



# SPEC® CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

SPECfp®\_rate2006 = 58.7

ProLiant BL20p G4  
(2.66 GHz, Intel Xeon processor X5355)

SPECfp\_rate\_base2006 = 58.0

CPU2006 license: 3

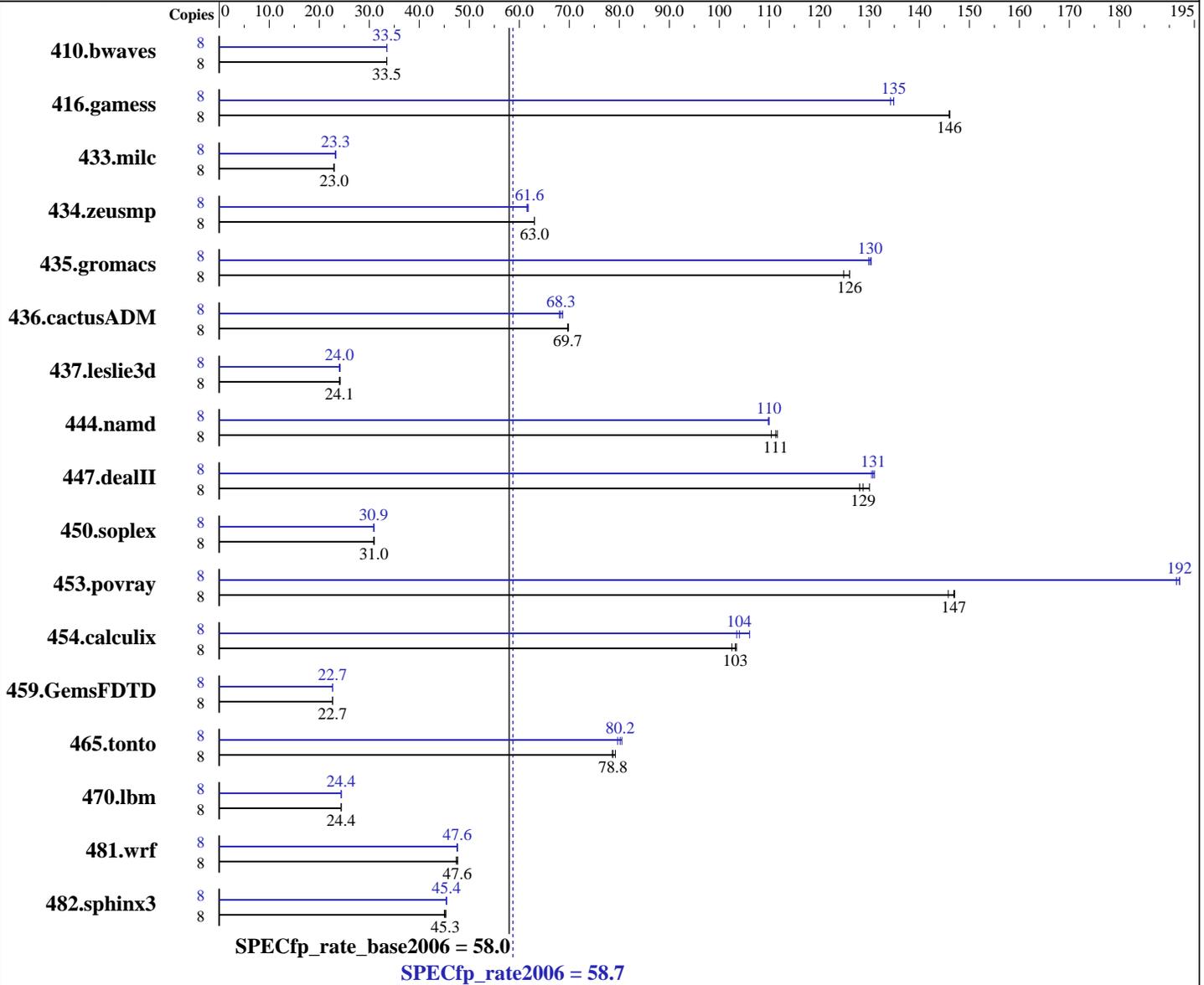
Test date: Jan-2007

Test sponsor: Hewlett-Packard Company

Hardware Availability: Jan-2007

Tested by: Hewlett-Packard Company

Software Availability: Nov-2006



### Hardware

CPU Name: Intel Xeon X5355  
 CPU Characteristics: 2.66 GHz, 2x4 MB L2 shared, 1333 MHz bus  
 CPU MHz: 2666  
 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-default  
 Compiler: Intel C++ Compiler for Intel EM64T-based applications, Version 9.1  
 Package ID l\_cc\_c\_9.1.045 Build no 20061101  
 Intel Fortran Compiler for Intel EM64T-based applications, Version 9.1  
 Package ID l\_fc\_c\_9.1.040 Build no 20061101  
 Auto Parallel: No

Continued on next page



# SPEC CFP2006 Result

Copyright 2006-2014 Standard Performance Evaluation Corporation

## Hewlett-Packard Company

SPECfp\_rate2006 = 58.7

ProLiant BL20p G4  
(2.66 GHz, Intel Xeon processor X5355)

SPECfp\_rate\_base2006 = 58.0

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

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

L3 Cache: None  
Other Cache: None  
Memory: 16 GB (8x2 GB PC2-5300 CL5)  
Disk Subsystem: 2x72 GB SAS, 10 K RPM  
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	8	3242	33.5	<b><u>3243</u></b>	<b><u>33.5</u></b>	3243	33.5	8	<b><u>3241</u></b>	<b><u>33.5</u></b>	3242	33.5	3241	33.5
416.gamess	8	1072	146	<b><u>1073</u></b>	<b><u>146</u></b>	1073	146	8	1167	134	<b><u>1161</u></b>	<b><u>135</u></b>	1161	135
433.milc	8	3194	23.0	<b><u>3195</u></b>	<b><u>23.0</u></b>	3198	23.0	8	3157	23.3	<b><u>3155</u></b>	<b><u>23.3</u></b>	3154	23.3
434.zeusmp	8	<b><u>1155</u></b>	<b><u>63.0</u></b>	1155	63.0	1155	63.0	8	1178	61.8	<b><u>1181</u></b>	<b><u>61.6</u></b>	1183	61.6
435.gromacs	8	457	125	453	126	<b><u>453</u></b>	<b><u>126</u></b>	8	<b><u>439</u></b>	<b><u>130</u></b>	440	130	438	130
436.cactusADM	8	1369	69.8	<b><u>1372</u></b>	<b><u>69.7</u></b>	1372	69.7	8	<b><u>1399</u></b>	<b><u>68.3</u></b>	1405	68.0	1392	68.7
437.leslie3d	8	3105	24.2	3127	24.1	<b><u>3127</u></b>	<b><u>24.1</u></b>	8	3131	24.0	<b><u>3128</u></b>	<b><u>24.0</u></b>	3110	24.2
444.namd	8	581	110	<b><u>576</u></b>	<b><u>111</u></b>	575	112	8	584	110	<b><u>584</u></b>	<b><u>110</u></b>	584	110
447.dealII	8	704	130	715	128	<b><u>711</u></b>	<b><u>129</u></b>	8	698	131	<b><u>700</u></b>	<b><u>131</u></b>	701	130
450.soplex	8	2154	31.0	2156	31.0	<b><u>2155</u></b>	<b><u>31.0</u></b>	8	2156	30.9	<b><u>2158</u></b>	<b><u>30.9</u></b>	2160	30.9
453.povray	8	292	146	<b><u>290</u></b>	<b><u>147</u></b>	289	147	8	<b><u>222</u></b>	<b><u>192</u></b>	222	192	222	191
454.calculix	8	<b><u>639</u></b>	<b><u>103</u></b>	638	103	644	103	8	622	106	638	103	<b><u>635</u></b>	<b><u>104</u></b>
459.GemsFDTD	8	<b><u>3744</u></b>	<b><u>22.7</u></b>	3744	22.7	3742	22.7	8	3744	22.7	3740	22.7	<b><u>3744</u></b>	<b><u>22.7</u></b>
465.tonto	8	<b><u>999</u></b>	<b><u>78.8</u></b>	994	79.2	1001	78.6	8	<b><u>982</u></b>	<b><u>80.2</u></b>	988	79.7	978	80.5
470.lbm	8	4507	24.4	4508	24.4	<b><u>4507</u></b>	<b><u>24.4</u></b>	8	4506	24.4	<b><u>4506</u></b>	<b><u>24.4</u></b>	4505	24.4
481.wrf	8	<b><u>1876</u></b>	<b><u>47.6</u></b>	1874	47.7	1885	47.4	8	1875	47.6	1880	47.5	<b><u>1876</u></b>	<b><u>47.6</u></b>
482.sphinx3	8	3463	45.0	<b><u>3446</u></b>	<b><u>45.3</u></b>	3441	45.3	8	3430	45.5	3433	45.4	<b><u>3431</u></b>	<b><u>45.4</u></b>

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.  
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 = 58.7**

ProLiant BL20p G4  
(2.66 GHz, Intel Xeon processor X5355)

**SPECfp\_rate\_base2006 = 58.0**

**CPU2006 license:** 3

**Test date:** Jan-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**

ProLiant BL20p G4  
(2.66 GHz, Intel Xeon processor X5355)

**SPECfp\_rate2006 = 58.7**

**SPECfp\_rate\_base2006 = 58.0**

**CPU2006 license:** 3

**Test sponsor:** Hewlett-Packard Company

**Tested by:** Hewlett-Packard Company

**Test date:** Jan-2007

**Hardware Availability:** Jan-2007

**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 -auto\_ilp32

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](mailto:webmaster@spec.org).

Tested with SPEC CPU2006 v1.0.  
Report generated on Tue Jul 22 10:29:22 2014 by SPEC CPU2006 PS/PDF formatter v6932.  
Originally published on 20 February 2007.