CFP2000 Result

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Advanced Micro Devices

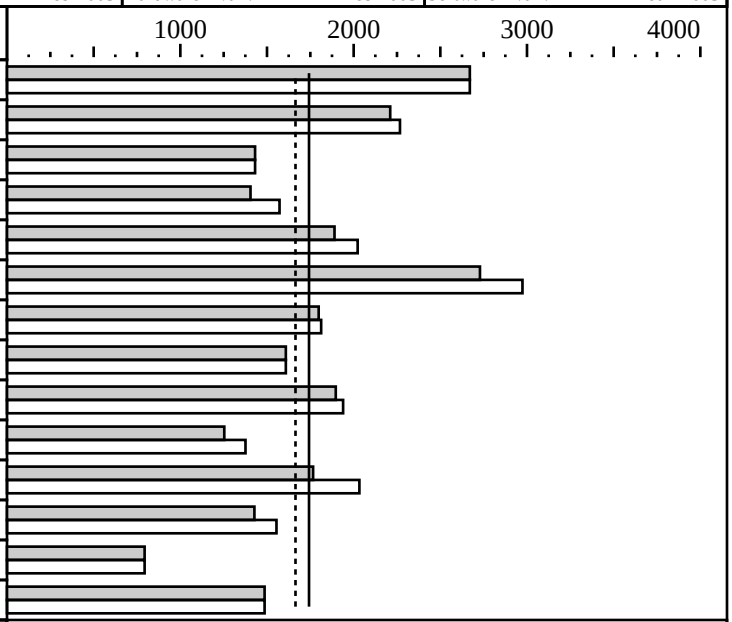
TYAN Thunder K8S Pro S2882, AMD Opteron (TM) 252

SPECfp2000 = 1742

SPECfp_base2000 = 1664

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Feb-2005 | Hardware Avail: Feb-2005 | Software Avail: Jan-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	59.9	2670	59.9	2670
171.swim	3100	140	2211	137	2267
172.mgrid	1800	126	1431	126	1431
173.applu	2100	149	1405	134	1572
177.mesa	1400	74.1	1889	69.2	2023
178.galgel	2900	106	2729	97.5	2974
179.art	2600	145	1798	143	1812
183.equake	1300	80.8	1609	80.8	1609
187.facerec	1900	100	1897	98.0	1939
188.ammp	2200	176	1254	160	1376
189.lucas	2000	113	1766	98.4	2033
191.fma3d	2100	147	1427	135	1555
200.sixtrack	1100	139	794	139	794
301.apsi	2600	175	1486	175	1486



Hardware

CPU:	AMD Opteron (TM) 252
CPU MHz:	2600
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 PC3200 (Kingston) CL2.5 ECC Reg
Disk Subsystem:	IDE, Western Digital WD2000JB, 7200 rpm
Other Hardware:	None

Software

Operating System:	Microsoft Windows Server 2003, Enterprise Edition
Compiler:	Intel C++ 8.0 build 20040714Z, Intel Fortran 8.1 build 20041019Z, PGI Fortran compiler 5.2-4 for Windows XP, AMD Core Math library Version 2.1 (ACML), Microsoft Visual Studio .NET 7.0.9466 (libraries), MicroQuill Smartheap Library 7.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
+FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
+ACML is linking with AMD Core Math Library V2.1
ONESTEP is set for all peak runs.
ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
pgf90 is the PGI Fortran compiler.
The Intel C++ 8.0 and the Intel Fortran 8.1 compilers are setup in the following order:
   "c:program filesintel ortrancompiler80ia32 inifortvars.bat"
   "c:program filesintelcppcompiler80ia32 iniclvars.bat"
To make sure that the correct libraries are selected, the following link option is
added for the peak runs where Intel Fortran 8.1 compiler is used:
    LDOPT = -Fe$@ -link -LIBPATH:"c:program filesintel ortrancompiler80ia32lib"
 (denoted by +LIBPATH:INTEL8.1 in the optimization flags listed below)
Portability:
  178.galgel: -Mfixed
Baseline: C      : icl   -fast -arch:SSE2 -QaxW +FDO
Baseline: Fortran: pgf90 -fastsse -Mipa=fast,inline
```

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Notes/Tuning Information (Continued)

```
Peak tuning:
168.wupwise:       pgf90 basepeak=yes
171.swim:          ifort -Qipo  -O3  -QaxN -QxW +FDO -Qunroll0     +LIBPATH:INTEL8.1
172.mgrid:         pgf90 basepeak=yes
173.applu:         ifort -Qipo  -O3  -QaxN -QxW +FDO -auto         +LIBPATH:INTEL8.1
177.mesa:          icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias
                       -Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
179.art:           icl   -Qipo             -Zp4 +FDO
183.equake:        icl   basepeak=yes
178.galgel:        pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
187.facerec:       ifort -Qipo             -QxW +FDO -Qunroll3     +LIBPATH:INTEL8.1
                       -Qoption,f,-ip_ninl_max_stats=2500,-ip_ninl_max_total_stats=7000
188.ammp:          icl   -Oa   -arch:SSE2  -Zp4      -Qansi_alias
189.lucas:         ifort -Qipo             -QxW      -Qunroll1     +LIBPATH:INTEL8.1
191.fma3d:         ifort -Qipo       -QaxN -QxW +FDO -Qansi-alias- +LIBPATH:INTEL8.1
200.sixtrack:      pgf90 basepeak=yes
301.apsi:          pgf90 basepeak=yes
Bios Rev v3.E
The tested system can be assembled using an Extended ATX footprint
ANTEC True 550Watt EPS12V power supply
```