CFP2000 Result

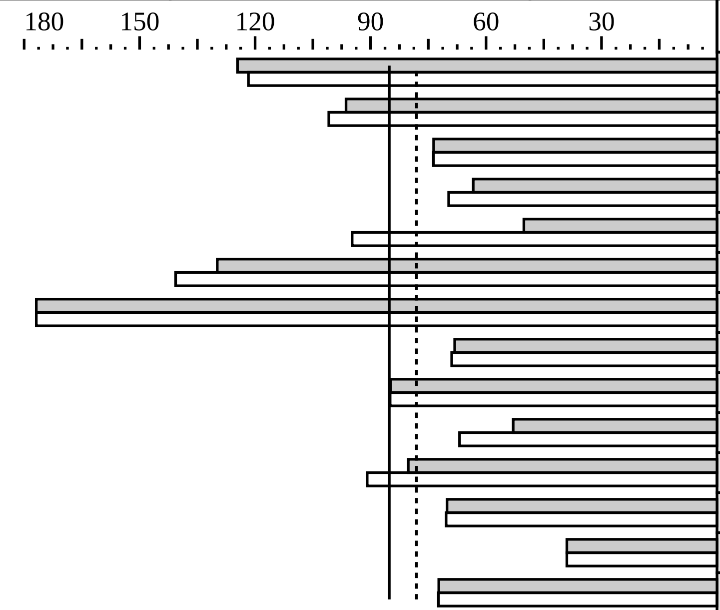
Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 854

SPECfp_rate2000 = 85.1

SPECfp_rate_base2000 = 78.1

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	4	59.6	125	4	61.0	122
171.swim	4	149	96.4	4	143	101
172.mgrid	4	113	73.6	4	113	73.7
173.applu	4	154	63.3	4	140	69.7
177.mesa	4	129	50.2	4	68.5	94.8
178.galgel	4	104	130	4	95.7	141
179.art	4	68.2	177	4	68.2	177
183.equake	4	88.5	68.1	4	87.5	68.9
187.facerec	4	104	84.8	4	104	84.9
188.ammp	4	193	53.0	4	153	66.9
189.lucas	4	116	80.2	4	102	90.9
191.fma3d	4	139	70.1	4	138	70.4
200.sixtrack	4	131	39.0	4	131	39.0
301.apsi	4	167	72.3	4	167	72.4

Hardware

CPU:	AMD Opteron (TM) 854
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	4 cores, 4 chips, 1 core/chip
CPU(s) orderable:	1-4
Parallel:	no
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16x512 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
```