



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
CELSIUS V810, Opteron (TM) 250, Linux 64-bit

SPECfp2000 = **1689**
SPECfp_base2000 = **1652**

SPEC license #: 22 Tested by: Fujitsu Siemens Computers Test date: Aug-2004 Hardware Avail: Aug-2004 Software Avail: Jul-2004

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	90.3	1773	72.6	2205	
171.swim	3100	129	2400	129	2400	
172.mgrid	1800	121	1493	118	1530	
173.applu	2100	144	1454	147	1425	
177.mesa	1400	78.5	1784	78.9	1775	
178.galgel	2900	97.2	2983	87.9	3300	
179.art	2600	168	1551	171	1519	
183.earthquake	1300	89.1	1460	87.6	1484	
187.facerec	1900	79.2	2398	79.2	2398	
188.amp	2200	157	1402	157	1401	
189.lucas	2000	121	1658	122	1645	
191.fma3d	2100	132	1595	132	1595	
200.sixtrack	1100	149	737	149	737	
301.apsi	2600	168	1550	168	1550	

Hardware

CPU: AMD Opteron (TM) 250
CPU MHz: 2400
FPU: Integrated
CPU(s) enabled: 1 core, 1 chip, 1 core/chip
CPU(s) orderable: 1, 2
Parallel: No
Primary Cache: 64KBI + 64KBD on chip
Secondary Cache: 1024KB(I+D) on chip
L3 Cache: N/A
Other Cache: N/A
Memory: 4 x 512 MB PC3200 CL3-3-3 DDR SDRAM
Disk Subsystem: S-ATA 7200 rpm
Other Hardware: None

Software

Operating System: SuSE Linux 9.1 (AMD64) 2.6.4-52-default
Compiler: For C and C++ : GNU gcc Compiler
- taken from SuSE's Linux distribution
For Fortran: PGI Fortran 5.2-1
ACML (AMD Core Math Library) for AMD64
- distributed with PGI compiler
File System: Linux/Reiser
System State: Multi-user SuSE Run level 3

Notes/Tuning Information

Tested by Fujitsu Siemens Computers

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

+ACML is linking with AMD Core Math Library

pgf90 is the PGI Fortran compiler

gcc is the GNU compiler, taken from SuSE's Linux distribution

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

Standard Performance Evaluation Corporation

info@spec.org

http://www.spec.org



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Fujitsu Siemens Computers
CELSIUS V810, Opteron (TM) 250, Linux 64-bit

SPECfp2000 = 1689
SPECfp_base2000 = 1652

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Aug-2004 | Hardware Avail: Aug-2004 | Software Avail: Jul-2004

Notes/Tuning Information (Continued)

```
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
183.quake:  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

System tested with only one CPU present.
BIOS default settings have been used. These include:
ECC memory checking disabled,
node interleave disabled, SRAT enabled.

For information about Fujitsu Siemens Computers in your country please see:
<http://www.fujitsu-siemens.com/countries>