# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## HITACHI

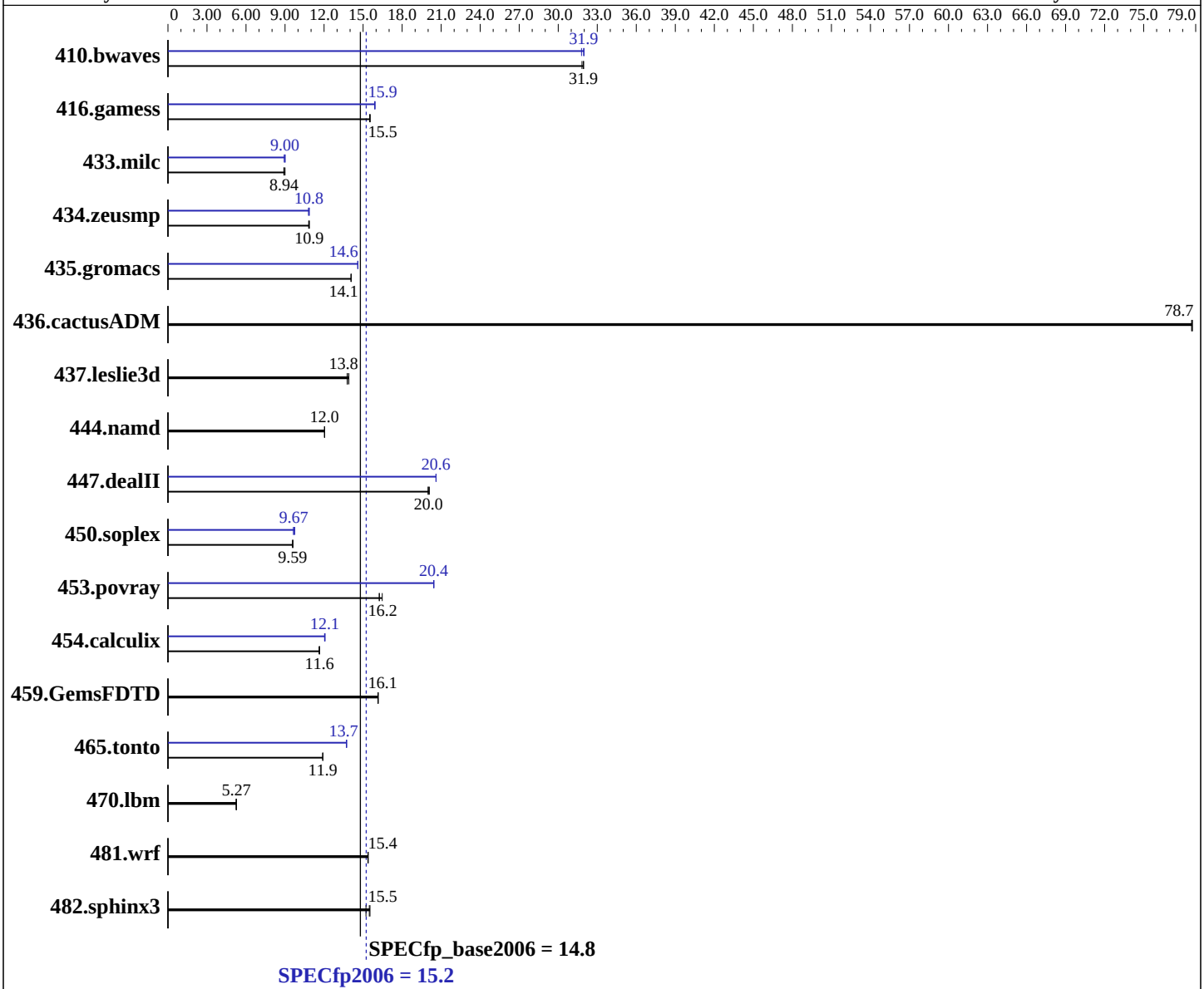
## BladeSymphony BS320 (Intel Xeon E5345)

SPECfp®2006 = 15.2

SPECfp_base2006 = 14.8

**CPU2006 license:** 872
**Test sponsor:** HITACHI
**Tested by:** HITACHI

**Test date:** Jul-2007
**Hardware Availability:** Jan-2007
**Software Availability:** Mar-2007




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon E5345 |
| CPU Characteristics: | 1333MHz system bus |
| CPU MHz: | 2333 |
| 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: | 8 MB I+D on chip per chip, 4 MB shared / 2 cores |

Continued on next page

### Software

| | |
|---|---|
| Operating System: | Red Hat Enterprise Linux ES release 4 (Nahant Update 3) Kernel 2.6.9-34.ELsmp on an x86_64 |
| Compiler: | Intel C++ Compiler for EM64T version 9.1 build 20070320 Intel Fortran Compiler for EM64T version 9.1 build 20070320 |
| Auto Parallel: | Yes |

Continued on next page

# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## HITACHI

## BladeSymphony BS320 (Intel Xeon E5345)

SPECfp2006 = 15.2

SPECfp_base2006 = 14.8

**CPU2006 license:** 872
**Test sponsor:** HITACHI
**Tested by:** HITACHI

**Test date:** Jul-2007
**Hardware Availability:** Jan-2007
**Software Availability:** Mar-2007

| | | | |
|---|---|---|---|
| L3 Cache: | None | File System: | ext3 |
| Other Cache: | None | System State: | Multi-user run level 3 |
| Memory: | 8 GB(4 x 2 GB PC2-5300F CAS 5-5-5) | Base Pointers: | 64-bit |
| Disk Subsystem: | 2 x 73GB 10000rpm SAS | Peak Pointers: | 64-bit |
| Other Hardware: | None | Other Software: | None |

## Results Table

| Benchmark | Base | | | | | | Peak | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 410.bwaves | **426** | **31.9** | 427 | 31.8 | 425 | 32.0 | 428 | 31.8 | **425** | **31.9** | 425 | 32.0 |
| 416.gamess | **1261** | **15.5** | 1260 | 15.5 | 1263 | 15.5 | 1230 | 15.9 | **1231** | **15.9** | 1232 | 15.9 |
| 433.milc | **1027** | **8.94** | 1020 | 9.00 | 1030 | 8.91 | 1020 | 9.00 | **1020** | **9.00** | 1028 | 8.93 |
| 434.zeusmp | **838** | **10.9** | 838 | 10.9 | 841 | 10.8 | 843 | 10.8 | 838 | 10.9 | **839** | **10.8** |
| 435.gromacs | 507 | 14.1 | **507** | **14.1** | 507 | 14.1 | **489** | **14.6** | 489 | 14.6 | 489 | 14.6 |
| 436.cactusADM | **152** | **78.7** | 152 | 78.7 | 152 | 78.7 | **152** | **78.7** | 152 | 78.7 | 152 | 78.7 |
| 437.leslie3d | 682 | 13.8 | **681** | **13.8** | 676 | 13.9 | 682 | 13.8 | **681** | **13.8** | 676 | 13.9 |
| 444.namd | 666 | 12.0 | **666** | **12.0** | 666 | 12.0 | 666 | 12.0 | **666** | **12.0** | 666 | 12.0 |
| 447.dealII | **571** | **20.0** | 569 | 20.1 | 572 | 20.0 | 555 | 20.6 | **555** | **20.6** | 555 | 20.6 |
| 450.soplex | 871 | 9.58 | **870** | **9.59** | 868 | 9.61 | 864 | 9.65 | **863** | **9.67** | 855 | 9.75 |
| 453.povray | 327 | 16.2 | 323 | 16.5 | **327** | **16.2** | **260** | **20.4** | 260 | 20.4 | 260 | 20.4 |
| 454.calculix | 710 | 11.6 | 707 | 11.7 | **708** | **11.6** | **684** | **12.1** | 684 | 12.1 | 685 | 12.0 |
| 459.GemsFDTD | **657** | **16.1** | 656 | 16.2 | 657 | 16.1 | **657** | **16.1** | 656 | 16.2 | 657 | 16.1 |
| 465.tonto | 826 | 11.9 | 827 | 11.9 | **826** | **11.9** | 718 | 13.7 | **717** | **13.7** | 716 | 13.7 |
| 470.lbm | 2627 | 5.23 | **2608** | **5.27** | 2607 | 5.27 | 2627 | 5.23 | **2608** | **5.27** | 2607 | 5.27 |
| 481.wrf | 726 | 15.4 | **726** | **15.4** | 727 | 15.4 | 726 | 15.4 | **726** | **15.4** | 727 | 15.4 |
| 482.sphinx3 | 1280 | 15.2 | **1259** | **15.5** | 1255 | 15.5 | 1280 | 15.2 | **1259** | **15.5** | 1255 | 15.5 |

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

## Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run

## Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Continued on next page

## Base Compiler Invocation (Continued)

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 -parallel

C++ benchmarks:
-fast -parallel

Fortran benchmarks:
-fast -parallel

Benchmarks using both Fortran and C:
-fast -parallel

## Peak Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Continued on next page

## Peak Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icc ifort

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

433.milc: -fast

470.lbm: basepeak = yes

482.sphinx3: basepeak = yes

C++ benchmarks:

444.namd: basepeak = yes

447.dealII: -fast

450.soplex: -prof_gen(pass 1) -prof_use(pass 2) -fast -parallel

453.povray: Same as 450.soplex

Fortran benchmarks:

410.bwaves: -prof_gen(pass 1) -prof_use(pass 2) -fast -parallel

416.gamess: -fast

434.zeusmp: Same as 410.bwaves

437.leslie3d: basepeak = yes

459.GemsFDTD: basepeak = yes

465.tonto: Same as 410.bwaves

Benchmarks using both Fortran and C:

Continued on next page

## Peak Optimization Flags (Continued)

435.gromacs: `-prof_gen`(pass 1) `-prof_use`(pass 2) `-fast -parallel`

436.cactusADM: `basepeak = yes`

454.calculix: `-prof_gen`(pass 1) `-prof_use`(pass 2) `-fast`

481.wrf: `basepeak = yes`

The flags file that was used to format this result can be browsed at
`http://www.spec.org/cpu2006/flags/ic91_fp.html`

You can also download the XML flags source by saving the following link:
`http://www.spec.org/cpu2006/flags/ic91_fp.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 v1.0.1.
Report generated on Tue Jul 22 12:22:39 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 21 August 2007.