



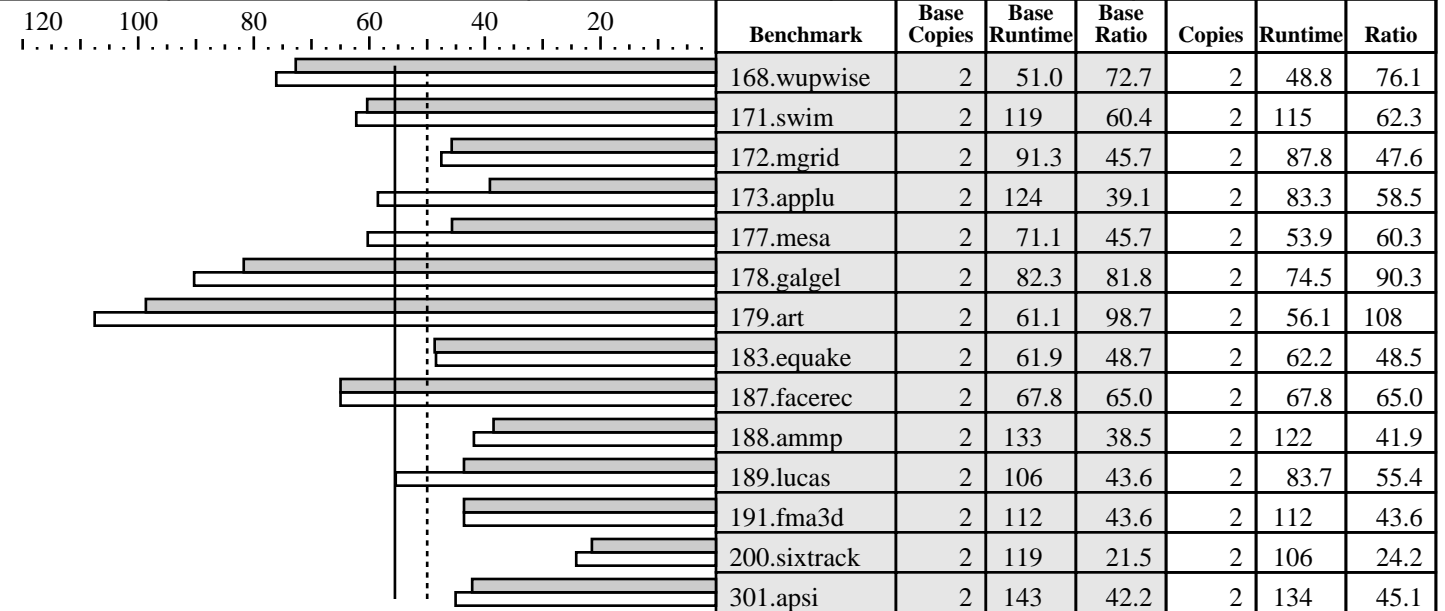
CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire X4200

SPECfp_rate2000 = 55.6
SPECfp_rate_base2000 = 50.0

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



Hardware

CPU: AMD Opteron (TM) 256
 CPU MHz: 3000
 FPU: Integrated
 CPU(s) enabled: 2 cores, 2 chips, 1 core/chip
 CPU(s) orderable: 1,2 (order by # of chips)
 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: 16GB (8x2GB, PC3200 CL3 DDR ECC Registered SDRAM)
 Disk Subsystem: SAS,36GB,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 X4200

SPECfp_rate2000 = 55.6
SPECfp_rate_base2000 = 50.0

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

```

taskset has been used to bind processes to CPUs
Default BIOS settings was used.

This result was measured on the Sun Fire X4200. In addition,
Sun has submitted the same result for the Sun Fire X4100, which is
electronically equivalent to the Sun Fire X4200.