CFP2000 Result

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Advanced Micro Devices

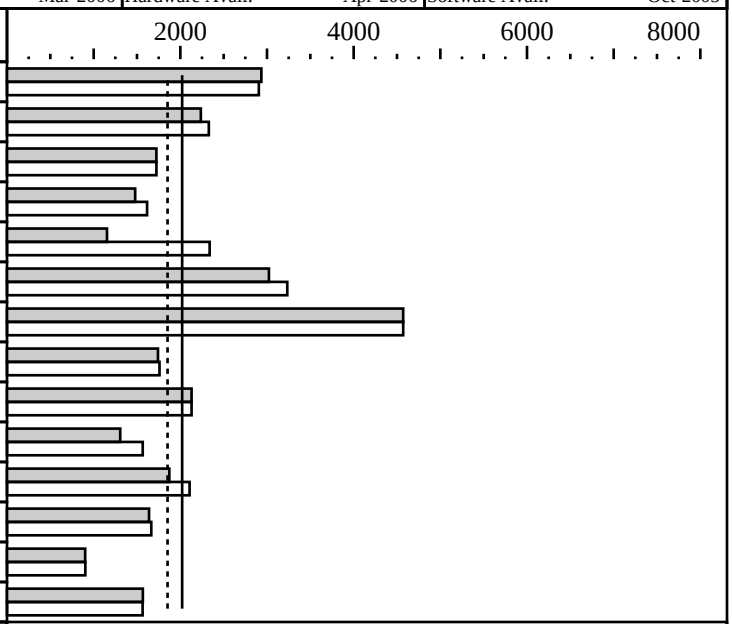
TYAN Thunder K8SD Pro (S2882-D), AMD Opteron (TM) 256

SPECfp2000 = 2021

SPECfp_base2000 = 1853

SPEC license #: 49 | Tested by: AMD Austin, Texas | Test date: Mar-2006 | Hardware Avail: Apr-2006 | Software Avail: Oct-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	54.5	2935	55.1	2906
171.swim	3100	139	2237	133	2329
172.mgrid	1800	104	1724	104	1724
173.applu	2100	142	1479	130	1616
177.mesa	1400	121	1154	59.9	2338
178.galgel	2900	96.0	3022	89.7	3234
179.art	2600	56.9	4571	56.9	4571
183.equake	1300	74.6	1742	73.9	1760
187.facerec	1900	89.2	2130	89.2	2130
188.ammp	2200	168	1306	140	1566
189.lucas	2000	107	1873	94.9	2107
191.fma3d	2100	128	1639	126	1665
200.sixtrack	1100	122	902	122	904
301.apsi	2600	166	1567	166	1565



Hardware

CPU:	AMD Opteron (TM) 256
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 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:	2x512MB, DDR400 CL2 ECC Reg
Disk Subsystem:	SATA, 250 GB
Other Hardware:	None

Software

Operating System:	Windows Server 2003 Enterprise edition SP1 (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 CMX512RE-3200LL (XMS3200REv2.1) memory used in Dual Channel configuration.
BIOS rev 3.06
The tested system can be assembled using a standard ATX case and an Antec True 550
watt EPS12V Power Supply.
/NUMPROC=1 flag added to boot.ini to invoke uniprocessor environment.
```