CFP2000 Result

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Advanced Micro Devices

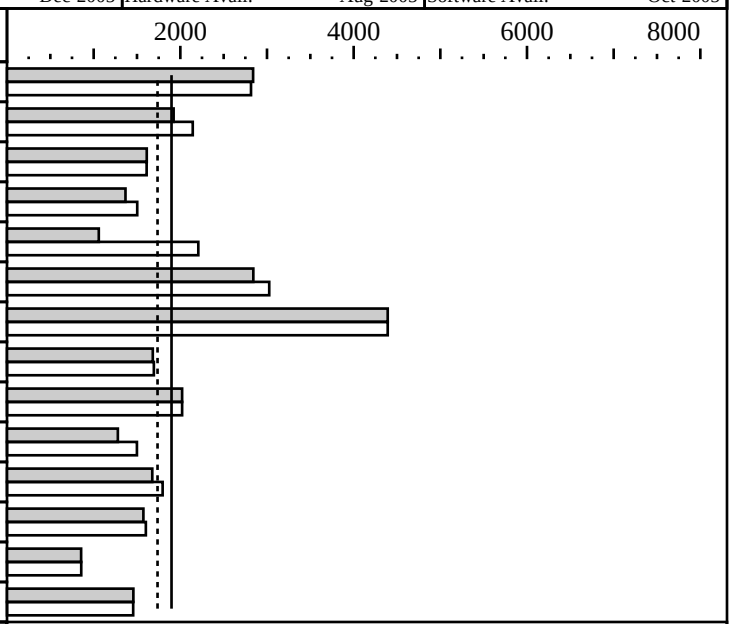
TYAN Tomcat K8E (S2865), AMD Opteron (TM) 154

SPECfp2000 = 1898

SPECfp_base2000 = 1737

SPEC license #: 49 | Tested by: AMD, Austin, Texas | Test date: Dec-2005 | Hardware Avail: Aug-2005 | Software Avail: Oct-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	56.3	2840	56.8	2816
171.swim	3100	161	1922	145	2143
172.mgrid	1800	112	1613	112	1611
173.applu	2100	154	1367	140	1503
177.mesa	1400	132	1059	63.4	2207
178.galgel	2900	102	2842	95.8	3026
179.art	2600	59.2	4393	59.2	4393
183.equake	1300	77.3	1682	76.7	1694
187.facerec	1900	94.0	2021	94.0	2021
188.ammp	2200	172	1279	147	1499
189.lucas	2000	119	1676	111	1796
191.fma3d	2100	133	1574	131	1602
200.sixtrack	1100	129	855	128	857
301.apsi	2600	178	1458	179	1456



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:	2x512MB, DDR400 CL2
Disk Subsystem:	IDE, 40 GB
Other Hardware:	None

Software

Operating System:	Windows Server 2003 Enterprise edition (32 bit)
Compiler:	Intel C++ 9.0 build 20050912Z for IA32, Intel Fortran 9.0 build 20050912Z for IA32, Microsoft Visual Studio .NET 7.0.9466 (libraries) PGI Fortran compiler 6.0-5 for Windows XP, PGI C compiler 6.0-5 for Windows XP, ACML Version 2.5.3 (bundled with PGI 6.0-5)
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 -QxW -Qunroll1 -Qansi_alias +FDO
```

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Notes/Tuning Information (Continued)

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                        -Qoption,c,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
 178.galgel:         pgf90   -fastsse -Mipa=fast,safe -Munix -lacml
                             RM_SOURCES=lapak.f90
 179.art:            pgcc     basepeak=yes
 183.equake:         icl     -O3 -Qipo -QxW +FDO
 187.facerec:        pgf90   basepeak=1
 188.ammp:           icl     -Oa   -QxW  -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
Corsair CMX512-3200XL memory used in Dual Channel configuration
Memory timings manually set in BIOS: CAS=2, Trcd=2, Tras=5, Trp=2
BIOS rev 3.00
The tested system can be assembled using a standard ATX case and an Antec True 550
watt EPS12V Power Supply
```