CFP2000 Result

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Hewlett-Packard Company

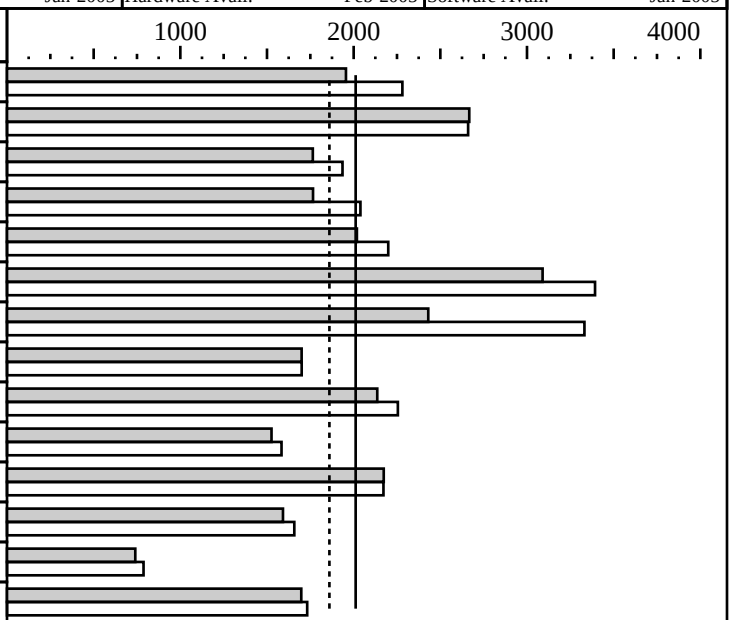
ProLiant BL25p (AMD Opteron (TM) 252)

SPECfp2000 = 2012

SPECfp_base2000 = 1860

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	81.8	1956	70.1	2281
171.swim	3100	116	2667	117	2660
172.mgrid	1800	102	1764	93.0	1936
173.applu	2100	119	1766	103	2039
177.mesa	1400	69.4	2019	63.7	2200
178.galgel	2900	93.9	3090	85.5	3393
179.art	2600	107	2430	78.0	3331
183.equake	1300	76.5	1700	76.5	1700
187.facerec	1900	88.9	2136	84.3	2255
188.ammp	2200	144	1526	139	1584
189.lucas	2000	92.0	2173	92.1	2172
191.fma3d	2100	132	1592	127	1658
200.sixtrack	1100	149	740	140	788
301.apsi	2600	153	1698	150	1732



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:	4x2048MB PC3200 DDR 400
Disk Subsystem:	2x18.2GB 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/ext3
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
```