CFP2000 Result

Fujitsu Siemens Computers

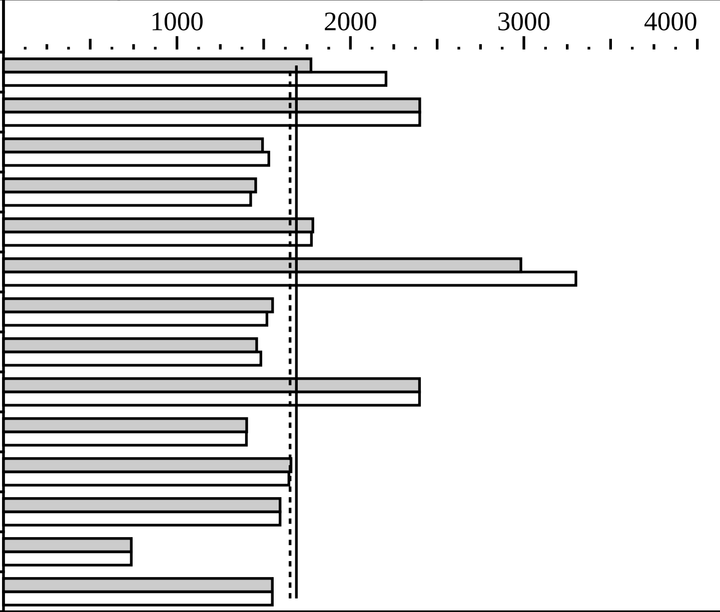
CELSIUS V810, Opteron (TM) 250, Linux 64-bit

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.equake	1300	89.1	1460	87.6	1484
187.facerec	1900	79.2	2398	79.2	2398
188.ammp	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

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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
```

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Notes/Tuning Information (Continued)

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  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

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
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