### SPEC® CFP2006 Result

**Hewlett-Packard Company**

ProLiant ML350 G5  
(3.0 GHz, Intel Xeon processor X5365)

<table>
<thead>
<tr>
<th>CPU2006 license</th>
<th>3</th>
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<tbody>
<tr>
<td>Test sponsor</td>
<td>Hewlett-Packard Company</td>
</tr>
<tr>
<td>Tested by</td>
<td>Hewlett-Packard Company</td>
</tr>
<tr>
<td>SPECfp_rate2006</td>
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<tr>
<td>SPECfp_rate_base2006</td>
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</table>

Test date: Oct-2007  
Hardware Availability: Sep-2007  
Software Availability: Nov-2007

**SPEC has determined that this result was not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the submitter reported that the result would not meet the 3 month availability requirement in the SPEC CPU2006 run rules due to a change in the availability date of the system.**

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**Hardware**

- **CPU Name:** Intel Xeon X5365  
- **CPU Characteristics:** 3.0 GHz, 2x4 MB L2 shared, 1333 MHz system bus  
- **CPU MHz:** 3000  
- **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 per chip per core  
- **Secondary Cache:** 8 MB I+D on chip per chip + 4 MB shared / 2 cores  
- **L3 Cache:** None  
- **Other Cache:** None  
- **Memory:** 16 GB (8x2 GB PC2-5300F CL5)  
- **Disk Subsystem:** 1x72 GB 15 K SAS  
- **Other Hardware:** None

**Software**

- **Operating System:** SuSE Linux Enterprise Server 10 (x86_64) SP1  
  kernel 2.6.16.46-0.12-smp  
- **Compiler:** Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1  
  Build 20070725  
- **Auto Parallel:** No  
- **File System:** ext2  
- **System State:** Multi-user run level 3  
- **Base Pointers:** 64-bit  
- **Peak Pointers:** 32/64-bit  
- **Other Software:** binutils-2.17.50
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Results Table

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Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run
'!/usr/bin/taskset' used to bind processes to CPUs

Non-Compliant
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Platform Notes
BIOS configuration:
- Power Regulator set to Static High Performance Mode
- Adjacent Sector Prefetch Disabled
- Hardware Prefetcher Disabled

Base Compiler Invocation
C benchmarks:
- icc
C++ benchmarks:
- icpc
Fortran benchmarks:
- ifort
Benchmarks using both Fortran and C:
- icc ifort

Base Portability Flags
- 410.bwaves: -DSPEC_CPU_LP64
- 436.cactusADM: -DSPEC_CPU_LP64 -nofor_main
- 437.lm: -DSPEC_CPU_LP64 -nofor_main
- 444.namd: -DSPEC_CPU_LP64 -nofor_main
- 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

Continued on next page

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Base Portability Flags (Continued)

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

Peak Compiler Invocation

C benchmarks:
-fast

C++ benchmarks:
-fast

Fortran benchmarks:
-fast

Benchmarks using both Fortran and C:
-fast

Non-Compliant
## Peak Compiler Invocation (Continued)

Fortran benchmarks (except as noted below):

```plaintext
ifort
```

437.leslie3d: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/bin/ifort
   -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/lib
   -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux32/include

Benchmarks using both Fortran and C:

```plaintext
icc ifort
```

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## Peak Optimization Flags

C benchmarks:

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Peak Optimization Flags (Continued)

433.milc: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias -auto-ilp32

470.lbm: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -scalar-rep- -prefetch -opt-malloc-options=3

482.sphinx3: -fast -unroll2

C++ benchmarks:

444.namd: -prof-gen(pass 1) -prof-use(pass 2) -fast -fno-alias -auto-ilp32

447.dealII: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -ansi-alias -scalar-rep-

450.soplex: -prof-gen(pass 1) -prof-use(pass 2) -fast -opt-malloc-options=3

453.povray: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -ansi-alias

Fortran benchmarks:

410.bwaves: -fast -prefetch

416.gamess: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0 -ansi-alias -scalar-rep-

434.zeusmp: -prof-gen(pass 1) -prof-use(pass 2) -fast

437.leslie3d: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch -opt-malloc-options=3

459.GemsFDTD: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -Ob0 -prefetch

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Peak Optimization Flags (Continued)

465.tonto: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4 -auto

Benchmarks using both Fortran and C:

435.gromacs: -prof-gen(pass 1) -prof-use(pass 2) -fast -prefetch -auto-ilp32

436.cactusADM: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -prefetch -auto-ilp32

454.calculix: -fast -unroll-aggressive -auto-ilp32

481.wrf: -fast -auto-ilp32

The flags file that was used to format this result can be browsed at http://www.spec.org/cpu2006/flags/HP-Intel-ic10.1-linux-fp-flags.20090714.01.html

You can also download the XML flags source by saving the following link:

http://www.spec.org/cpu2006/flags/HP-Intel-ic10.1-linux-fp-flags.20090714.01.xml