CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

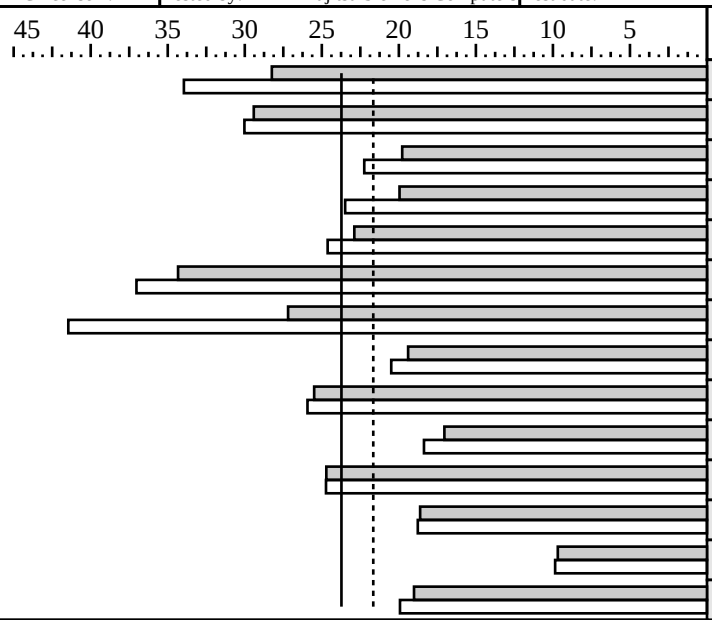
Fujitsu Siemens Computers

CELSIUS V810, Opteron (TM) 252, Linux 64-bit

SPECfp_rate2000 = 23.7

SPECfp_rate_base2000 = 21.7

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Feb-2005 | Hardware Avail: Mar-2005 | Software Avail: Jan-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	65.7	28.2	1	54.7	34.0
171.swim	1	122	29.4	1	120	30.0
172.mgrid	1	106	19.8	1	93.9	22.2
173.applu	1	122	20.0	1	104	23.5
177.mesa	1	70.9	22.9	1	66.0	24.6
178.galgel	1	98.0	34.3	1	90.8	37.0
179.art	1	111	27.2	1	72.8	41.5
183.equake	1	77.7	19.4	1	73.6	20.5
187.facerec	1	86.4	25.5	1	85.0	25.9
188.ammp	1	150	17.0	1	139	18.4
189.lucas	1	93.9	24.7	1	93.8	24.7
191.fma3d	1	131	18.6	1	130	18.8
200.sixtrack	1	132	9.68	1	129	9.86
301.apsi	1	159	19.0	1	151	19.9

Hardware

CPU:	AMD Opteron (TM) 252
CPU MHz:	2600
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-smp
Compiler:	PathScale EKOPath (TM) Compiler Suite, Release 2.0 - (both for C and Fortran) ACML (AMD Core Math Library) for AMD64, Version 2.1 - available from AMD
File System:	Linux/ReiserFS
System State:	Multi-user SuSE Run level 3

Notes/Tuning Information

```
Tested by Fujitsu Siemens Computers

 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
 +ACML: -lacml -lg2c
        for linking with AMD Core Math Library, Version 2.1.0
 (ACML requires g2c, the Fortran Compatibility Library;
 g2c comes with GNU Fortran compiler in SuSE's distribution)

 Portability Flags:
   178.galgel: -fixedform

 Baseline optimization flags:
   C programs:       -Ofast -WOPT:mem_opnds=on +FDO
   Fortran programs: -Ofast -LNO:fusion=2 -OPT:fast_complex +FDO

 Peak tuning:
 168.wupwise: -Ofast -LNO:prefetch_ahead=5:prefetch=3
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

```
                -OPT:unroll_times_max=8:unroll_size=128:IEEE_NaN_Inf=off:ro=3
                -TENV:X=4
                -IPA:space=1000:linear=on:plimit=50000:callee_limit=5000
                -INLINE:aggressive=on
 171.swim:      -Ofast -LNO:fusion=2 -m3dnow
 172.mgrid:     -O3 -LNO:fusion=2:blocking=off
                -OPT:Ofast:unroll_times_max=8:unroll_size=256:ro=3
                -CG:gcm=off:cflow=off -m3dnow
 173.applu:     -Ofast -CG:local_fwd_sched=on
                -LNO:fusion=2:fission=2:full_unroll_size=10000:prefetch=3
                -OPT:ro=3 -TENV:X=3 -WOPT:val=2
 177.mesa:      -O2 -ipa -OPT:Ofast -fno-math-errno
                -CG:local_fwd_sched=on +FDO
 178.galgel:    -Ofast -OPT:fast_complex -CG:use_movlpd=on +FDO +ACML
 179.art:       -O3 -OPT:ro=2:div_split=on:alias=typed -fno-math-errno -m32
 183.equake:    -Ofast -WOPT:mem_opnds=on -m32
 187.facerec:   -Ofast -OPT:treeheight=on:IEEE_NaN_Inf=off:ro=3
                -CG:load_exe=0 -LNO:fusion=2 -IPA:plimit=1500 +FDO
 188.ammp:      -O3 -OPT:alias=disjoint:unroll_times_max=8:Ofast:ro=3
                -fno-math-errno -TENV:X=4 +FDO
 189.lucas:     -Ofast -CG:local_fwd_sched=on -LNO:fusion=2 +FDO
 191.fma3d:     -O2 -ipa -CG:load_exe=1 -OPT:Ofast:IEEE_arith=3:ro=3
                -WOPT:mem_opnds=on:retype_expr=on -IPA:pu_reorder=1 +FDO
 200.sixtrack:-O3 -OPT:Ofast:Olimit=6000 -fno-math-errno
                -CG:load_exe=1 +FDO
 301.apsi:      -Ofast -TENV:X=4 -LNO:fusion=2:prefetch=0

System tested with only 1 CPU present.

BIOS Version 1.06, default settings.

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