



# CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Hewlett-Packard Company  
ProLiant DL145 G3 (AMD Opteron (TM) 2218)

SPECfp2000 = 2296  
SPECfp\_base2000 = 2081

SPEC license #: 3 Tested by: Hewlett-Packard Company Test date: Nov-2006 Hardware Avail: Jan-2006 Software Avail: Sep-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	1000 2000 3000 4000			
168.wupwise	1600	57.7	2771	49.2	3255	[Bar chart showing ratio 3255]			
171.swim	3100	104	2980	96.8	3203	[Bar chart showing ratio 3203]			
172.mgrid	1800	97.0	1855	88.5	2034	[Bar chart showing ratio 2034]			
173.applu	2100	94.6	2221	86.9	2417	[Bar chart showing ratio 2417]			
177.mesa	1400	68.8	2036	64.5	2172	[Bar chart showing ratio 2172]			
178.galgel	2900	85.4	3394	75.1	3864	[Bar chart showing ratio 3864]			
179.art	2600	92.5	2810	66.2	3926	[Bar chart showing ratio 3926]			
183.quake	1300	73.7	1764	68.0	1912	[Bar chart showing ratio 1912]			
187.facerec	1900	69.7	2724	68.2	2788	[Bar chart showing ratio 2788]			
188.amp	2200	144	1531	133	1658	[Bar chart showing ratio 1658]			
189.lucas	2000	89.7	2230	78.1	2562	[Bar chart showing ratio 2562]			
191.fma3d	2100	118	1777	120	1757	[Bar chart showing ratio 1757]			
200.sixtrack	1100	127	865	119	924	[Bar chart showing ratio 924]			
301.apsi	2600	151	1717	143	1823	[Bar chart showing ratio 1823]			

### Hardware

CPU: AMD Opteron (TM) 2218  
 CPU MHz: 2600  
 FPU: Integrated  
 CPU(s) enabled: 1 core, 1 chip, 2 cores/chip  
 CPU(s) orderable: 1,2 chips  
 Parallel: No  
 Primary Cache: 64 KB I + 64 KB D on chip per core  
 Secondary Cache: 1 MB I+D on chip per core  
 L3 Cache: N/A  
 Other Cache: N/A  
 Memory: 8 GB (4x2 GB PC2-5300P CL5.0)  
 Disk Subsystem: 1x250 GB SATA  
 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 2.5  
 AMD Core Math Library 3.5.0  
 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
```



# CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Hewlett-Packard Company  
ProLiant DL145 G3 (AMD Opteron (TM) 2218)

SPECfp2000 = 2296  
SPECfp\_base2000 = 2081

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Nov-2006 | Hardware Avail: Jan-2006 | Software Avail: Sep-2006

## 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.ammmp: -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  
Taskset utility used to bind process to CPU(s)  
Single processor kernel used