



# CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

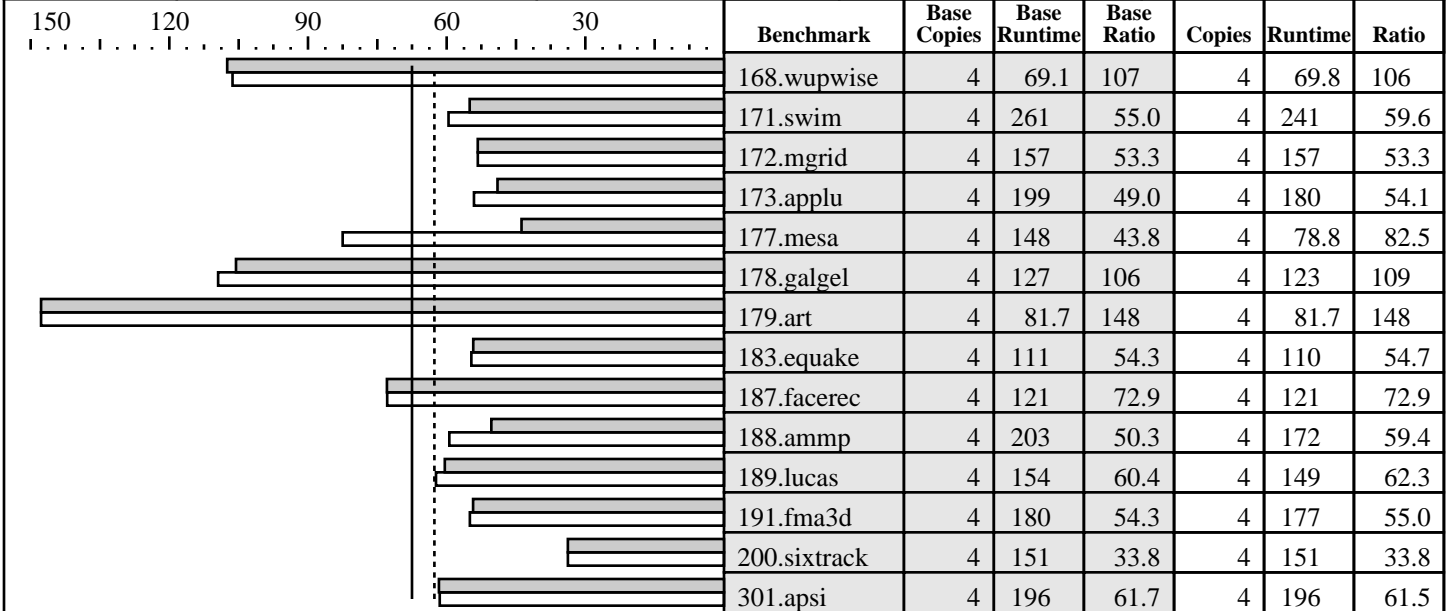
## Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 280

SPECfp\_rate2000 = 67.5

SPECfp\_rate\_base2000 = 62.6

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



### Hardware

CPU: AMD Opteron (TM) 280  
 CPU MHz: 2400  
 FPU: Integrated  
 CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip  
 CPU(s) orderable: 1-2  
 Parallel: no  
 Primary Cache: 64KBI + 64KBD/core  
 Secondary Cache: 1024KB (I+D)/core  
 L3 Cache: N/A  
 Other Cache: N/A  
 Memory: 8x512 MB, DDR400 ECC Reg CL2  
 Disk Subsystem: SATA, Western Digital WD740GD, 74 GB 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 -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
```



# CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

## Advanced Micro Devices

TYAN Thunder K8QSD Pro (S4882-D), AMD Opteron (TM) 280

SPECfp\_rate2000 = 67.5

SPECfp\_rate\_base2000 = 62.6

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

### Notes/Tuning Information (Continued)

```

177.mesa:          icl      -Qipo -arch:SSE2 -Qunroll1 -Qansi_alias +FDO
                  -Qoption,f,-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      -fast -arch:SSE2 -QaxW +FDO
187.facerec:     pgf90    -fastsse -Mipa=fast,inline +FDO
188.amm:         icl      -Oa -arch:SSE2 -Zp4 -Qansi_alias
189.lucas:       ifort    -Qipo -QxW -Qunroll1
191.fma3d:       pgf90    -Mipa=fast,inline -fastsse -Mno vect +FDO
200.sixtrack:    pgf90    -fastsse -Mipa=fast,inline
301.apsi:        pgf90    -fastsse -Mipa=fast,inline

```

The system under test can be built using a SSI MEB case and an Enermax EPS 12V ATX-6ES 660W power supply.

All memory slots populated on all CPU(s).

BIOS Rev E 1.03

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