



# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

## Advanced Micro Devices

Pogo Linux PerformanceWare 3566, AMD Opteron (TM) 865

SPECfp\_rate2000 = 95.7

SPECfp\_rate\_base2000 = 92.9

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	92.3	161	8	92.3	161
171.swim	8	301	95.6	8	301	95.6
172.mgrid	8	197	84.8	8	197	84.8
173.applu	8	241	80.7	8	241	80.7
177.mesa	8	108	121	8	101	129
178.galgel	8	170	158	8	157	172
179.art	8	342	70.6	8	324	74.4
183.quake	8	144	83.6	8	144	83.6
187.facerec	8	166	106	8	166	106
188.amp	8	273	74.8	8	237	86.3
189.lucas	8	185	100	8	185	100
191.fma3d	8	235	82.9	8	217	89.9
200.sixtrack	8	210	48.6	8	210	48.6
301.apsi	8	260	92.9	8	260	92.9

### Hardware

CPU: AMD Opteron (TM) 865  
 CPU MHz: 1800  
 FPU: Integrated  
 CPU(s) enabled: 8 cores, 4 chips, 2 cores/chip  
 CPU(s) orderable: 1-4  
 Parallel: No  
 Primary Cache: 64KBI + 64KBD/core  
 Secondary Cache: 1024KB (I+D)/core  
 L3 Cache: N/A  
 Other Cache: N/A  
 Memory: 16x1024 MB PC3200 CL3.0 ECC Reg  
 Disk Subsystem: SCSI, Seagate Cheetah Ultra320 ST373307LC, 10000 RPM  
 Other Hardware: None

### Software

Operating System: Microsoft Windows Server 2003 Enterprise Edition SP1  
 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 files\intel\fortran\compiler80\ia32\bin\ifortvars.bat"
  "c:\program files\intel\cpp\compiler80\ia32\bin\iclvars.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 files\intel\fortran\compiler80\ia32\lib"
(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
```



# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices

Pogo Linux PerformanceWare 3566, AMD Opteron (TM) 865

SPECfp\_rate2000 = 95.7

SPECfp\_rate\_base2000 = 92.9

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

## Notes/Tuning Information (Continued)

Peak tuning:

```

168.wupwise:      pgf90 basepeak=yes
171.swim:         basepeak=yes
172.mgrid:       pgf90 basepeak=yes
173.applu:        basepeak=yes
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.quake:        icl basepeak=yes
178.galgel:       pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
187.facerec:      basepeak=yes
188.ammp:         icl -Oa -arch:SSE2 -Zp4 -Qansi_alias
189.lucas:        basepeak=yes
191.fma3d:        ifort -Qipo -QaxN -QxW +FDO -Qansi-alias- +LIBPATH:INTEL8.1
200.sixtrack:     pgf90 basepeak=yes
301.apsi:         pgf90 basepeak=yes

```

Bios Rev 2.33.1.1

All memory slots populated on all CPU(s).

Physical Address Extension (PAE) enabled.

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