



SPEC[®] CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECfp[®]_rate2006 = 26.0

ProLiant BL460c
(1.86 GHz, Intel Xeon processor E5320)

SPECfp_rate_base2006 = 25.6

CPU2006 license: 3

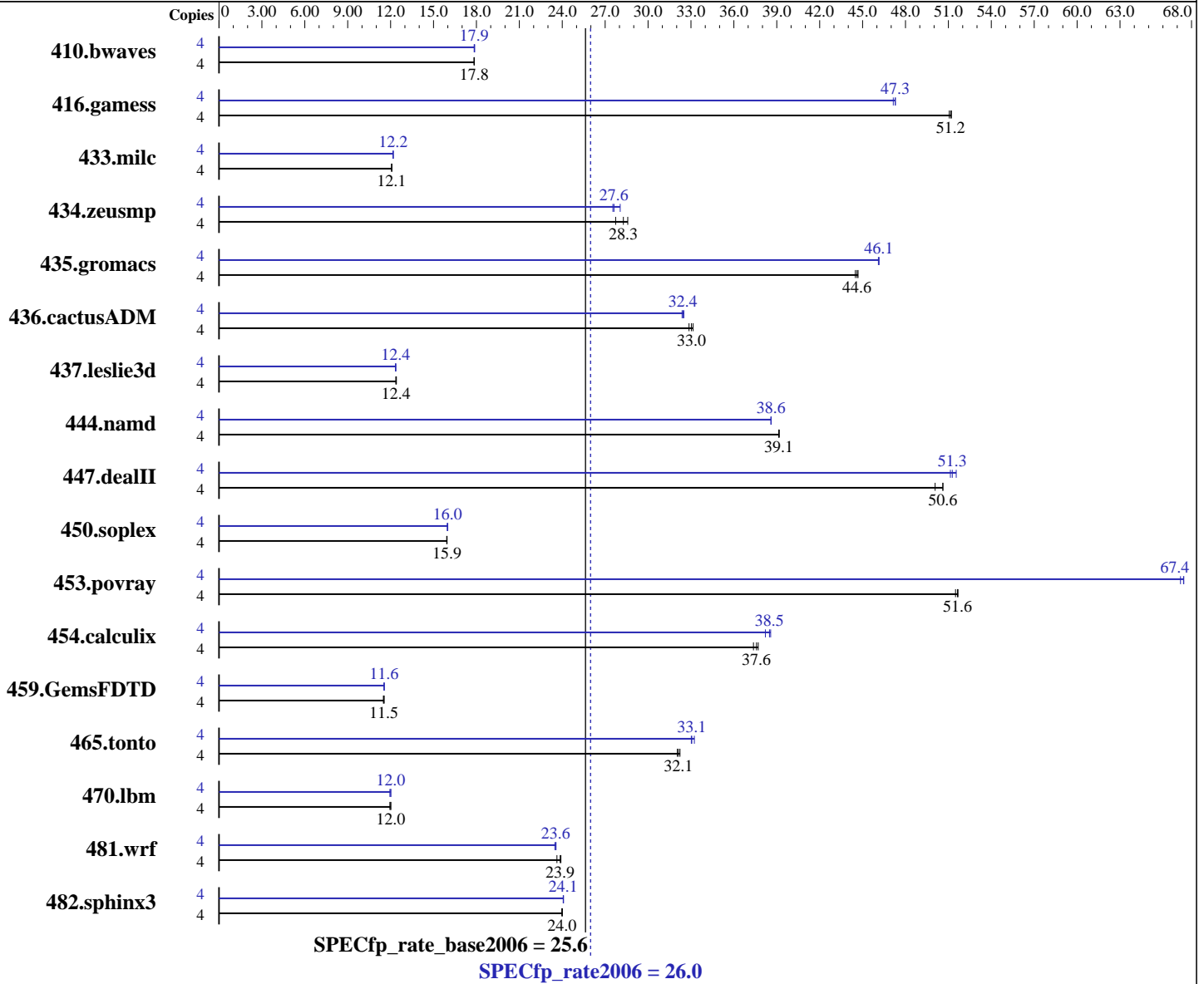
Test date: Feb-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006



Hardware

CPU Name: Intel Xeon E5320
 CPU Characteristics: 1.86 GHz, 2x4 MB L2 shared, 1066MHz system bus
 CPU MHz: 1860
 FPU: Integrated
 CPU(s) enabled: 4 cores, 1 chip, 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: 1_cc_c_9.1.045
 Intel Fortran Compiler for Intel EM64T-based applications, Version 9.1
 Build 20061101, Package ID: 1_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

SPECfp_rate2006 = 26.0

ProLiant BL460c
(1.86 GHz, Intel Xeon processor E5320)

SPECfp_rate_base2006 = 25.6

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

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

L3 Cache: None
Other Cache: None
Memory: 16 GB (8x2 GB PC2-5300F CL5)
Disk Subsystem: 1x72 GB 10k SAS
Other Hardware: None

File System: ext2
System State: Multi-user run level 3
Base Pointers: 64-bit
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 | 3045 | 17.9 | 3048 | 17.8 | 3047 | 17.8 | 4 | 3040 | 17.9 | 3045 | 17.9 | 3047 | 17.8 |
| 416.gamess | 4 | 1531 | 51.2 | 1529 | 51.2 | 1534 | 51.1 | 4 | 1661 | 47.1 | 1656 | 47.3 | 1656 | 47.3 |
| 433.milc | 4 | 3040 | 12.1 | 3042 | 12.1 | 3040 | 12.1 | 4 | 3018 | 12.2 | 3015 | 12.2 | 3013 | 12.2 |
| 434.zeusmp | 4 | 1274 | 28.6 | 1287 | 28.3 | 1312 | 27.7 | 4 | 1318 | 27.6 | 1298 | 28.1 | 1322 | 27.5 |
| 435.gromacs | 4 | 639 | 44.7 | 640 | 44.6 | 642 | 44.5 | 4 | 619 | 46.1 | 619 | 46.1 | 619 | 46.1 |
| 436.cactusADM | 4 | 1442 | 33.1 | 1447 | 33.0 | 1454 | 32.9 | 4 | 1474 | 32.4 | 1476 | 32.4 | 1471 | 32.5 |
| 437.leslie3d | 4 | 3031 | 12.4 | 3040 | 12.4 | 3038 | 12.4 | 4 | 3047 | 12.3 | 3041 | 12.4 | 3043 | 12.4 |
| 444.namd | 4 | 819 | 39.2 | 819 | 39.1 | 820 | 39.1 | 4 | 831 | 38.6 | 831 | 38.6 | 831 | 38.6 |
| 447.dealII | 4 | 904 | 50.6 | 904 | 50.6 | 914 | 50.1 | 4 | 895 | 51.1 | 892 | 51.3 | 888 | 51.5 |
| 450.soplex | 4 | 2095 | 15.9 | 2092 | 15.9 | 2093 | 15.9 | 4 | 2085 | 16.0 | 2091 | 16.0 | 2088 | 16.0 |
| 453.povray | 4 | 412 | 51.6 | 412 | 51.7 | 413 | 51.5 | 4 | 316 | 67.4 | 317 | 67.2 | 315 | 67.5 |
| 454.calculix | 4 | 883 | 37.4 | 878 | 37.6 | 875 | 37.7 | 4 | 857 | 38.5 | 864 | 38.2 | 856 | 38.6 |
| 459.GemsFDTD | 4 | 3693 | 11.5 | 3681 | 11.5 | 3675 | 11.5 | 4 | 3673 | 11.6 | 3680 | 11.5 | 3674 | 11.6 |
| 465.tonto | 4 | 1228 | 32.0 | 1221 | 32.2 | 1225 | 32.1 | 4 | 1192 | 33.0 | 1191 | 33.1 | 1184 | 33.2 |
| 470.lbm | 4 | 4600 | 11.9 | 4577 | 12.0 | 4577 | 12.0 | 4 | 4576 | 12.0 | 4600 | 11.9 | 4576 | 12.0 |
| 481.wrf | 4 | 1873 | 23.9 | 1869 | 23.9 | 1891 | 23.6 | 4 | 1896 | 23.6 | 1903 | 23.5 | 1897 | 23.6 |
| 482.sphinx3 | 4 | 3247 | 24.0 | 3250 | 24.0 | 3252 | 24.0 | 4 | 3236 | 24.1 | 3239 | 24.1 | 3239 | 24.1 |

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.
Environment stack size set to 'unlimited'

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Continued on next page



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECfp_rate2006 = 26.0

ProLiant BL460c
(1.86 GHz, Intel Xeon processor E5320)

SPECfp_rate_base2006 = 25.6

CPU2006 license: 3

Test date: Feb-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006

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



SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

Hewlett-Packard Company

SPECfp_rate2006 = 26.0

ProLiant BL460c
(1.86 GHz, Intel Xeon processor E5320)

SPECfp_rate_base2006 = 25.6

CPU2006 license: 3

Test date: Feb-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006

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 10:45:33 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 March 2007.