



CFP2000 Result

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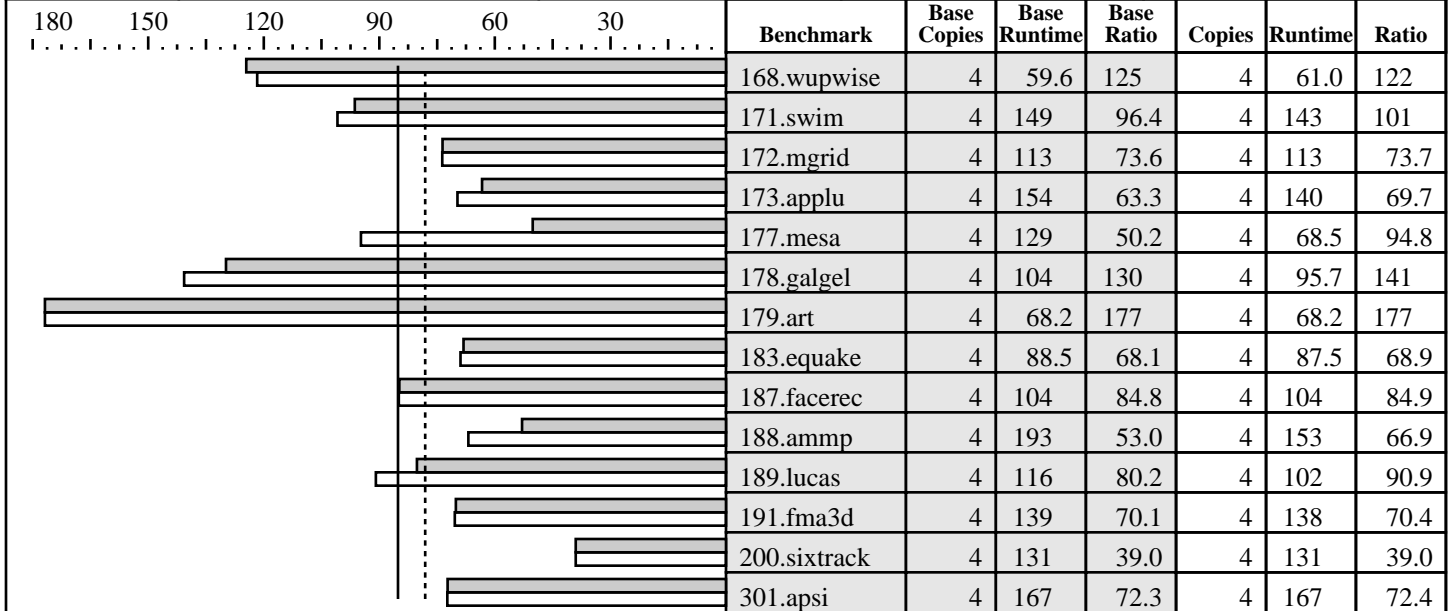
Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 854

SPECfp_rate2000 = 85.1

SPECfp_rate_base2000 = 78.1

SPEC license #: 49 Tested by: AMD, Austin, TX Test date: Aug-2005 Hardware Avail: Aug-2005 Software Avail: Jun-2005



Hardware

CPU: AMD Opteron (TM) 854
 CPU MHz: 2800
 FPU: Integrated
 CPU(s) enabled: 4 cores, 4 chips, 1 core/chip
 CPU(s) orderable: 1-4
 Parallel: no
 Primary Cache: 64KBI + 64KBD on chip
 Secondary Cache: 1024KB (I+D) on chip
 L3 Cache: N/A
 Other Cache: N/A
 Memory: 16x512 MB, DDR400 ECC Reg CL2.5
 Disk Subsystem: SATA Western Digital WD740GD, 74GB 10000 rpm
 Other Hardware: None

Software

Operating System: Microsoft Windows Server 2003 Enterprise Edition SP1
 Compiler: Intel C++ 9.0 build 20050430z for IA32, Intel Fortran 9.0 build 20050430z for IA32, PGI Fortran compiler 6.0-4 for Windows XP, PGI C compiler 6.0-4 for Windows XP, ACML Version 2.5.3 (bundled with PGI 6.0-4) Microsoft Visual Studio .NET 7.0.9466 (libraries)
 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 -Mvect
 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 -arch:SSE2 -Qunroll1 -Qansi_alias +FDO



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Notes/Tuning Information (Continued)

-Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500

```

178.galgel:      pgf90  -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90
                -Munix -lacml
179.art:         pgcc   basepeak=yes
183.equake:     icl    -fast -arch:SSE2 -QaxW +FDO
187.facerec:    pgf90  -fastsse -Mipa=fast,inline +FDO
188.ampp:       icl    -Oa  -arch:SSE2 -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

```

The system under test can be built using a 13" x 16" SSI MEB case and an Enermax EPS 12 Volt ATX-6ES 660 Watt power supply.

The 'start /b /wait /affinity' command was used to bind CPU(s) to processes.

All memory slots were populated with Kingston KRX3200AK2 on all CPU(s).

Memory timings were manually set in BIOS: CL=2.5, TRCD=3, TRAS=6, TRP=3

BIOS Rev E.1.02