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

SPECfp_rate_base2006 = 43.1

SPECfp_rate2006 = 43.7

Benchmark	Copies	base	peak
410.bwaves	8 / 8	25.2	25.2
416.gamess	8 / 8	94.3	102
433.milc	8 / 8	17.7	17.5
434.zeusmp	8 / 8	47.3	48.6
435.gromacs	8 / 8	91.8	88.9
436.cactusADM	8 / 8	53.3	54.1
437.leslie3d	8 / 8	18.3	18.3
444.namd	8 / 8	77.0	77.4
447.dealII	8 / 8	96.5	93.3
450.soplex	8 / 8	23.5	23.6
453.povray	8 / 8	134	103
454.calculix	8 / 8	75.1	74.0
459.GemsFDTD	8 / 8	17.3	17.3
465.tonto	8 / 8	59.5	58.1
470.lbm	8 / 8	19.1	19.1
481.wrf	8 / 8	36.3	36.3
482.sphinx3	8 / 8	34.3	34.2

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

Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/

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

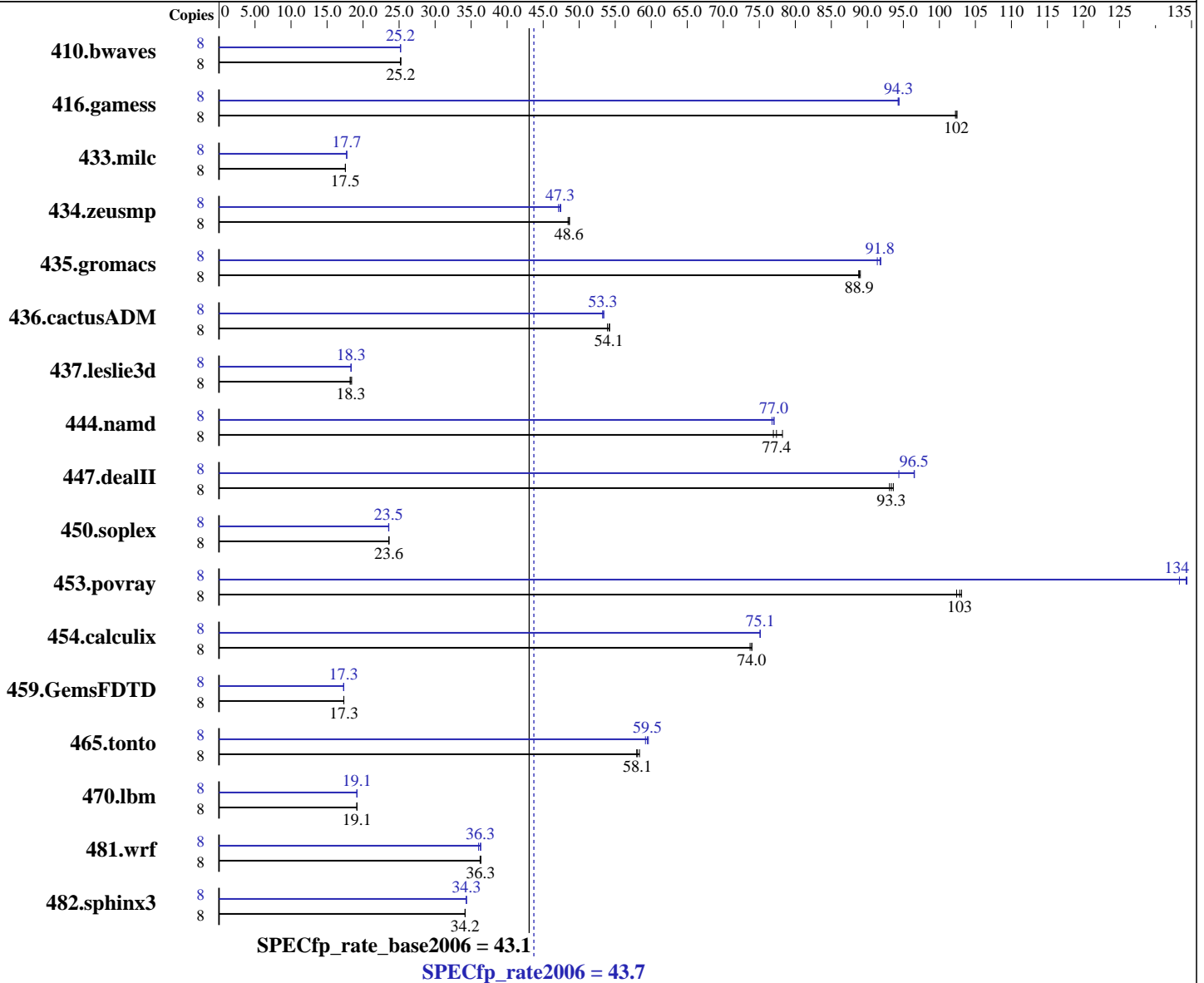|	
CPU2006 license: 3	**Test date:** Feb-2007
Test sponsor: Hewlett-Packard Company	**Hardware Availability:** Nov-2006
Tested by: Hewlett-Packard Company	**Software Availability:** Nov-2006

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							Copies	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
```

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

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

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

$SPECfp\_rate2006 = \qquad 43.7$

$SPECfp\_rate\_base2006 = \quad 43.1$

CPU2006 license: 3	**Test date:** Feb-2007
Test sponsor: Hewlett-Packard Company	**Hardware Availability:** Nov-2006
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

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 10:49:56 2014 by SPEC CPU2006 PS/PDF formatter v6932.
Originally published on 20 March 2007.