# CFP2000 Result



## Advanced Micro Devices

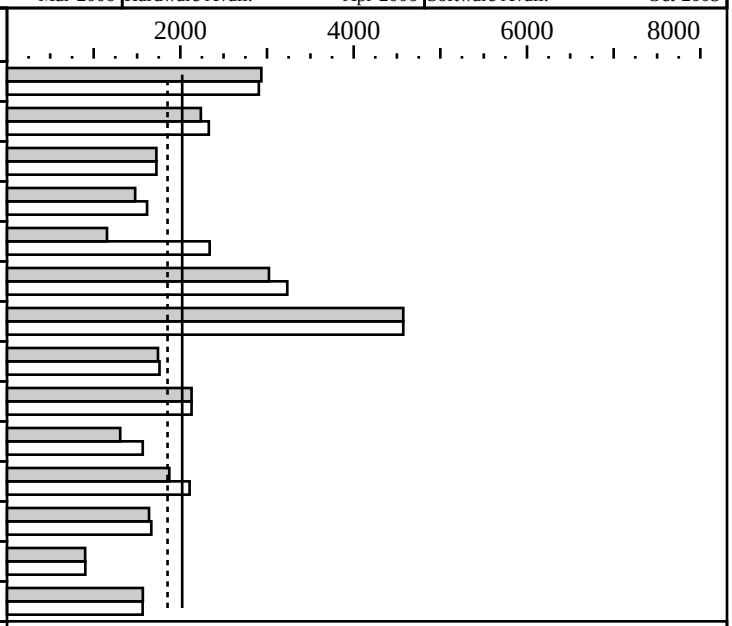
TYAN Thunder K8SD Pro (S2882-D), AMD Opteron (TM) 256

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,<br>Intel Fortran 9.0 build 20050912Z for IA32,<br>Microsoft Visual Studio .NET 7.0.9466 (libraries)<br>PGI Fortran compiler 6.0-5 for Windows XP,<br>PGI C compiler 6.0-5 for Windows XP,<br>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
```

## Notes/Tuning Information (Continued)

```
                        -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.
```