



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2100

SPECfp2000 = 2262

SPECfp_base2000 = 2041

SPEC license #: 6 Tested by: Sun Microsystems, Santa Clara Test date: Mar-2006 Hardware Avail: May-2006 Software Avail: Mar-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	52.3	3060	48.2	3321	
171.swim	3100	142	2188	139	2230	
172.mgrid	1800	101	1782	98.3	1831	
173.applu	2100	133	1579	85.4	2458	
177.mesa	1400	72.5	1932	54.4	2575	
178.galgel	2900	86.2	3365	80.0	3623	
179.art	2600	62.6	4153	58.9	4414	
183.quake	1300	63.5	2046	64.0	2031	
187.facerec	1900	71.4	2660	71.4	2660	
188.amp	2200	132	1665	122	1810	
189.lucas	2000	124	1612	102	1957	
191.fma3d	2100	116	1808	116	1808	
200.sixtrack	1100	119	927	105	1046	
301.apsi	2600	149	1748	141	1848	

Hardware

CPU: AMD Opteron (TM) 156
 CPU MHz: 3000
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 1
 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: 4GB (4x1GB, PC3200 CL3 DDR ECC SDRAM)
 Disk Subsystem: SATA,80GB,10K RPM
 Other Hardware: None

Software

Operating System: SUSE LINUX Enterprise Server 9 SP3 (x86_64)
 Compiler: PathScale EKOPath(TM) Compiler Suite, Version 2.3
 PGI Compiler for Linux, Release 6.1-3
 AMD Core Mathematical Library (ACML), Version 3.0.1
 File System: ufs
 System State: Multi-user

Notes/Tuning Information

Portability flags:

178.galgel (pgf90) : -Mfixed

Feedback Optimization +FDO:

PGI : PASS1=-Mpfi PASS2=-Mpfo
 PathSale: PASS1=-fb_create fbdata PASS2=-fb_opt fbdata

Baseline Optimization Flags:

C programs : pgcc -fastsse -Mipa=fast,inline +FDO
 Fortran programs: pgf90 -fastsse -Mipa=fast,inline +FDO

Peak Tuning Flags:

168.wupwise: pathf95 -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
 -CG:local_fwd_sched=on -m3dnow
 171.swim: pathf95 -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 -m3dnow



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X2100

SPECfp2000 = 2262

SPECfp_base2000 = 2041

SPEC license #: 6 Tested by: Sun Microsystems, Santa Clara Test date: Mar-2006 Hardware Avail: May-2006 Software Avail: Mar-2006

Notes/Tuning Information (Continued)

```

172.mgrid: pathf95 -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: pathf95 -Ofast -CG:local_fwd_sched=on -OPT:ro=3 -TENV:X=3
           -LNO:fusion=2:fission=2:full_unroll_size=10000:prefetch=3
           +FDO
177.mesa: pathf95 -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on
           -WOPT:mem_opnds=on +FDO
178.galgel: pgf90 -fastsse -O4 -Mipa=fast,inline ONESTEP=yes +FDO
           RM_SOURCES=lapak.f90
           EXTRALIBS=-lacml
179.art: pgcc -fastsse -Munroll=n:9 -Mipa=fast,inline -tp k8-32
183.quake: pgcc -fastsse -Mflushz -Mvect -Mipa=fast,inline ONESTEP=yes +FDO
187.facerec: pgf90 basepeak=1
188.ammp: pathcc -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
           -fno-math-errno -TENV:X=4 +FDO
189.lucas: pathf95 -O3 -OPT:ro=3:fast_nint=off:unroll_size=256
           -WOPT:mem_opnds=on +FDO
191.fma3d: pgf90 basepeak=1
200.sixtrack: pathf95 -O3 -OPT:Ofast:Olimit=6000:early_intrinsics=on
           -fno-math-errno -CG:load_exe=1 +FDO
301.apsi: pathf95 -Ofast -CG:load_exe=0 -LNO:prefetch=0:simd=2

```

Default BIOS settings was used.