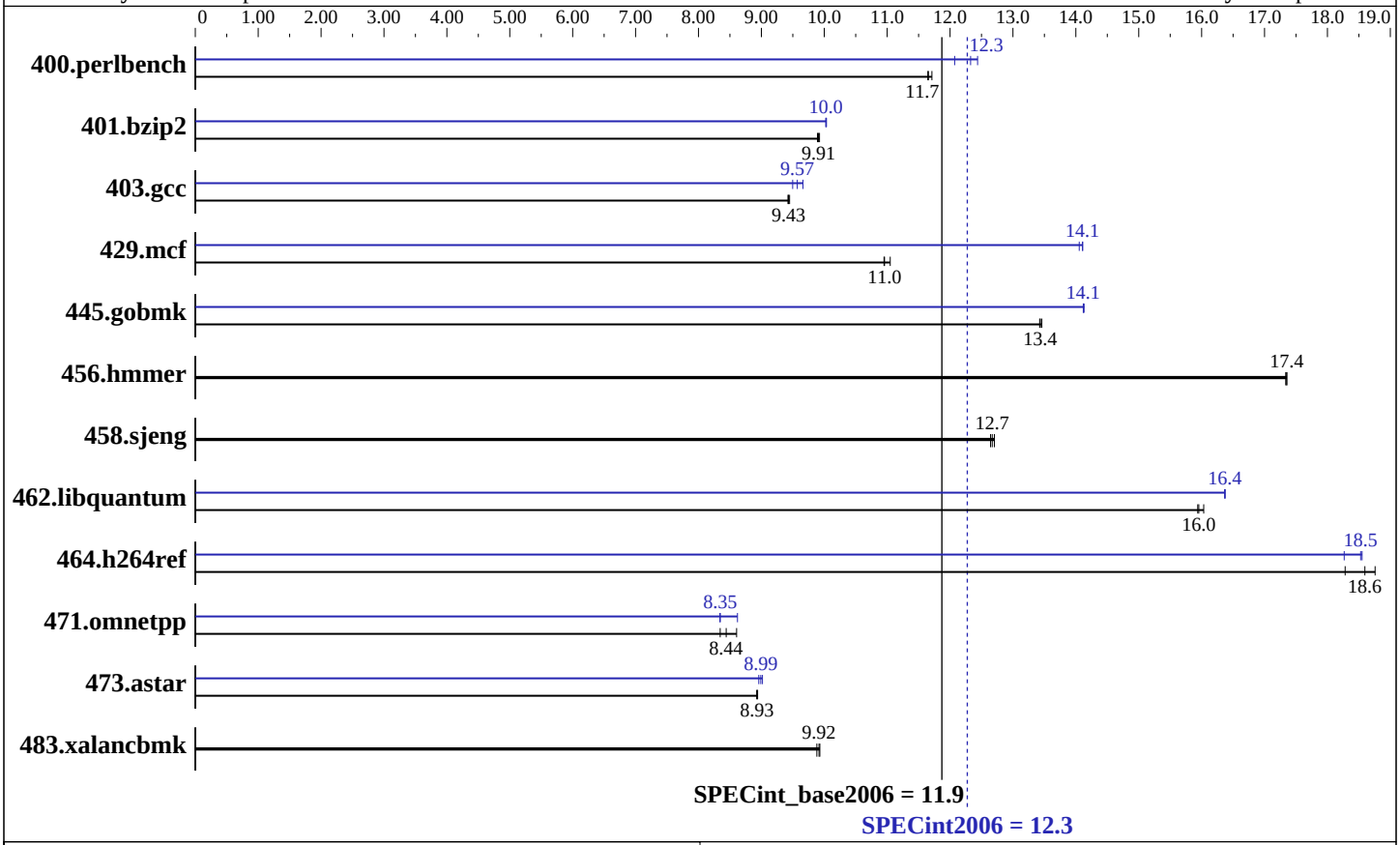
Supermicro Motherboard H8DM8-2

SPECint®2006 = 12.3

SPECint_base2006 = 11.9

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, 7200 RPM
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

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro Motherboard H8DM8-2

SPECint2006 = 12.3

SPECint_base2006 = 11.9

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					
	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
400.perlbench	839	11.6	**838**	**11.7**	834	11.7	**793**	**12.3**	809	12.1	786	12.4
401.bzip2	976	9.89	972	9.92	**974**	**9.91**	**962**	**10.0**	962	10.0	962	10.0
403.gcc	852	9.45	854	9.42	**854**	**9.43**	**841**	**9.57**	833	9.66	848	9.50
429.mcf	825	11.0	**832**	**11.0**	833	11.0	**646**	**14.1**	646	14.1	649	14.1
445.gobmk	781	13.4	**781**	**13.4**	779	13.5	**743**	**14.1**	742	14.1	743	14.1
456.hmmer	538	17.3	538	17.4	**538**	**17.4**	538	17.3	538	17.4	**538**	**17.4**
458.sjeng	952	12.7	**955**	**12.7**	957	12.6	952	12.7	**955**	**12.7**	957	12.6
462.libquantum	**1299**	**16.0**	1292	16.0	1300	15.9	**1266**	**16.4**	1266	16.4	1266	16.4
464.h264ref	**1190**	**18.6**	1180	18.8	1210	18.3	1193	18.6	**1194**	**18.5**	1211	18.3
471.omnetpp	**740**	**8.44**	726	8.61	749	8.35	**749**	**8.35**	725	8.62	749	8.34
473.astar	786	8.93	785	8.94	**786**	**8.93**	778	9.02	**781**	**8.99**	784	8.96
483.xalancbmk	**696**	**9.92**	698	9.88	695	9.93	**696**	**9.92**	698	9.88	695	9.93

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

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 v1.0.
Report generated on Tue Jul 22 11:31:37 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 1 May 2007.