CFP2000 Result

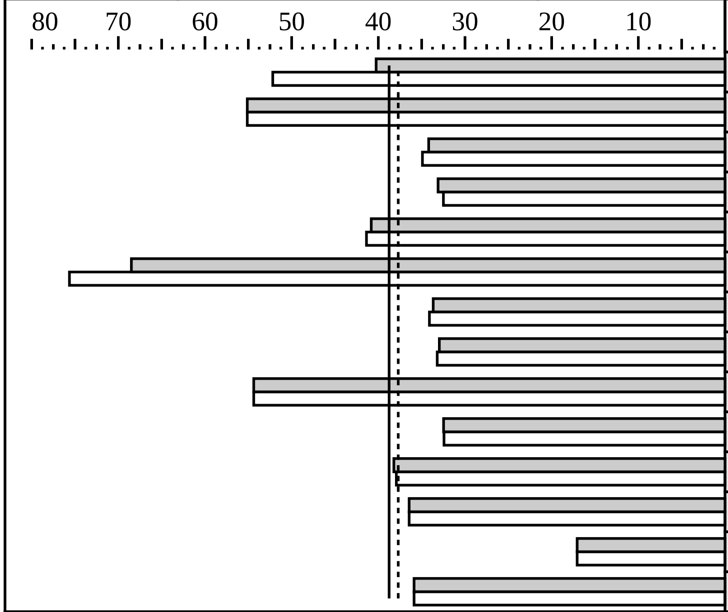
Fujitsu Siemens Computers

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

SPECfp_rate2000 = 38.8

SPECfp_rate_base2000 = 37.7

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	92.2	40.3	2	71.1	52.2
171.swim	2	130	55.1	2	130	55.1
172.mgrid	2	122	34.2	2	120	34.9
173.applu	2	147	33.1	2	150	32.5
177.mesa	2	79.6	40.8	2	78.5	41.4
178.galgel	2	98.2	68.5	2	88.9	75.6
179.art	2	179	33.7	2	177	34.1
183.equake	2	91.5	33.0	2	90.8	33.2
187.facerec	2	81.1	54.4	2	81.1	54.4
188.ammp	2	157	32.5	2	157	32.4
189.lucas	2	121	38.2	2	122	37.9
191.fma3d	2	134	36.4	2	134	36.4
200.sixtrack	2	150	17.1	2	150	17.1
301.apsi	2	168	35.9	2	168	35.9

Hardware

CPU:	AMD Opteron (TM) 250
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 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:	8 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
```

CFP2000 Result

Fujitsu Siemens Computers CELSIUS V810, Opteron (TM) 250, Linux 64-bit	SPECfp_rate2000 = 38.8 SPECfp_rate_base2000 = 37.7

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.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
BIOS default settings have been used. These include:
ECC memory checking disabled,
node interleave disabled, SRAT enabled.

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