CFP2000 Result

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Hewlett-Packard Company

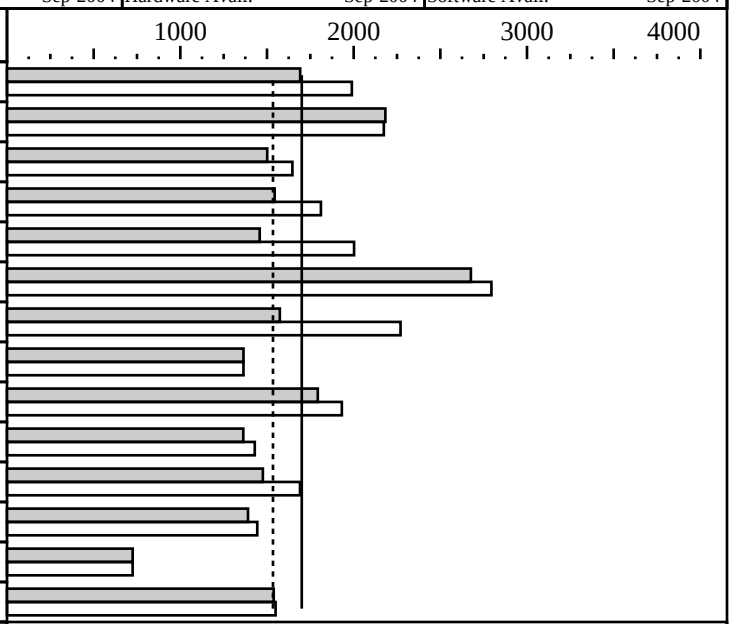
ProLiant DL145 (AMD Opteron (TM) 250)

SPECfp2000 = 1701

SPECfp_base2000 = 1534

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Sep-2004 | Hardware Avail: Sep-2004 | Software Avail: Sep-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	94.6	1691	80.4	1989
171.swim	3100	142	2183	143	2174
172.mgrid	1800	120	1501	109	1647
173.applu	2100	136	1544	116	1811
177.mesa	1400	96.0	1458	69.9	2002
178.galgel	2900	108	2676	104	2795
179.art	2600	165	1574	115	2270
183.equake	1300	95.3	1364	95.3	1364
187.facerec	1900	106	1793	98.4	1932
188.ammp	2200	161	1363	154	1429
189.lucas	2000	135	1476	118	1690
191.fma3d	2100	151	1390	145	1444
200.sixtrack	1100	152	725	152	725
301.apsi	2600	169	1539	168	1549



Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
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 PC2700 CL2.5
Disk Subsystem:	1x40GB ATA100
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server 8 for AMD64 (SP3) SuSE kernel 2.4.21-143-numa
Compiler:	PathScale EKO Compiler Suite, Release 1.3 AMD Core Math Library 2.0
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
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:prefetch=2
  172.mgrid:     -O3 -LNO:fusion=2:blocking=off:prefetch=2
                -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:load_exe=0:use_movlpd=on +ACML
  179.art:      -O3 -OPT:ro=2:div_split=on:alias=typed -fno-math-errno -m32 +FDO
  183.equake:   basepeak=yes
  187.facerec:  -Ofast -OPT:treeheight=on:IEEE_NaN_Inf=off:ro=3 -CG:load_exe=0
                -LNO:fusion=2:prefetch=0 +FDO -IPA:plimit=1800
  188.ammp:     -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
                -LNO:prefetch=0 -fno-math-errno -TENV:X=4 +FDO
  189.lucas:    -Ofast -CG:prefetch=off:load_exe=2:local_fwd_sched
                -TENV:X=4 -WOPT:retype_expr=on +FDO
  191.fma3d:    -O2 -ipa -WOPT:mem_opnds=on:retype_expr=on
                -Qoption,f,-ip_ninl_max_total_stats=3500 +FDO ONESTEP=yes
  200.sixtrack: -Ofast +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)
```