CFP2000 Result

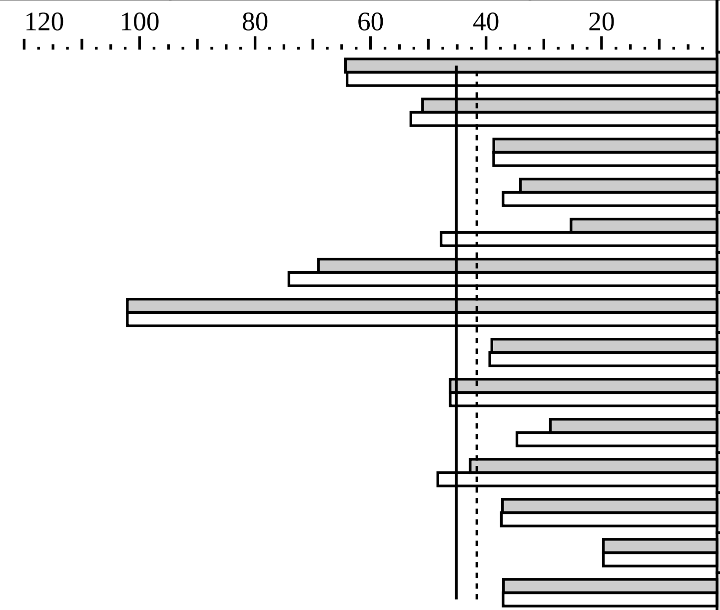
Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 254

SPECfp_rate2000 = 45.2

SPECfp_rate_base2000 = 41.6

SPEC license #: 49	Tested by: AMD, Austin, TX	Test date: Aug-2005	Hardware Avail: Aug-2005	Software Avail: Jun-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	57.7	64.3	2	57.9	64.1
171.swim	2	141	51.0	2	136	53.0
172.mgrid	2	108	38.7	2	108	38.7
173.applu	2	143	34.0	2	131	37.1
177.mesa	2	128	25.3	2	68.0	47.8
178.galgel	2	97.5	69.0	2	90.8	74.1
179.art	2	59.1	102	2	59.1	102
183.equake	2	77.3	39.0	2	76.6	39.4
187.facerec	2	95.3	46.2	2	95.4	46.2
188.ammp	2	177	28.9	2	147	34.7
189.lucas	2	109	42.8	2	96.0	48.4
191.fma3d	2	131	37.2	2	130	37.4
200.sixtrack	2	130	19.7	2	130	19.7
301.apsi	2	163	37.0	2	163	37.1

Hardware

CPU:	AMD Opteron (TM) 254
CPU MHz:	2800
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:	8x512 MB, DDR400 ECC Reg CL2.5
Disk Subsystem:	SATA, Western Digital WD740GD, 74GB 10000 rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003 Enterprise Edition SP1
Compiler:	Intel C++ 9.0 build 20050430z for IA32, Intel Fortran 9.0 build 20050430z for IA32, PGI Fortran compiler 6.0-4 for Windows XP, PGI C compiler 6.0-4 for Windows XP, ACML Version 2.5.3 (bundled with PGI 6.0-4) Microsoft Visual Studio .NET 7.0.9466 (libraries)
File System:	NTFS
System State:	default

Notes/Tuning Information

```
+FDO:
 icl, ifort  : PASS1=-Qprof_gen  PASS2=-Qprof_use
 pgf90       : PASS1=-Mpfi       PASS2=-Mpfo
ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
pgf90 is the PGI Fortran 90 compiler.
pgcc is the PGI C compiler.
ONESTEP is set to 1 for every compile with the PGI compilers.
Portability:
178.galgel:                      -Mfixed
Baseline: C      :  pgcc    -fastsse -Mipa=fast,inline
Baseline: Fortran:  pgf90   -fastsse -Mipa=fast,inline +FDO
Peak tuning:
168.wupwise:        pgf90   -fastsse -Mipa=fast,inline -Mnovect
171.swim:           ifort   -Qipo  -O3  -QaxN -QxW -Qunroll0 +FDO
172.mgrid:          pgf90   -fastsse -Mipa=fast,inline
173.applu:          ifort   -Qipo  -O3 -QaxN -QxW -auto +FDO
177.mesa:           icl     -Qipo -arch:SSE2 -Qunroll1 -Qansi_alias +FDO
```

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Notes/Tuning Information (Continued)

```
                                  -Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
     178.galgel:         pgf90   -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90
                                 -Munix -lacml
     179.art:            pgcc     basepeak=yes
     183.equake:         icl     -fast -arch:SSE2 -QaxW +FDO
     187.facerec:        pgf90   -fastsse -Mipa=fast,inline +FDO
     188.ammp:           icl     -Oa   -arch:SSE2  -Zp4 -Qansi_alias
     189.lucas:          ifort   -Qipo -QxW -Qunroll1
     191.fma3d:          pgf90   -Mipa=fast,inline -fastsse -Mnovect +FDO
     200.sixtrack:       pgf90   -fastsse -Mipa=fast,inline
     301.apsi:           pgf90   -fastsse -Mipa=fast,inline
    The system under test can be built using a 13" x 16" SSI MEB case and an
    Enermax EPS 12 Volt ATX-6ES 660 Watt power supply.
    The 'start /b /wait /affinity' command was used to bind CPU(s) to processes.
    All memory slots were populated with Kingston KRX3200AK2 on all CPU(s).
    Memory timings were manually set in BIOS: CL=2.5, TRCD=3, TRAS=6, TRP=3
    BIOS Rev E.1.02
```