CFP2000 Result

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Hewlett-Packard Company

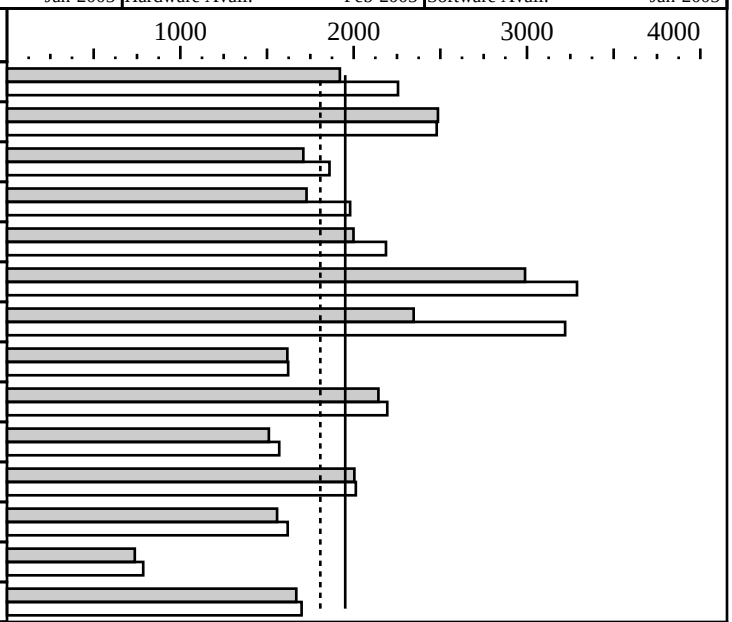
ProLiant DL385 (AMD Opteron (TM) 252)

SPECfp2000 = 1951

SPECfp_base2000 = 1808

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Jan-2005 | Hardware Avail: Feb-2005 | Software Avail: Jan-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	83.3	1920	70.9	2256
171.swim	3100	125	2486	125	2479
172.mgrid	1800	105	1710	96.7	1861
173.applu	2100	122	1728	106	1980
177.mesa	1400	70.0	1999	64.0	2186
178.galgel	2900	97.0	2989	88.2	3288
179.art	2600	111	2346	80.7	3220
183.equake	1300	80.4	1617	80.1	1622
187.facerec	1900	88.7	2143	86.6	2194
188.ammp	2200	146	1511	140	1571
189.lucas	2000	99.8	2004	99.4	2012
191.fma3d	2100	135	1558	130	1619
200.sixtrack	1100	149	737	140	786
301.apsi	2600	156	1669	153	1700



Hardware

CPU:	AMD Opteron (TM) 252
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB(I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8x2048MB PC3200 DDR 400
Disk Subsystem:	1x36.4GB Ultra320 SCSI
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server 9 for AMD64 SuSE kernel 2.6.5-7.97-smp
Compiler:	PathScale EKO Compiler Suite, Release 1.4 AMD Core Math Library 2.5.1
File System:	Linux/ext2
System State:	Multi-user run level 3

Notes/Tuning Information

```
+FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
+ACML: Linked with AMD Core Math Library
Base tuning for C programs: -Ofast -WOPT:mem_opnds=on +FDO
Base tuning for FORTRAN programs: -Ofast -LNO:fusion=2 -OPT:fast_complex
Portability flags:
  178.galgel:    -fixedform
Peak tuning:
  168.wupwise:   -Ofast -LNO:prefetch_ahead=5:prefetch=3
                -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3 -TENV:X=4
                +FDO
    loader:      -IPA:space=1000:linear=on:plimit=50000:callee_limit=5000
                -INLINE:aggressive=on
  171.swim:      -Ofast -LNO:fusion=2
  172.mgrid:     -O3 -LNO:fusion=2:blocking=off
                -OPT:Ofast:unroll_times_max=8:unroll_size=256:ro=3 -CG:gcm=off:cflow=off
  173.applu:     -Ofast -CG:local_fwd_sched=on
                -LNO:fusion=2:fission=2:full_unroll_size=10000:prefetch=3
```

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Notes/Tuning Information (Continued)

```
                  -OPT:ro=3 -TENV:X=3 -WOPT:val=2
    177.mesa:     -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on +FDO
    178.galgel:   -Ofast -OPT:fast_complex -CG:use_movlpd=on +ACML
    179.art:      -O3 -OPT:ro=2:div_split=on:alias=typed -fno-math-errno -m32 +FDO
    183.equake:   -Ofast -WOPT:mem_opnds=on +FDO
      Note:      The configuration file contains peak optimization flags for 183.equake that are
                  not invoked due to a syntax error. The options invoked during compilation
                  are correctly described in the notes above.
    187.facerec:  -Ofast -OPT:treeheight=on:IEEE_NaN_Inf=off:ro=3 -CG:load_exe=0
                  -LNO:fusion=2 +FDO
      loader:     -IPA:plimit=1800
    188.ammp:     -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
                  -fno-math-errno -TENV:X=4 -LNO:prefetch=0 +FDO
    189.lucas:    -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 +FDO
    191.fma3d:    -O2 -ipa -CG:load_exe=1 -OPT:Ofast:IEEE_arith=3:ro=3
                  -WOPT:mem_opnds=on:retype_expr=on +FDO
      loader:     -IPA:pu_reorder=1
    200.sixtrack: -Ofast -CG:load_exe=1 +FDO
    301.apsi:     -Ofast -TENV:X=4 -LNO:fusion=2:prefetch=0
  BIOS Configuration Notes
    Node Interleaving is Disabled
```