



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices
ASUS SK8V Motherboard, AMD Opteron (TM) 150

SPECfp_rate2000 = 19.1
SPECfp_rate_base2000 = 18.4

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2004 | Hardware Avail: Jun-2004 | Software Avail: Apr-2004

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	91.2	20.3	1	73.3	25.3
171.swim	1	132	27.3	1	132	27.3
172.mgrid	1	122	17.1	1	119	17.5
173.applu	1	147	16.5	1	145	16.7
177.mesa	1	79.2	20.5	1	76.5	21.2
178.galgel	1	105	32.0	1	97.5	34.5
179.art	1	172	17.5	1	168	18.0
183.equake	1	83.2	18.1	1	80.1	18.8
187.facerec	1	86.5	25.5	1	86.5	25.5
188.amp	1	165	15.5	1	161	15.9
189.lucas	1	135	17.2	1	133	17.4
191.fma3d	1	135	18.0	1	135	18.0
200.sixtrack	1	149	8.54	1	149	8.54
301.apsi	1	195	15.5	1	195	15.5

Hardware

CPU: AMD Opteron (TM) 150
 CPU MHz: 2400
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 1
 Parallel: No
 Primary Cache: 64KBI + 64KBD on chip
 Secondary Cache: 1024KB(I+D) on chip
 L3 Cache: N/A
 Other Cache: N/A
 Memory: 2x512 MB PC3200 DDR SDRAM ECC Reg CL2
 Disk Subsystem: IDE, Western Digital WD2000
 Other Hardware: None

Software

Operating System: SuSE Linux 8.0 SLES 64 bit (SP3)
 Compiler: PGI Fortran 5.1-3
 SuSE gcc33 optional compiler (from SLES8 SP3)
 AMD Core Math Library (Version 1.5) for AMD64
 File System: Linux/ext3
 System State: Multi-user SuSE Run level 3

Notes/Tuning Information

+FDO: PASS1=-fprofile-arcs PASS2=-fbranch-probabilities

+ACML is linking with AMD Core Math Library

pgf90 is the PGI Fortran compiler

gcc is the SuSE optional gcc 3.3 compiler (from SLES8 SP3)

Portability:

PORTABILITY=-DSPEC_CPU2000_LP64 is applied to all the C benchmarks.

178.galgel: -Mfixed

Baseline: C gcc -O3 -funroll-all-loops +FDO

Baseline: Fortran pgf90 -fastsse -Mipa=fast

Peak tuning:

168.wupwise: pgf90 -fastsse -Mipa=fast -Minline=levels:2

171.swim: basepeak=true

172.mgrid: pgf90 -fast -Mipa=fast

173.applu: pgf90 -fast -Mipa=fast

177.mesa: gcc -O3 -funroll-all-loops -finline-limit=2000 +FDO

178.galgel: pgf90 -fastsse -O3 -mp RM_SOURCES=lapak.f90 +ACML

179.art: gcc -O3 -funroll-all-loops -ffast-math -finline-limit=1500 +FDO

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices
ASUS SK8V Motherboard, AMD Opteron (TM) 150

SPECfp_rate2000 = 19.1
SPECfp_rate_base2000 = 18.4

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2004 | Hardware Avail: Jun-2004 | Software Avail: Apr-2004

Notes/Tuning Information (Continued)

```
183.equake: gcc -O3 -funroll-all-loops -ffast-math -finline-limit=2000
187.facerec: basepeak=true
188.amp: gcc -O3 -funroll-all-loops -ffast-math -finline-limit=2000 +FDO
189.lucas: pgf90 -fastsse -Mipa=fast -Mnosmart
191.fma3d: basepeak=true
200.sixtrack: basepeak=true
301.apsi: basepeak=true
ONESTEP is used for all base and peak runs
BIOS rev.: 1001
Memory used is Corsair CMX512R-3200C2
Cas Latency manually set to 2.0 in BIOS
```