CFP2000 Result

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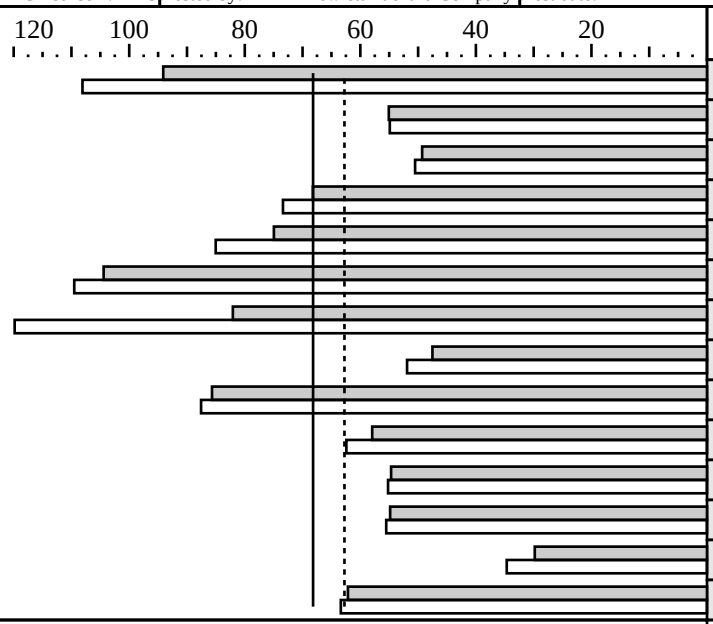
Hewlett-Packard Company

ProLiant DL385 (AMD Opteron (TM) 275)

SPECfp_rate2000 = 68.2

SPECfp_rate_base2000 = 62.7

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	4	78.9	94.1	4	68.7	108
171.swim	4	261	55.1	4	262	54.9
172.mgrid	4	169	49.3	4	165	50.5
173.applu	4	143	68.2	4	133	73.4
177.mesa	4	86.7	75.0	4	76.4	85.0
178.galgel	4	129	104	4	123	110
179.art	4	147	82.1	4	101	120
183.equake	4	127	47.5	4	116	51.9
187.facerec	4	103	85.7	4	101	87.6
188.ammp	4	176	57.9	4	164	62.4
189.lucas	4	170	54.7	4	168	55.2
191.fma3d	4	178	54.8	4	176	55.5
200.sixtrack	4	171	29.8	4	147	34.7
301.apsi	4	194	62.1	4	190	63.4

Hardware

CPU:	AMD Opteron (TM) 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 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:	8x2048MB 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)
```