



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro Motherboard X7DB8

SPECfp[®]_rate2006 = 31.1

SPECfp_rate_base2006 = 30.1

CPU2006 license: 001176

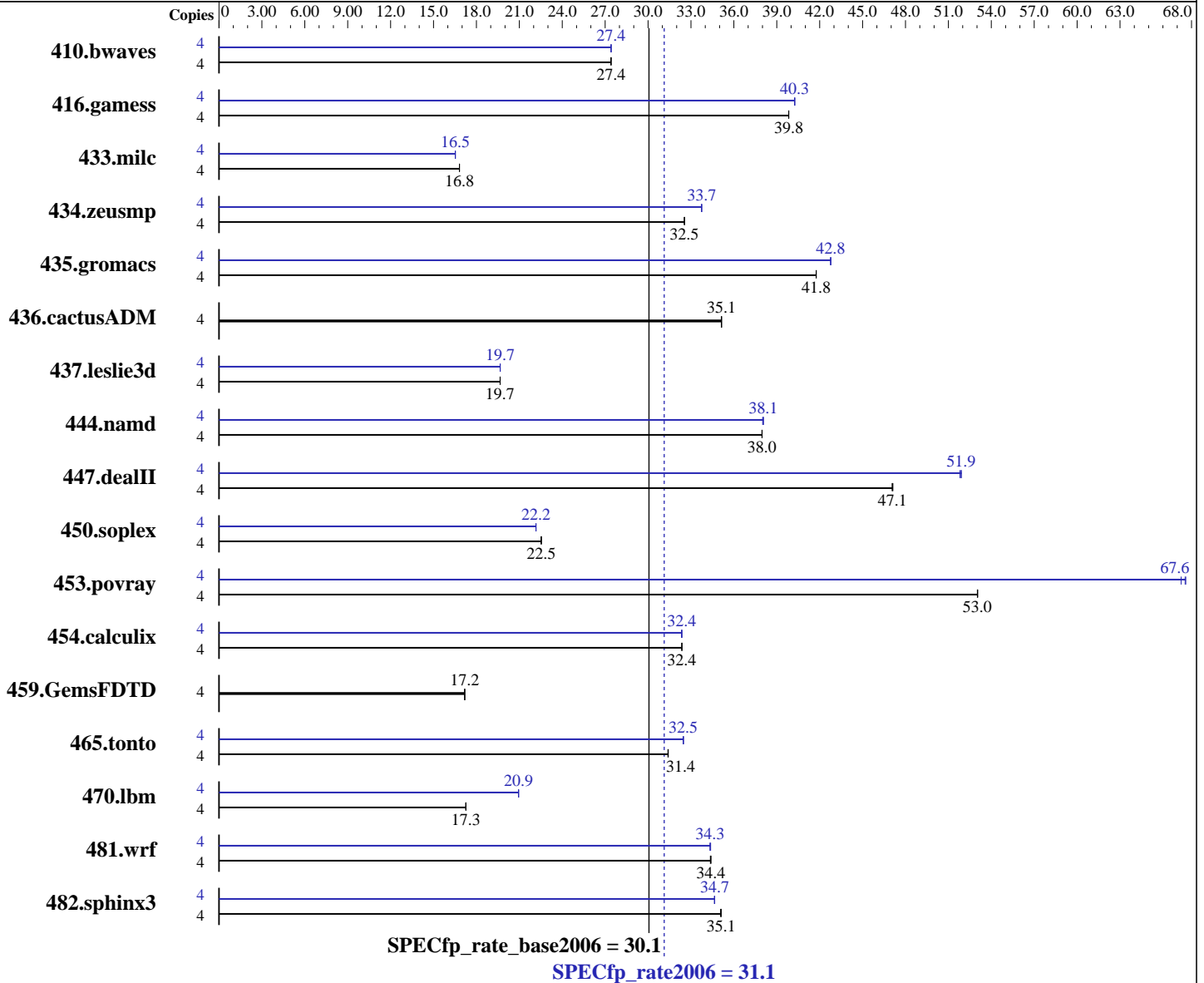
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Jun-2007

Hardware Availability: May-2007

Software Availability: Apr-2007



Hardware

CPU Name: Intel Xeon 5120
 CPU Characteristics: 1.86GHz 1066MHz System Bus
 CPU MHz: 1860
 FPU: Integrated
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
 CPU(s) orderable: 1, 2 chips
 Primary Cache: 32 KB I + 32 KB D on chip per core
 Secondary Cache: 4 MB I+D on chip per chip

Continued on next page

Software

Operating System: Windows Server 2003 Enterprise Edition W/ SP1
 Compiler: Intel C++ Compiler for IA32 version 10.0
 Build 20070426 Package ID: W_CC_P_10.0.025
 Intel Fortran Compiler for IA32 version 10.0
 Build 20070426 Package ID: W_FC_P_10.0.025
 Microsoft Visual Studio .Net 2003 (for libraries)
 Auto Parallel: No
 File System: NTFS
 System State: Default

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro Motherboard X7DB8

SPECfp_rate2006 = 31.1

SPECfp_rate_base2006 = 30.1

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Jun-2007

Hardware Availability: May-2007

Software Availability: Apr-2007

L3 Cache: None
Other Cache: None
Memory: 16 GB (8 X 2GB ECC PC2-5300, CL5, FBDIMM)
Disk Subsystem: 250GB SATA, 7200RPM
Other Hardware: None

Base Pointers: 32-bit
Peak Pointers: 32-bit
Other Software: SmartHeap Library Version 8.0 from <http://www.microquill.com/>

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
410.bwaves	4	1984	27.4	1983	27.4	<u>1983</u>	<u>27.4</u>	4	1983	27.4	<u>1983</u>	<u>27.4</u>	1983	27.4
416.gamess	4	1966	39.8	1966	39.8	<u>1966</u>	<u>39.8</u>	4	1946	40.3	1946	40.3	<u>1946</u>	<u>40.3</u>
433.milc	4	2185	16.8	<u>2184</u>	<u>16.8</u>	2183	16.8	4	2222	16.5	<u>2222</u>	<u>16.5</u>	2222	16.5
434.zeusmp	4	<u>1119</u>	<u>32.5</u>	1119	32.5	1118	32.6	4	1079	33.7	1079	33.8	<u>1079</u>	<u>33.7</u>
435.gromacs	4	684	41.8	<u>684</u>	<u>41.8</u>	684	41.8	4	668	42.8	668	42.8	<u>668</u>	<u>42.8</u>
436.cactusADM	4	1360	35.1	<u>1361</u>	<u>35.1</u>	1361	35.1	4	1360	35.1	<u>1361</u>	<u>35.1</u>	1361	35.1
437.leslie3d	4	1913	19.7	1912	19.7	<u>1913</u>	<u>19.7</u>	4	1912	19.7	1913	19.7	<u>1912</u>	<u>19.7</u>
444.namd	4	845	38.0	<u>845</u>	<u>38.0</u>	845	38.0	4	<u>843</u>	<u>38.1</u>	844	38.0	843	38.1
447.dealII	4	971	47.1	<u>972</u>	<u>47.1</u>	972	47.1	4	883	51.8	882	51.9	<u>882</u>	<u>51.9</u>
450.soplex	4	1480	22.5	<u>1480</u>	<u>22.5</u>	1481	22.5	4	1506	22.2	1505	22.2	<u>1505</u>	<u>22.2</u>
453.povray	4	401	53.0	401	53.1	<u>401</u>	<u>53.0</u>	4	315	67.6	316	67.3	<u>315</u>	<u>67.6</u>
454.calculix	4	1020	32.4	<u>1020</u>	<u>32.4</u>	1020	32.4	4	1020	32.4	1020	32.3	<u>1020</u>	<u>32.4</u>
459.GemsFDTD	4	2469	17.2	2471	17.2	<u>2470</u>	<u>17.2</u>	4	2469	17.2	2471	17.2	<u>2470</u>	<u>17.2</u>
465.tonto	4	1253	31.4	1254	31.4	<u>1254</u>	<u>31.4</u>	4	1212	32.5	<u>1212</u>	<u>32.5</u>	1212	32.5
470.lbm	4	<u>3184</u>	<u>17.3</u>	3184	17.3	3184	17.3	4	2624	20.9	<u>2624</u>	<u>20.9</u>	2624	20.9
481.wrf	4	1300	34.4	1299	34.4	<u>1299</u>	<u>34.4</u>	4	1300	34.4	1301	34.3	<u>1301</u>	<u>34.3</u>
482.sphinx3	4	2220	35.1	<u>2221</u>	<u>35.1</u>	2223	35.1	4	2251	34.6	<u>2249</u>	<u>34.7</u>	2249	34.7

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

General Notes

Tested systems can be used with CSE-825S2-R700LPV case,
To ensure system stability, a 500W (minimum) ATX power supply [4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Product description located as of <http://www.supermicro.com/products/motherboard/Xeon1333/5000P/X7DB8.cfm>
The system bus runs at 1066 MHz
"start /b /wait /affinity" used to bind processes to CPUs.

Base Compiler Invocation

C benchmarks:
icl -Qvc7.1 -Qc99

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro
Motherboard X7DB8

SPECfp_rate2006 = 31.1

SPECfp_rate_base2006 = 30.1

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

Test date: Jun-2007
Hardware Availability: May-2007
Software Availability: Apr-2007

Base Compiler Invocation (Continued)

C++ benchmarks:
icl -Qvc7.1

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icl -Qvc7.1 -Qc99 ifort

Base Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
444.namd: -TP
447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
-DBOOST_NO_INTRINSIC_WCHAR_T
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Base Optimization Flags

C benchmarks:
-fast /F950000000 shlw32m.lib -link /FORCE:MULTIPLE

C++ benchmarks:
-fast -Qcxx_features /F950000000 shlw32m.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:
-fast /F950000000

Benchmarks using both Fortran and C:
-fast /F950000000

Peak Compiler Invocation

C benchmarks:
icl -Qvc7.1 -Qc99

C++ benchmarks:
icl -Qvc7.1

Fortran benchmarks:
ifort

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Supermicro
Motherboard X7DB8**

SPECfp_rate2006 = 31.1

SPECfp_rate_base2006 = 30.1

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

Test date: Jun-2007
Hardware Availability: May-2007
Software Availability: Apr-2007

Peak Compiler Invocation (Continued)

Benchmarks using both Fortran and C:
icl -Qvc7.1 -Qc99 ifort

Peak Portability Flags

436.cactusADM: -Qlowercase /assume:underscore
444.namd: -TP
447.dealII: -DDEAL_II_MEMBER_VAR_SPECIALIZATION_BUG
-DBOOST_NO_INTRINSIC_WCHAR_T
453.povray: -DSPEC_CPU_WINDOWS_ICL
454.calculix: -DSPEC_CPU_NOZMODIFIER -Qlowercase
481.wrf: -DSPEC_CPU_WINDOWS_ICL

Peak Optimization Flags

C benchmarks:

433.milc: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2 -Oa
/F950000000 shlw32m.lib -link /FORCE:MULTIPLE
470.lbm: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2
-Qscalar-rep- -Qprefetch /F950000000 shlw32m.lib
-link /FORCE:MULTIPLE
482.sphinx3: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2
/F950000000 shlw32m.lib -link /FORCE:MULTIPLE

C++ benchmarks:

444.namd: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Oa
-Qcxx_features /F950000000 shlw32m.lib
-link /FORCE:MULTIPLE
447.dealII: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qprefetch
-Qcxx_features /F950000000 shlw32m.lib
-link /FORCE:MULTIPLE
450.soplex: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qcxx_features
/F950000000 shlw32m.lib -link /FORCE:MULTIPLE
453.povray: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qansi-alias
-Qcxx_features /F950000000 shlw32m.lib
-link /FORCE:MULTIPLE

Fortran benchmarks:

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Supermicro
Motherboard X7DB8**

SPECfp_rate2006 = 31.1

SPECfp_rate_base2006 = 30.1

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

Test date: Jun-2007
Hardware Availability: May-2007
Software Availability: Apr-2007

Peak Optimization Flags (Continued)

410.bwaves: -fast /F950000000

416.gamess: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Qunroll2 -Ob0
-Qansi-alias -Qscalar-rep- /F950000000

434.zeusmp: -Qprof_gen(pass 1) -Qprof_use(pass 2) -QxT -O2 -Qprec_div-
-Qunroll10 -Qscalar-rep- /F950000000

437.leslie3d: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast /F950000000

459.GemsFDTD: basepeak = yes

465.tonto: Same as 437.leslie3d

Benchmarks using both Fortran and C:

435.gromacs: -Qprof_gen(pass 1) -Qprof_use(pass 2) -fast -Oa
/F950000000

436.cactusADM: basepeak = yes

454.calculix: -fast /F950000000

481.wrf: Same as 454.calculix

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.20090714.18.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.20090714.18.xml>

SPEC and SPECfp 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 13:25:22 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 24 July 2007.