



CFP2000 Result

Copyright ©1999-2007, Standard Performance Evaluation Corporation

Hewlett-Packard Company

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

SPECfp_rate2000 = 65.7

SPECfp_rate_base2000 = 60.5

SPEC license #: 3 Tested by: Hewlett-Packard Company Test date: Feb-2007 Hardware Avail: Nov-2006 Software Avail: Nov-2006

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	101	73.7	4	101	73.7
171.swim	4	425	33.8	4	421	34.2
172.mgrid	4	266	31.4	2	128	32.6
173.applu	4	291	33.5	4	207	47.1
177.mesa	4	53.7	121	4	48.6	134
178.galgel	4	75.6	178	4	75.6	178
179.art	4	69.4	174	2	24.9	242
183.quake	4	184	32.7	4	142	42.6
187.facerec	4	110	80.3	2	54.3	81.1
188.amp	4	127	80.3	4	127	80.3
189.lucas	4	251	37.0	4	251	37.0
191.fma3d	4	230	42.4	4	230	42.4
200.sixtrack	4	109	46.7	4	109	46.7
301.apsi	4	206	58.4	4	197	61.2

Hardware

CPU: Intel Xeon processor X5355 (2.66GHz, 2x4MB L2 shared, 1333MHz bus)
CPU MHz: 2666
FPU: Integrated
CPU(s) enabled: 4 cores, 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)
Kernel 2.6.16.21-0.8-smpp
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 -Ofast -LNO:fusion=2:simd=0 -WOPT:val=0 -march=em64t
172.mgrid: pathf95 -Ofast -CG:load_exe=0 -LNO:blocking=off:prefetch_ahead=5
-OPT:ro=3:unroll_size=256 -WOPT:mem_opnds=on -march=em64t
users=2
173.applu: pathf95 -O3 -ipa -CG:load_exe=0
-LNO:fission=1:fusion=2:blocking=off:full_unroll_size=9000
```



CFP2000 Result

Copyright ©1999-2007, Standard Performance Evaluation Corporation

Hewlett-Packard Company

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

SPECfp_rate2000 = 65.7

SPECfp_rate_base2000 = 60.5

SPEC license #: 3 Tested by: Hewlett-Packard Company Test date: Feb-2007 Hardware Avail: Nov-2006 Software Avail: Nov-2006

Notes/Tuning Information (Continued)

```

-Opt:IEEE_a=3:ro=3 -TENV:X=3 -march=em64t
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 users=2
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
             users=2
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

```