CFP2000 Result

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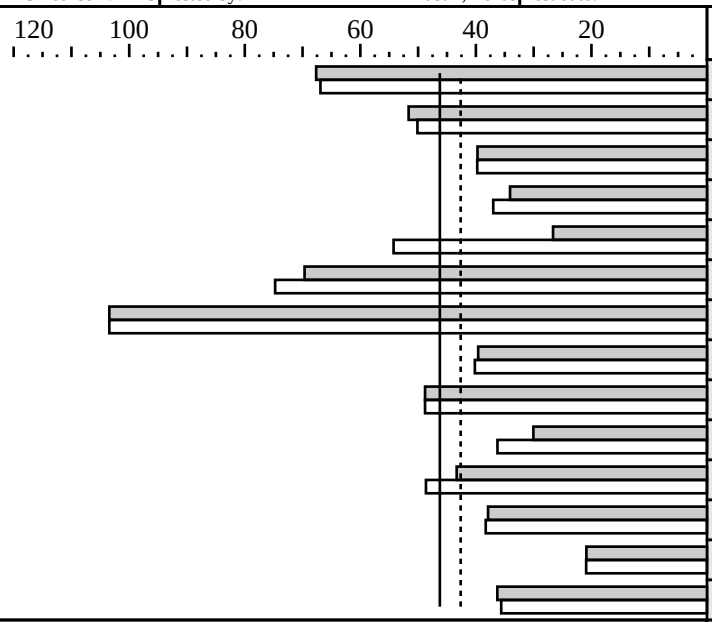
Advanced Micro Devices

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

SPECfp_rate2000 = 46.2

SPECfp_rate_base2000 = 42.6

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	54.9	67.6	2	55.5	66.9
171.swim	2	139	51.6	2	144	50.1
172.mgrid	2	105	39.7	2	105	39.8
173.applu	2	143	34.1	2	132	37.0
177.mesa	2	122	26.6	2	59.9	54.2
178.galgel	2	96.6	69.7	2	90.0	74.7
179.art	2	58.3	103	2	58.3	103
183.equake	2	76.2	39.6	2	75.1	40.2
187.facerec	2	90.3	48.8	2	90.3	48.8
188.ammp	2	170	30.0	2	141	36.3
189.lucas	2	107	43.3	2	95.4	48.6
191.fma3d	2	129	37.9	2	127	38.3
200.sixtrack	2	122	20.9	2	122	20.9
301.apsi	2	166	36.3	2	169	35.6

Hardware

CPU:	AMD Opteron (TM) 256
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	2 cores, 2 chips, 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:	4x512MB, 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)

```
                        -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.
'start /b /wait /affinity' command is used to bind CPU(s) to processes
```