



# SPEC<sup>®</sup> CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Supermicro Motherboard X7DBR-3

SPECfp<sup>®</sup>\_rate2006 = 56.8

SPECfp\_rate\_base2006 = 50.6

CPU2006 license: 001176

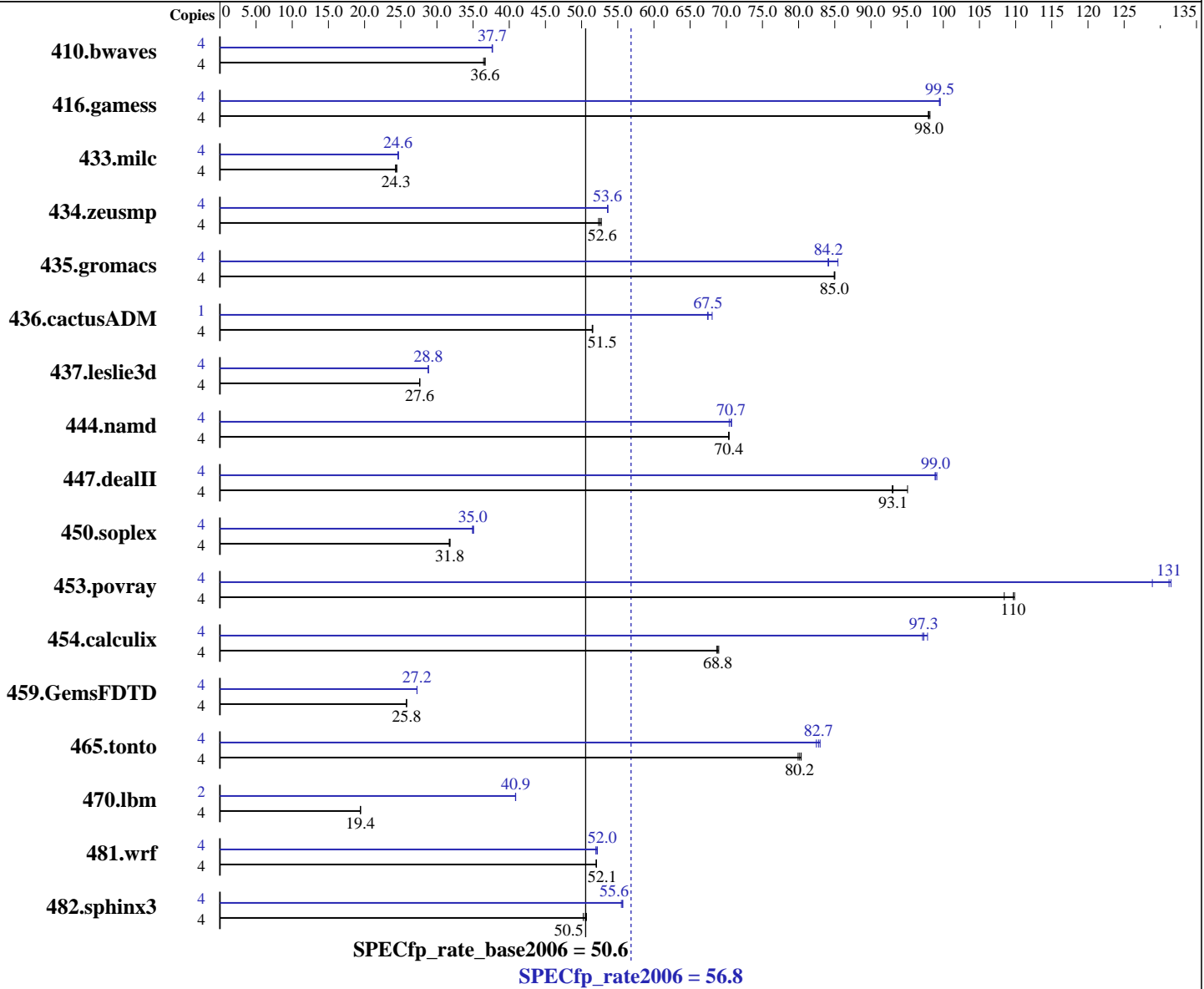
Test sponsor: Supermicro

Tested by: Supermicro

Test date: Dec-2007

Hardware Availability: Nov-2007

Software Availability: Nov-2007



### Hardware

CPU Name: Intel Xeon X5260  
 CPU Characteristics: Dual Core, 3.33GHz  
 CPU MHz: 3333  
 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: 6 MB I+D on chip per chip

Continued on next page

### Software

Operating System: SuSE Linux Enterprise Server 10 (x86\_64) SP1, kernel 2.6.16.46-0.12-default  
 Compiler: Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1 Build 20070725  
 Auto Parallel: Yes  
 File System: ReiserFS  
 System State: Multi-user, run level 3  
 Base Pointers: 64-bit

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Supermicro Motherboard X7DBR-3

SPECfp\_rate2006 = 56.8

SPECfp\_rate\_base2006 = 50.6

CPU2006 license: 001176

Test sponsor: Supermicro

Tested by: Supermicro

Test date: Dec-2007

Hardware Availability: Nov-2007

Software Availability: Nov-2007

L3 Cache: None  
Other Cache: None  
Memory: 16 GB (8 X 2GB ECC PC2-5300, CL5, FBDIMM)  
Disk Subsystem: Western Digital WD1600YS-01SHB1 160GB SATA II, 7200RPM  
Other Hardware: None

Peak Pointers: 32/64-bit  
Other Software: None

### Results Table

| Benchmark     | Base   |                    |                    |                    |                    |                    |                    |        | Peak              |                    |                    |                    |                    |                    |  |  |
|---------------|--------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|--|
|               | Copies | Seconds            | Ratio              | Seconds            | Ratio              | Seconds            | Ratio              | Copies | Seconds           | Ratio              | Seconds            | Ratio              | Seconds            | Ratio              |  |  |
| 410.bwaves    | 4      | 1491               | 36.5               | <b><u>1483</u></b> | <b><u>36.6</u></b> | 1483               | 36.7               | 4      | 1442              | 37.7               | <b><u>1443</u></b> | <b><u>37.7</u></b> | 1445               | 37.6               |  |  |
| 416.gamess    | 4      | 800                | 97.9               | 798                | 98.2               | <b><u>799</u></b>  | <b><u>98.0</u></b> | 4      | <b><u>787</u></b> | <b><u>99.5</u></b> | 787                | 99.5               | 787                | 99.6               |  |  |
| 433.milc      | 4      | 1501               | 24.5               | 1513               | 24.3               | <b><u>1508</u></b> | <b><u>24.3</u></b> | 4      | 1492              | 24.6               | 1487               | 24.7               | <b><u>1491</u></b> | <b><u>24.6</u></b> |  |  |
| 434.zeusmp    | 4      | 690                | 52.7               | 695                | 52.3               | <b><u>693</u></b>  | <b><u>52.6</u></b> | 4      | 679               | 53.6               | <b><u>679</u></b>  | <b><u>53.6</u></b> | 679                | 53.6               |  |  |
| 435.gromacs   | 4      | 336                | 85.0               | <b><u>336</u></b>  | <b><u>85.0</u></b> | 336                | 84.9               | 4      | 340               | 84.1               | 334                | 85.4               | <b><u>339</u></b>  | <b><u>84.2</u></b> |  |  |
| 436.cactusADM | 4      | <b><u>928</u></b>  | <b><u>51.5</u></b> | 929                | 51.5               | 928                | 51.5               | 1      | 177               | 67.4               | 176                | 68.0               | <b><u>177</u></b>  | <b><u>67.5</u></b> |  |  |
| 437.leslie3d  | 4      | <b><u>1361</u></b> | <b><u>27.6</u></b> | 1361               | 27.6               | 1362               | 27.6               | 4      | 1304              | 28.8               | <b><u>1305</u></b> | <b><u>28.8</u></b> | 1305               | 28.8               |  |  |
| 444.namd      | 4      | <b><u>456</u></b>  | <b><u>70.4</u></b> | 456                | 70.4               | 456                | 70.3               | 4      | <b><u>454</u></b> | <b><u>70.7</u></b> | 454                | 70.7               | 456                | 70.4               |  |  |
| 447.dealII    | 4      | <b><u>492</u></b>  | <b><u>93.1</u></b> | 492                | 92.9               | 481                | 95.1               | 4      | 462               | 99.1               | 463                | 98.9               | <b><u>462</u></b>  | <b><u>99.0</u></b> |  |  |
| 450.soplex    | 4      | 1052               | 31.7               | <b><u>1050</u></b> | <b><u>31.8</u></b> | 1048               | 31.8               | 4      | <b><u>954</u></b> | <b><u>35.0</u></b> | 955                | 34.9               | 951                | 35.1               |  |  |
| 453.povray    | 4      | <b><u>194</u></b>  | <b><u>110</u></b>  | 196                | 108                | 194                | 110                | 4      | <b><u>162</u></b> | <b><u>131</u></b>  | 162                | 131                | 165                | 129                |  |  |
| 454.calculix  | 4      | <b><u>479</u></b>  | <b><u>68.8</u></b> | 481                | 68.7               | 479                | 69.0               | 4      | 340               | 97.1               | <b><u>339</u></b>  | <b><u>97.3</u></b> | 337                | 97.8               |  |  |
| 459.GemsFDTD  | 4      | <b><u>1645</u></b> | <b><u>25.8</u></b> | 1645               | 25.8               | 1645               | 25.8               | 4      | 1558              | 27.2               | 1557               | 27.3               | <b><u>1557</u></b> | <b><u>27.2</u></b> |  |  |
| 465.tonto     | 4      | 492                | 79.9               | 490                | 80.4               | <b><u>491</u></b>  | <b><u>80.2</u></b> | 4      | 474               | 83.0               | <b><u>476</u></b>  | <b><u>82.7</u></b> | 477                | 82.4               |  |  |
| 470.lbm       | 4      | 2829               | 19.4               | <b><u>2829</u></b> | <b><u>19.4</u></b> | 2828               | 19.4               | 2      | 672               | 40.9               | <b><u>672</u></b>  | <b><u>40.9</u></b> | 673                | 40.9               |  |  |
| 481.wrf       | 4      | 859                | 52.0               | 858                | 52.1               | <b><u>858</u></b>  | <b><u>52.1</u></b> | 4      | <b><u>859</u></b> | <b><u>52.0</u></b> | 859                | 52.0               | 856                | 52.2               |  |  |
| 482.sphinx3   | 4      | 1539               | 50.7               | <b><u>1544</u></b> | <b><u>50.5</u></b> | 1552               | 50.2               | 4      | 1405              | 55.5               | 1400               | 55.7               | <b><u>1401</u></b> | <b><u>55.6</u></b> |  |  |

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-815TQ-700V 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/X7DBR-3.cfm>  
The system bus runs at 1333 MHz  
The "taskset" command was used to bind benchmark copies to cores  
except for 436.cactusADM peak



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro  
Motherboard X7DBR-3

SPECfp\_rate2006 = 56.8

SPECfp\_rate\_base2006 = 50.6

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

Test date: Dec-2007  
Hardware Availability: Nov-2007  
Software Availability: Nov-2007

## Base Compiler Invocation

C benchmarks:  
icc  
C++ benchmarks:  
icpc  
Fortran benchmarks:  
ifort  
Benchmarks using both Fortran and C:  
icc ifort

## Base Portability Flags

410.bwaves: -DSPEC\_CPU\_LP64  
416.gamess: -DSPEC\_CPU\_LP64  
433.milc: -DSPEC\_CPU\_LP64  
434.zeusmp: -DSPEC\_CPU\_LP64  
435.gromacs: -DSPEC\_CPU\_LP64 -nofor\_main  
436.cactusADM: -DSPEC\_CPU\_LP64 -nofor\_main  
437.leslie3d: -DSPEC\_CPU\_LP64  
444.namd: -DSPEC\_CPU\_LP64  
447.dealII: -DSPEC\_CPU\_LP64  
450.soplex: -DSPEC\_CPU\_LP64  
453.povray: -DSPEC\_CPU\_LP64  
454.calculix: -DSPEC\_CPU\_LP64 -nofor\_main  
459.GemsFDTD: -DSPEC\_CPU\_LP64  
465.tonto: -DSPEC\_CPU\_LP64  
470.lbm: -DSPEC\_CPU\_LP64  
481.wrf: -DSPEC\_CPU\_LP64 -DSPEC\_CPU\_CASE\_FLAG -DSPEC\_CPU\_LINUX  
482.sphinx3: -DSPEC\_CPU\_LP64

## Base Optimization Flags

C benchmarks:  
-fast  
C++ benchmarks:  
-fast  
Fortran benchmarks:  
-fast  
Benchmarks using both Fortran and C:  
-fast



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Supermicro  
Motherboard X7DBR-3**

**SPECfp\_rate2006 = 56.8**

**SPECfp\_rate\_base2006 = 50.6**

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

**Test date:** Dec-2007  
**Hardware Availability:** Nov-2007  
**Software Availability:** Nov-2007

## Peak Compiler Invocation

C benchmarks (except as noted below):

```
/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

433.milc: icc

C++ benchmarks (except as noted below):

icpc

```
450.soplex: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/icpc  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

Fortran benchmarks (except as noted below):

ifort

```
437.leslie3d: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/ifort  
-L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib  
-I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include
```

Benchmarks using both Fortran and C:

icc ifort

## Peak Portability Flags

```
410.bwaves: -DSPEC_CPU_LP64  
416.gamess: -DSPEC_CPU_LP64  
433.milc: -DSPEC_CPU_LP64  
434.zeusmp: -DSPEC_CPU_LP64  
435.gromacs: -DSPEC_CPU_LP64 -nofor_main  
436.cactusADM: -DSPEC_CPU_LP64 -nofor_main  
444.namd: -DSPEC_CPU_LP64  
447.deallI: -DSPEC_CPU_LP64  
453.povray: -DSPEC_CPU_LP64  
454.calculix: -DSPEC_CPU_LP64 -nofor_main  
459.GemsFDTD: -DSPEC_CPU_LP64  
465.tonto: -DSPEC_CPU_LP64  
481.wrf: -DSPEC_CPU_LP64 -DSPEC_CPU_CASE_FLAG -DSPEC_CPU_LINUX
```

## Peak Optimization Flags

C benchmarks:

```
433.milc: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias  
-auto-ilp32
```

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

**Supermicro  
Motherboard X7DBR-3**

**SPECfp\_rate2006 = 56.8**

**SPECfp\_rate\_base2006 = 50.6**

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

**Test date:** Dec-2007  
**Hardware Availability:** Nov-2007  
**Software Availability:** Nov-2007

## Peak Optimization Flags (Continued)

470.lbm: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-scalar-rep- -prefetch -opt-malloc-options=3

482.sphinx3: -fast -unroll2

### C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias  
-auto-ilp32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast  
-opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4  
-ansi-alias

### Fortran benchmarks:

410.bwaves: -fast -prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0  
-ansi-alias -scalar-rep-

434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch  
-opt-malloc-options=3

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0  
-prefetch

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

### Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch  
-auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2  
-prefetch -parallel -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Supermicro  
Motherboard X7DBR-3

SPECfp\_rate2006 = 56.8

SPECfp\_rate\_base2006 = 50.6

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

Test date: Dec-2007  
Hardware Availability: Nov-2007  
Software Availability: Nov-2007

The flags file that was used to format this result can be browsed at  
<http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090713.00.html>

You can also download the XML flags source by saving the following link:  
<http://www.spec.org/cpu2006/flags/Intel-ic10.1-FP-intel64-linux-flags.20090713.00.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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.1.  
Report generated on Tue Jul 22 17:01:11 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 27 May 2008.