CFP2000 Result

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Advanced Micro Devices

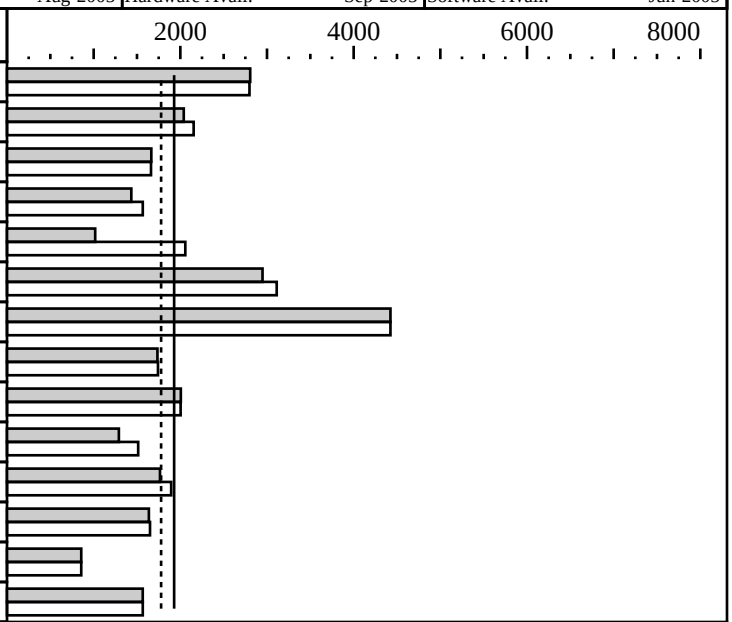
TYAN Tomcat K8E (S2865), AMD Opteron (TM) 154

SPECfp2000 = 1929

SPECfp_base2000 = 1778

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	57.0	2806	57.2	2798
171.swim	3100	152	2039	144	2154
172.mgrid	1800	108	1665	108	1662
173.applu	2100	146	1434	134	1567
177.mesa	1400	138	1018	68.0	2057
178.galgel	2900	98.4	2948	93.2	3112
179.art	2600	58.8	4424	58.8	4424
183.equake	1300	74.9	1736	74.6	1742
187.facerec	1900	94.7	2006	94.8	2003
188.ammp	2200	170	1291	145	1514
189.lucas	2000	113	1765	106	1894
191.fma3d	2100	128	1637	127	1650
200.sixtrack	1100	128	857	128	857
301.apsi	2600	166	1566	166	1567



Hardware

CPU:	AMD Opteron (TM) 154 (939-pin)
CPU MHz:	2800
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1
Parallel:	no
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x512 MB, DDR400 CL2.0
Disk Subsystem:	SATA, Western Digital WD740GD, 10000 rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows XP Pro SP2
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
File System:	NTFS
System State:	default

Notes/Tuning Information

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+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)

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                        -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 tested system can be assembled using a standard ATX case and an Antec True 550
Watt EPS12V power supply.
All memory slots were populated with Corsair CMX512-3200XL.
Memory timings manually set in BIOS: CAS=2, TRCD=2, TRAS=5, TRP=2
BIOS V2.00b
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