



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices
ASUS SK8N Motherboard, AMD Opteron (TM) 148

SPECfp2000 = 1514
SPECfp_base2000 = 1505

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Nov-2003 | Hardware Avail: Dec-2003 | Software Avail: Nov-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	95.6	1674	95.6	1674	
171.swim	3100	138	2254	138	2254	
172.mgrid	1800	143	1254	137	1318	
173.applu	2100	156	1344	154	1360	
177.mesa	1400	87.3	1603	84.3	1660	
178.galgel	2900	108	2679	108	2679	
179.art	2600	177	1468	176	1474	
183.quake	1300	91.4	1422	94.1	1381	
187.facerec	1900	94.2	2016	94.2	2016	
188.amp	2200	169	1299	169	1303	
189.lucas	2000	131	1529	130	1543	
191.fma3d	2100	146	1438	146	1438	
200.sixtrack	1100	161	684	161	684	
301.apsi	2600	190	1366	190	1366	

Hardware

CPU: AMD Opteron (TM) 148
CPU MHz: 2200
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: 2 x 512MB PC3200 DDR SDRAM, ECC Registered
Disk Subsystem: Western Digital WD2000, IDE
Other Hardware: None

Software

Operating System: SuSE Linux 9.0 (AMD64) 2.4.21-102-default
Compiler: PGI Fortran 5.1-0 and SuSE gcc 3.3.1 compiler (from SuSE Linux 9.0)
File System: Linux/ext3
System State: Multi-user SuSE Run level 3

Notes/Tuning Information

Tested by Advanced Micro Devices

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

pgf90 is the PGI Fortran 5.1 compiler

gcc is the SuSE gcc 3.3.1 compiler

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: basepeak=true

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: basepeak=true

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 SK8N Motherboard, AMD Opteron (TM) 148

SPECfp2000 = 1514
SPECfp_base2000 = 1505

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Nov-2003 | Hardware Avail: Dec-2003 | Software Avail: Nov-2003

Notes/Tuning Information (Continued)

```
183.equake: gcc -O3 -funroll-all-loops -ffast-math -finline-limit=2000
187.facerec: basepeak=true
188.ammp: 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
The tested system can be assembled using an ATX case such as the Antec KS-282,
a 480W power supply, and a PCI or AGP video card.