# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

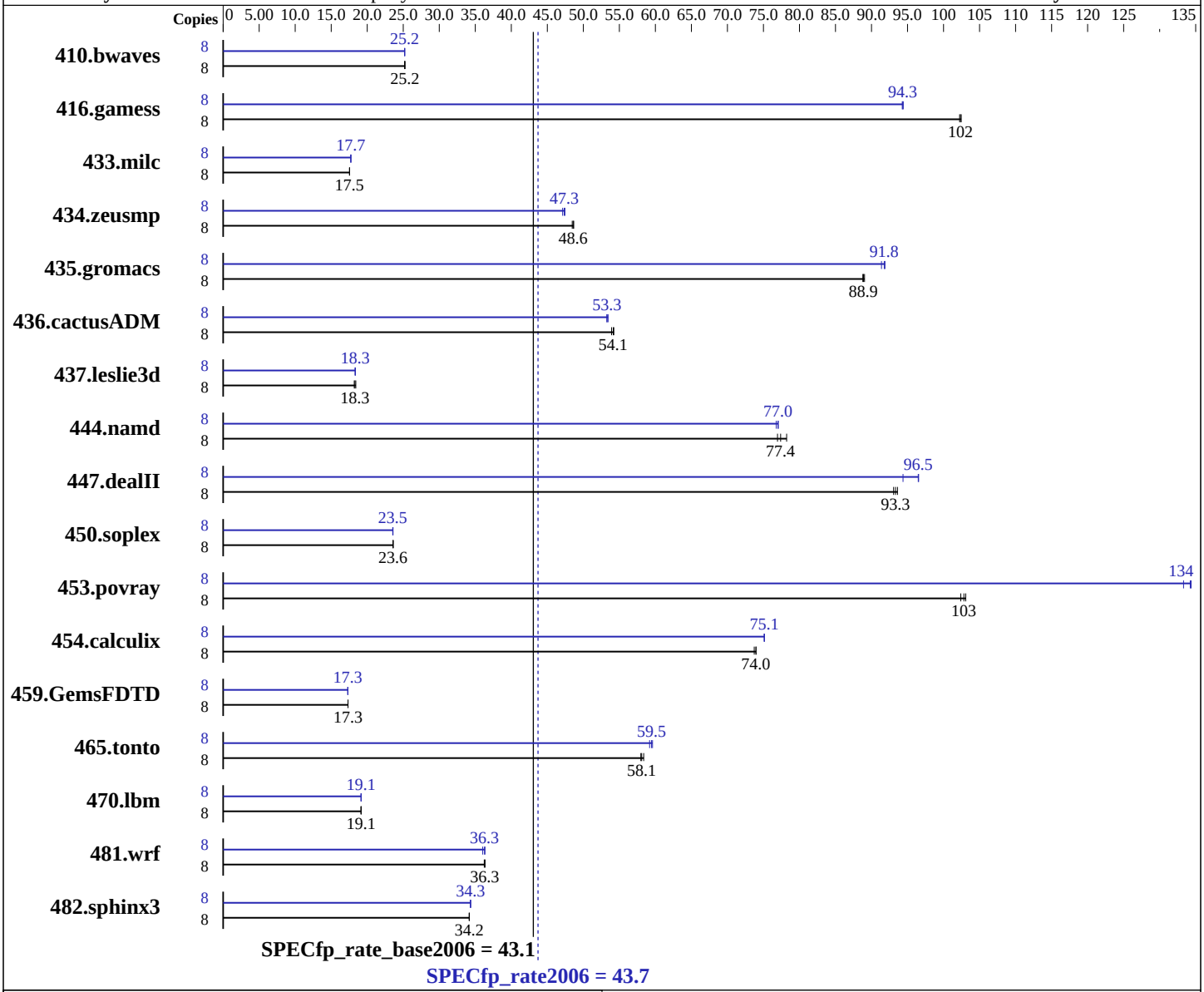
ProLiant DL380 G5
(1.86 GHz, Intel Xeon processor E5320)

SPECfp®_rate2006 = 43.7

SPECfp_rate_base2006 = 43.1

**CPU2006 license:** 3
**Test sponsor:** Hewlett-Packard Company
**Tested by:** Hewlett-Packard Company

**Test date:** Feb-2007
**Hardware Availability:** Nov-2006
**Software Availability:** Nov-2006




### Hardware

| | |
|---|---|
| CPU Name: | Intel Xeon E5320 |
| CPU Characteristics: | 1.86 GHz, 2x4 MB L2 shared, 1066 MHz system bus |
| CPU MHz: | 1860 |
| 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: | SuSE Linux Enterprise Server 10 (x86_64) kernel 2.6.16.21-0.8-smp |
| Compiler: | Intel C++ Compiler for Intel EM64T-based applications, Version 9.1 Build 20061101, Package ID: l_cc_c_9.1.045 Intel Fortran Compiler for Intel EM64T-based applications, Version 9.1 Build 20061101, Package ID: l_fc_c_9.1.040 |
| Auto Parallel: | No |

Continued on next page

# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

ProLiant DL380 G5
(1.86 GHz, Intel Xeon processor E5320)

SPECfp_rate2006 = 43.7

SPECfp_rate_base2006 = 43.1

**CPU2006 license:** 3
**Test sponsor:** Hewlett-Packard Company
**Tested by:** Hewlett-Packard Company

**Test date:** Feb-2007
**Hardware Availability:** Nov-2006
**Software Availability:** Nov-2006

| | | | |
|---|---|---|---|
| L3 Cache: | None | File System: | ext2 |
| Other Cache: | None | System State: | Multi-user run level 3 |
| Memory: | 16 GB (8x2 GB PC2-5300F CL5) | Base Pointers: | 64-bit |
| Disk Subsystem: | 4x36 GB 10 K SAS | Peak Pointers: | 32/64-bit |
| Other Hardware: | None | Other Software: | None |

## Results Table

| Benchmark | Base | | | | | | | Peak | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 410.bwaves | 8 | 4317 | 25.2 | **4311** | **25.2** | 4307 | 25.2 | 8 | 4313 | 25.2 | 4315 | 25.2 | **4315** | **25.2** |
| 416.gamess | 8 | 1529 | 102 | **1531** | **102** | 1532 | 102 | 8 | 1662 | 94.3 | **1660** | **94.3** | 1659 | 94.4 |
| 433.milc | 8 | 4184 | 17.6 | **4185** | **17.5** | 4186 | 17.5 | 8 | 4144 | 17.7 | 4142 | 17.7 | **4144** | **17.7** |
| 434.zeusmp | 8 | 1502 | 48.5 | 1496 | 48.7 | **1498** | **48.6** | 8 | 1534 | 47.4 | 1545 | 47.1 | **1538** | **47.3** |
| 435.gromacs | 8 | 643 | 88.8 | **643** | **88.9** | 642 | 89.0 | 8 | 622 | 91.9 | **622** | **91.8** | 625 | 91.4 |
| 436.cactusADM | 8 | 1773 | 53.9 | 1763 | 54.2 | **1766** | **54.1** | 8 | 1789 | 53.4 | 1795 | 53.3 | **1794** | **53.3** |
| 437.leslie3d | 8 | 4084 | 18.4 | 4133 | 18.2 | **4111** | **18.3** | 8 | 4097 | 18.4 | 4105 | 18.3 | **4101** | **18.3** |
| 444.namd | 8 | **829** | **77.4** | 820 | 78.2 | 834 | 77.0 | 8 | **833** | **77.0** | 833 | 77.1 | 836 | 76.8 |
| 447.dealII | 8 | 983 | 93.1 | 978 | 93.6 | **981** | **93.3** | 8 | 970 | 94.4 | 948 | 96.5 | **949** | **96.5** |
| 450.soplex | 8 | 2829 | 23.6 | **2829** | **23.6** | 2827 | 23.6 | 8 | 2829 | 23.6 | 2833 | 23.5 | **2833** | **23.5** |
| 453.povray | 8 | **414** | **103** | 413 | 103 | 416 | 102 | 8 | **317** | **134** | 317 | 134 | 319 | 133 |
| 454.calculix | 8 | **892** | **74.0** | 895 | 73.7 | 892 | 74.0 | 8 | 879 | 75.1 | **879** | **75.1** | 878 | 75.1 |
| 459.GemsFDTD | 8 | 4898 | 17.3 | 4898 | 17.3 | **4898** | **17.3** | 8 | 4909 | 17.3 | **4903** | **17.3** | 4899 | 17.3 |
| 465.tonto | 8 | 1348 | 58.4 | **1355** | **58.1** | 1358 | 58.0 | 8 | 1321 | 59.6 | **1324** | **59.5** | 1330 | 59.2 |
| 470.lbm | 8 | 5741 | 19.1 | **5741** | **19.1** | 5740 | 19.2 | 8 | 5740 | 19.1 | **5740** | **19.1** | 5739 | 19.2 |
| 481.wrf | 8 | 2466 | 36.2 | 2459 | 36.3 | **2460** | **36.3** | 8 | **2463** | **36.3** | 2480 | 36.0 | 2459 | 36.3 |
| 482.sphinx3 | 8 | **4565** | **34.2** | 4565 | 34.2 | 4561 | 34.2 | 8 | **4541** | **34.3** | 4537 | 34.4 | 4544 | 34.3 |

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

## Platform Notes

```
Power Regulator set to Static High Performance Mode in BIOS.
Adjacent Sector Prefetch Disabled in BIOS.
"/usr/bin/taskset" used to bind processes to CPUs.
"ulimit -s unlimited" set
```

## Base Compiler Invocation

C benchmarks:
`icc`

C++ benchmarks:
`icpc`

Continued on next page

## Base Compiler Invocation (Continued)

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

## Peak Compiler Invocation

C benchmarks:
icc

Continued on next page

## Peak Compiler Invocation (Continued)

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
icc ifort

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:
-prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

C++ benchmarks:
-prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

Fortran benchmarks:
-prof_gen(pass 1) -prof_use(pass 2) -fast

Benchmarks using both Fortran and C:
-prof_gen(pass 1) -prof_use(pass 2) -fast -auto_ilp32

The flags file that was used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/hp-ic91-flags.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/hp-ic91-flags.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 10:49:57 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 March 2007.