CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

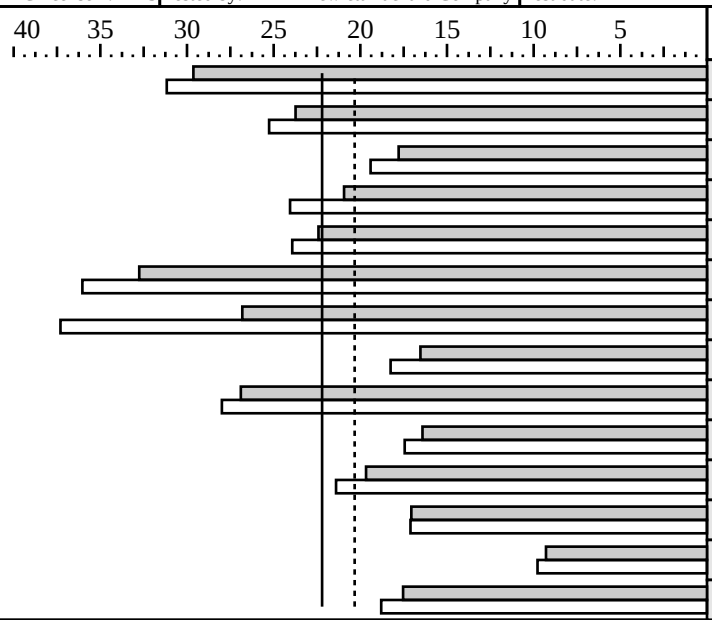
Hewlett-Packard Company

ProLiant DL145 G2 (AMD Opteron (TM) 280)

SPECfp_rate2000 = 22.2

SPECfp_rate_base2000 = 20.3

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Nov-2005 | Hardware Avail: Oct-2005 | Software Avail: Sep-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	62.6	29.6	1	59.5	31.2
171.swim	1	151	23.7	1	142	25.3
172.mgrid	1	117	17.8	1	108	19.4
173.applu	1	116	20.9	1	101	24.1
177.mesa	1	72.5	22.4	1	67.9	23.9
178.galgel	1	103	32.8	1	93.4	36.0
179.art	1	112	26.8	1	80.9	37.3
183.equake	1	91.2	16.5	1	82.6	18.3
187.facerec	1	81.9	26.9	1	78.8	28.0
188.ammp	1	155	16.4	1	146	17.4
189.lucas	1	118	19.7	1	108	21.4
191.fma3d	1	143	17.1	1	142	17.1
200.sixtrack	1	137	9.29	1	130	9.78
301.apsi	1	172	17.5	1	160	18.8

Hardware

CPU:	AMD Opteron (TM) 280
CPU MHz:	2400
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 2 SuSE kernel 2.6.5-7.191-default
Compiler:	PathScale EKOPath(TM) Compiler Suite, Release 2.2.1 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=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
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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

Submitted_by: "Schmidt, David (Performance Eng.)" <D.Schmidt@hp.com>
Submitted: Tue Nov 22 15:43:19 2005
Submission: cpu2000-20051114-05057.sub
```