CFP2000 Result

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Hewlett-Packard Company

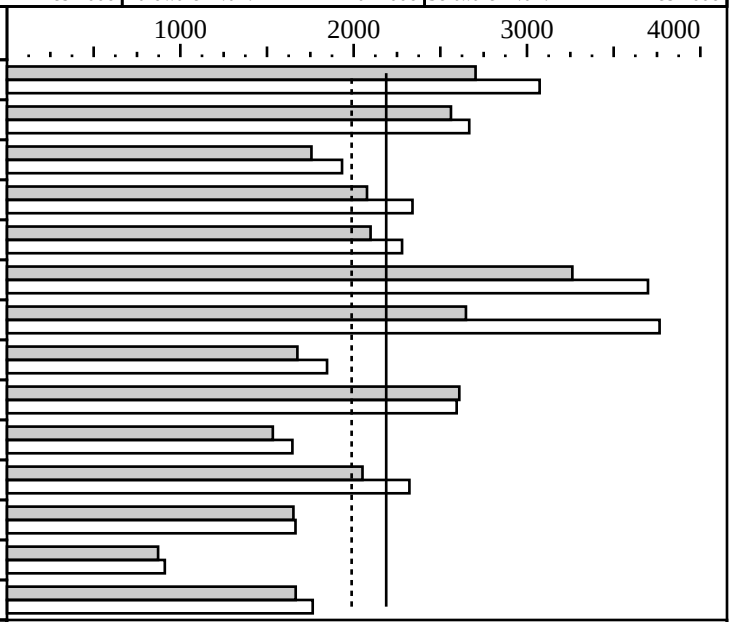
ProLiant DL145 G2 (AMD Opteron (TM) 285)

SPECfp2000 = 2188

SPECfp_base2000 = 1988

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	59.2	2703	52.1	3073
171.swim	3100	121	2561	116	2667
172.mgrid	1800	102	1756	93.1	1933
173.applu	2100	101	2077	89.8	2339
177.mesa	1400	66.7	2098	61.4	2279
178.galgel	2900	88.9	3262	78.4	3698
179.art	2600	98.2	2648	69.1	3765
183.equake	1300	77.6	1675	70.4	1846
187.facerec	1900	72.8	2609	73.2	2594
188.ammp	2200	143	1534	134	1647
189.lucas	2000	97.5	2051	86.1	2322
191.fma3d	2100	127	1652	126	1664
200.sixtrack	1100	126	872	121	910
301.apsi	2600	156	1666	147	1764



Hardware

CPU:	AMD Opteron (TM) 285
CPU MHz:	2600
FPU:	Integrated
CPU(s) enabled:	1 core, 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 CL3.0
Disk Subsystem:	1x36.4GB 15K Ultra320 SCSI
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server 9 (x86_64) SP 3 SuSE kernel 2.6.5-7.244-default
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 2.3 AMD Core Math Library 3.0.0
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=on +FDO
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
                -IPA:linear=on:plimit=50000:callee_limit=5000 -INLINE:aggressive=on
  171.swim:      -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 -m3dnow
  172.mgrid:     -Ofast -CG:gcm=off -OPT:IEEE_a=3:unroll_size=200
               -LNO:fusion=2:fission=1:blocking=off:prefetch_ahead=2 -WOPT:mem_opnds=on:aggstr=0
  173.applu:     -Ofast -CG:local_fwd_sched=on -OPT:ro=3 -TENV:X=3
                 -LNO:fusion=2:fission=2:full_unroll_size=10000 +FDO
  177.mesa:      -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on
                  -WOPT:mem_opnds=on +FDO
```

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Notes/Tuning Information (Continued)

```
   178.galgel:    -Ofast -OPT:fast_complex-on RM_SOURCES=lapak.f90 +ACML +FDO
   179.art:       -O3 -OPT:Ofast -fno-math-errno -mno-sse2 -m32
   183.equake:    -Ofast -CG:load_exe=2 -WOPT:mem_opnds=on -m32 +FDO
  187.facerec:   -Ofast -LNO:fusion=2 -OPT:fast_complex=on:IEEE_NaN_Inf=off:unroll_size=0 +FDO
   188.ammp:      -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
                  -fno-math-errno -TENV:X=4 +FDO
   189.lucas:     -Ofast -OPT:ro=3:fast_nint=off:unroll_size=256 -WOPT:mem_opnds=on +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:  -O3 -OPT:Ofast:Olimit=6000:early_intrinsics=on -fno-math-errno
                  -CG:load_exe=1 +FDO
   301.apsi:      -Ofast -CG:load_exe=0 -LNO:prefetch=0:simd=2
BIOS Configuration Notes
  Node Interleaving is Disabled
Other Configuration Notes
   Single-processor kernel was used
```