## CFP2000 Result

### Hewlett-Packard Company

**ProLiant ML370 G5 (2.66GHz, Intel Xeon processor X5355)**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Reference Time</th>
<th>Base Runtime</th>
<th>Base Ratio</th>
<th>Runtime</th>
<th>Ratio</th>
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<td>168.wupwise</td>
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<td>45.1</td>
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</tbody>
</table>

### Hardware

- **CPU:**
  - Intel Xeon processor X5355 (2.66GHz, 2x4MB L2 shared, 133MHz bus)
- **CPU MHz:** 2666
- **FPU:** Integrated
- **CPU(s) enabled:** 1 core, 1 chip, 4 cores/chip
- **CPU(s) orderable:** 1,2 chips
- **Parallel:** No
- **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 per 2 cores)
- **L3 Cache:** N/A
- **Other Cache:** N/A
- **Memory:** 8 GB (4x2 GB PC2-5300F CL5)
- **Disk Subsystem:** 2x72GB 10K SAS
- **Other Hardware:**

### Software

- **Operating System:** SuSE Linux Enterprise Server 10 (x86_64)
- **Compiler:**
  - Intel C++ Compiler for EM64T-based applications, (Version 9.1 Build 20061101)
  - Intel Fortran Compiler for EM64T-based applications, (Version 9.1 Build 20061101)
  - PathScale EKOPath(TM) Compiler Suite, Release 2.5
- **File System:** ext2
- **System State:** Default

### Notes/Tuning Information

- **+FDO:** PASS1= -prof_gen PASS2= -prof_use (Intel Compiler)
- **+FDO:** PASS1= -fb_create fbdata PASS2= -fb_opt fbdata (PathScale Compiler)
- **ifort** is the Intel Fortran compiler, **icc** is the Intel C++ compiler; and **pathf95** is PathScale Fortran compiler, **pathcc** is the PathScale C compiler.
- **Base tuning for C programs:** icc -fast -auto_ilp32 +FDO
- **Base tuning for FORTRAN programs:** ifort -fast +FDO
- **Portability:**
  - DSPEC_CPU2000_LP64 applied to all benchmarks
  - 178.galgel: -FI
- **Peak tuning:**
  - 168.wupwise: basepeak=1
  - 171.swim: pathf95 -o fastest -LNO:fusion=2:simd=0 -WOPT:val=0 -march=em64t
  - 173.applu: pathf95 -o fastest -CG:load_exe=0
  - pathf95 -o3 -ipa -CG:load_exe=0 -LNO:fission=1:fusion=2:blocking=off:full_unroll_size=9000
  - -OPT:IEEE_a=3:ro=3 -TENV:CPU=3 -march=em64t
Hewlett-Packard Company  
ProLiant ML370 G5 (2.66GHz, Intel Xeon processor X5355)  

SPECfp2000 = 2764  
SPECfp_base2000 = 2531

Notes/Tuning Information (Continued)

177.mesa:  pathcc -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on  
            -GRA:optimize_boundary=on -march=em64t +FDO
178.galgel:  basepeak=1
179.art:  icc -fast -auto_ilp32 +FDO
183.equake:  icc -fast +FDO ONESTEP=yes -rcd -auto-ilp32
187.facerec:  pathf95 -Ofast -IPA:plimit=1500 -LNO:fusion=2  
            -OPT:IEEE_NaN_Inf=off:ro=3:unroll_size=0 -march=em64t +FDO
188.ammp:  basepeak=1
189.lucas:  ifort -fast ONESTEP=yes
191.fma3d:  basepeak=1
200.sixtrack:  basepeak=1
301.apsi:  pathf95 -Ofast -CG:load_exe=0 -LNO:opt=0:prefetch=1 -march=em64t

BIOS Configuration Notes
Power Regulator set to Static High
Adjacent Sector Prefetch disabled

Other Configuration Notes
Taskset utility used to bind process to CPU(s)
"ulimit -s unlimited" set
Single processor kernel used