CFP2000 Result

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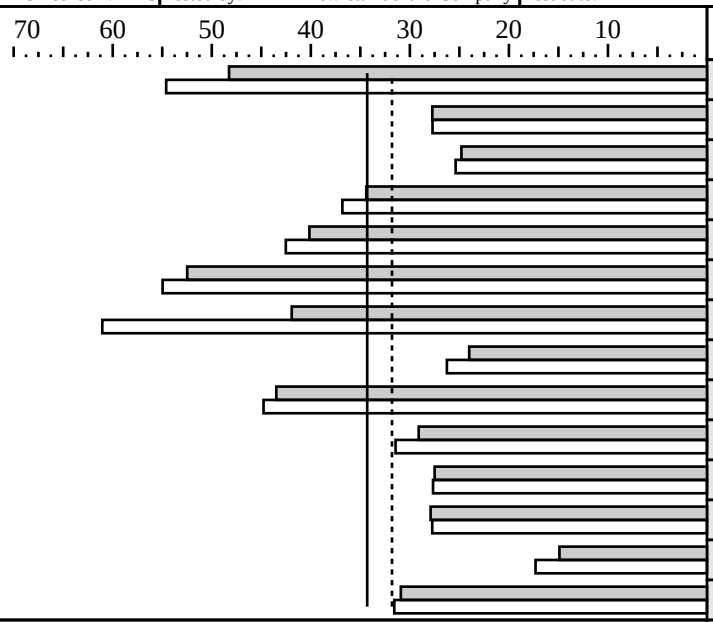
Hewlett-Packard Company

ProLiant DL385 (AMD Opteron (TM) 275)

SPECfp_rate2000 = 34.3

SPECfp_rate_base2000 = 31.8

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	76.9	48.3	2	68.0	54.6
171.swim	2	259	27.7	2	260	27.7
172.mgrid	2	168	24.8	2	165	25.4
173.applu	2	142	34.4	2	132	36.8
177.mesa	2	80.9	40.1	2	76.4	42.5
178.galgel	2	128	52.5	2	122	55.0
179.art	2	144	41.9	2	98.8	61.1
183.equake	2	126	24.0	2	115	26.3
187.facerec	2	101	43.5	2	98.5	44.8
188.ammp	2	175	29.1	2	162	31.4
189.lucas	2	169	27.5	2	168	27.7
191.fma3d	2	175	27.9	2	176	27.7
200.sixtrack	2	171	14.9	2	147	17.3
301.apsi	2	195	30.9	2	191	31.6

Hardware

CPU:	AMD Opteron (TM) 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	2 cores, 1 chip, 2 cores/chip
CPU(s) orderable:	1,2
Parallel:	No
Primary Cache:	64KBI + 64KBD (on chip) per core
Secondary Cache:	1024KB(I+D) (on chip) per core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x2048MB PC3200 DDR CL3.0
Disk Subsystem:	1x36GB 15K Ultra320 SCSI
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server 9 (x86_64) SP 1 SuSE kernel 2.6.5-7.139-smp
Compiler:	PathScale EKO Compiler Suite, Release 2.1 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
                 -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
                 -OPT:ro=3 -TENV:X=3 -WOPT:val=2
```

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Notes/Tuning Information (Continued)

```
    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 RM_SOURCES=lapak.f90 +ACML
    179.art:       -O3 -OPT:ro=2:div_split=on:alias=typed -fno-math-errno -m32 +FDO
    183.equake:    -Ofast -WOPT:mem_opnds=on -CG:local_fwd_sched=on -m32
    187.facerec:   -Ofast -OPT:treeheight=on:IEEE_NaN_Inf=off:ro=3 -CG:load_exe=0
                   -LNO:fusion=2 -IPA:plimit=1500 +FDO
    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 -IPA:pu_reorder=1 +FDO
    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
  Other Configuration Notes
     Taskset utility used to bind process to CPU(s)
```