CFP2000 Result

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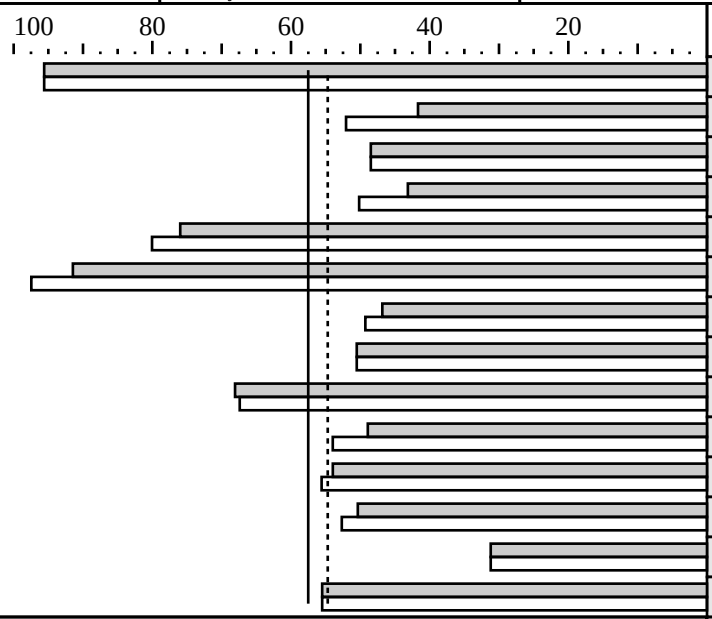
Advanced Micro Devices

TYAN S2895 Thunder K8WE, AMD Opteron (TM) 275

SPECfp_rate2000 = 57.5

SPECfp_rate_base2000 = 54.7

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Apr-2005 | Hardware Avail: May-2005 | Software Avail: Mar-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	77.7	95.6	4	77.7	95.6
171.swim	4	345	41.7	4	276	52.1
172.mgrid	4	172	48.5	4	172	48.5
173.applu	4	226	43.1	4	194	50.2
177.mesa	4	85.5	76.0	4	81.2	80.0
178.galgel	4	147	91.5	4	138	97.5
179.art	4	258	46.8	4	245	49.3
183.equake	4	119	50.5	4	119	50.5
187.facerec	4	130	68.1	4	131	67.4
188.ammp	4	209	48.9	4	189	54.0
189.lucas	4	172	54.0	4	167	55.6
191.fma3d	4	193	50.4	4	185	52.7
200.sixtrack	4	164	31.2	4	164	31.2
301.apsi	4	217	55.5	4	217	55.5

Hardware

CPU:	AMD Opteron (TM) 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chips
CPU(s) orderable:	1-2
Parallel:	No
Primary Cache:	64KBI + 64KBD/core
Secondary Cache:	1024KB(I+D)/core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8x512 MB PC3200 CL2.5 ECC Reg
Disk Subsystem:	SATA, Western Digital WD740GD, 10000 RPM
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003 Enterprise Edition SP1
Compiler:	Intel C++ 8.0 build 20040714Z, Intel Fortran 8.1 build 20041019Z, PGI Fortran compiler 5.2-4 for Windows XP, AMD Core Math library Version 2.1 (ACML), Microsoft Visual Studio .NET 7.0.9466 (libraries), MicroQuill Smartheap Library 7.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
+FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
+ACML is linking with AMD Core Math Library V2.1
ONESTEP is set for all peak runs.
ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
pgf90 is the PGI Fortran compiler.
The Intel C++ 8.0 and the Intel Fortran 8.1 compilers are setup in the following order:
   "c:program filesintel ortrancompiler80ia32 inifortvars.bat"
   "c:program filesintelcppcompiler80ia32 iniclvars.bat"
To make sure that the correct libraries are selected, the following link option is
added for the peak runs where Intel Fortran 8.1 compiler is used:
    LDOPT = -Fe$@ -link -LIBPATH:"c:program filesintel ortrancompiler80ia32lib"
 (denoted by +LIBPATH:INTEL8.1 in the optimization flags listed below)
Portability:
  178.galgel: -Mfixed
Baseline: C      : icl   -fast -arch:SSE2 -QaxW +FDO
Baseline: Fortran: pgf90 -fastsse -Mipa=fast,inline
```

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Notes/Tuning Information (Continued)

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  Peak tuning:
  168.wupwise:       pgf90 basepeak=yes
  171.swim:          ifort -Qipo  -O3  -QaxN -QxW +FDO -Qunroll0     +LIBPATH:INTEL8.1
  172.mgrid:         pgf90 basepeak=yes
  173.applu:         ifort -Qipo  -O3  -QaxN -QxW +FDO -auto         +LIBPATH:INTEL8.1
  177.mesa:          icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias
                         -Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
  179.art:           icl   -Qipo             -Zp4 +FDO
  183.equake:        icl   basepeak=yes
  178.galgel:        pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
  187.facerec:       ifort -Qipo             -QxW +FDO -Qunroll3     +LIBPATH:INTEL8.1
                         -Qoption,f,-ip_ninl_max_stats=2500,-ip_ninl_max_total_stats=7000
  188.ammp:          icl   -Oa   -arch:SSE2  -Zp4      -Qansi_alias
  189.lucas:         ifort -Qipo             -QxW      -Qunroll1     +LIBPATH:INTEL8.1
  191.fma3d:         ifort -Qipo       -QaxN -QxW +FDO -Qansi-alias- +LIBPATH:INTEL8.1
  200.sixtrack:      pgf90 basepeak=yes
  301.apsi:          pgf90 basepeak=yes
Bios Rev 1.00.2895
The start /b /wait /affinity command is used to bind CPU(s) to processes.
The tested system can be assembled using the SSI EEB v3.5 footprint, an
Antec True 550 EPS12V 550W power supply, and a PCI-e graphics card.
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