CFP2000 Result

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Fujitsu Siemens Computers

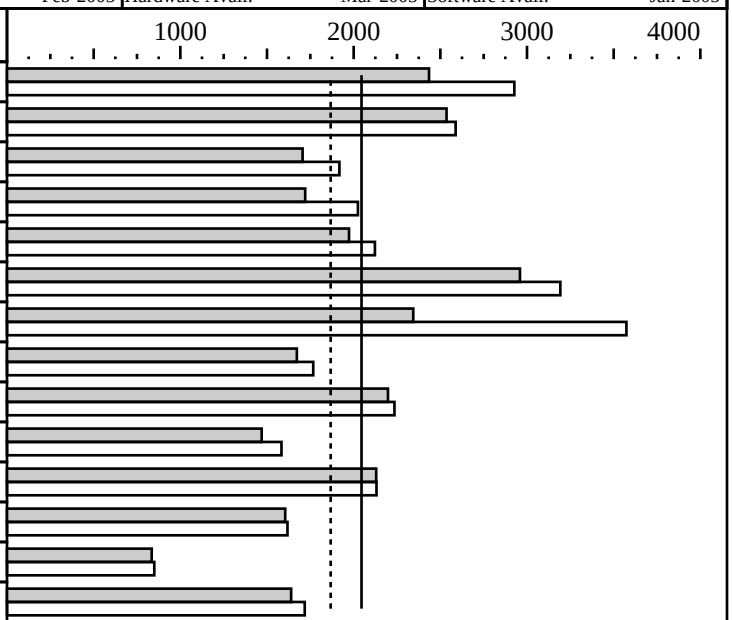
CELSIUS V810, Opteron (TM) 252, Linux 64-bit

SPECfp2000 = 2045

SPECfp_base2000 = 1867

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	65.7	2435	54.7	2927
171.swim	3100	122	2536	120	2588
172.mgrid	1800	106	1705	93.9	1918
173.applu	2100	122	1720	104	2025
177.mesa	1400	70.9	1973	66.0	2123
178.galgel	2900	98.0	2959	90.8	3192
179.art	2600	111	2344	72.8	3574
183.equake	1300	77.7	1672	73.6	1767
187.facerec	1900	86.4	2198	85.0	2235
188.ammp	2200	150	1469	139	1584
189.lucas	2000	93.9	2130	93.8	2132
191.fma3d	2100	131	1605	130	1618
200.sixtrack	1100	132	835	129	850
301.apsi	2600	159	1639	151	1718



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

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 +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
```

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Notes/Tuning Information (Continued)

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                -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.

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http://www.fujitsu-siemens.com/countries
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