



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices
Rioworks HDAMA Motherboard, AMD Opteron (TM) 248

SPECfp_rate2000 = 31.6
SPECfp_rate_base2000 = 30.2

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Nov-2003 | Hardware Avail: Nov-2003 | Software Avail: May-2003

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	111	33.3	2	103	36.0
171.swim	2	218	32.9	2	151	47.7
172.mgrid	2	149	28.1	2	166	25.2
173.applu	2	181	26.9	2	189	25.8
177.mesa	2	91.0	35.7	2	88.7	36.6
178.galgel	2	149	45.2	2	126	53.3
179.art	2	160	37.6	2	195	31.0
183.quake	2	116	26.0	2	96.0	31.4
187.facerec	2	127	34.8	2	124	35.7
188.amp	2	167	30.6	2	164	31.2
189.lucas	2	131	35.4	2	131	35.4
191.fma3d	2	159	30.6	2	159	30.6
200.sixtrack	2	205	12.4	2	183	13.9
301.apsi	2	218	27.7	2	219	27.5

Hardware

CPU: AMD Opteron (TM) 248
 CPU MHz: 2200
 FPU: Integrated
 CPU(s) enabled: 2 cores, 2 chips, 1 core/chip
 CPU(s) orderable: 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 PC3200 DDR SDRAM, ECC Registered
 Disk Subsystem: Seagate Cheetah ST336753LW SCSI, Ultra 320
 Other Hardware: None

Software

Operating System: Microsoft Windows 2003 Server Enterprise Edition
 Compiler: Intel C/C++ 7.0 build 20021212Z and Intel Fortran 7.0 build 20021212Z
 Compaq Visual Fortran Compiler Version 6.6 (Update B)
 Microsoft Visual Studio .NET 7.0.9466 (for libraries)
 MicroQuill SmartHeap Library 6.0
 File System: NTFS
 System State: Default

Notes/Tuning Information

+FDO: PASS1=-Qprof_gen PASS2=-Qprof_use
 icl and ifl are the Intel C/C++ and Fortran compilers
 f90 is the Compaq Fortran compiler
 shlw32M6.lib is the SmartHeap library V6.0 from MicroQuill www.microquill.com
 Portability:
 178.galgel: -FI -Fe\$@ -link -stack:32000000
 Baseline: C icl +FDO -O3 -QxW -Qipo
 Baseline: Fortran ifl +FDO -O3 -QxW -Qipo
 Peak tuning:
 168.wupwise: ifl +FDO -QxK -Qipo -Ow
 171.swim: f90 -Optimize:5 -alignment:dcommons -alignment:records
 -alignment:sequence -architecture:k7
 -assume:noaccuracy_sensitive -math_library:fast -tune:k7
 172.mgrid: ifl +FDO -O3 -QaxW -Qipo -Oa -Qprefetch-
 173.applu: ifl +FDO -O3 -QxK -Qipo -Qscalar_rep- -Zp8
 177.mesa: icl +FDO -O3 -QxW -Qipo -Oa -Qscalar_rep-
 178.galgel: f90 -Optimize:5 -fast



CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Advanced Micro Devices
Rioworks HDAMA Motherboard, AMD Opteron (TM) 248

SPECfp_rate2000 = 31.6
SPECfp_rate_base2000 = 30.2

SPEC license #: 49 | Tested by: AMD, Austin, TX | Test date: Nov-2003 | Hardware Avail: Nov-2003 | Software Avail: May-2003

Notes/Tuning Information (Continued)

```

179.art:          icl          -Qipo -Oa          -Qunroll14 -Zp4
183.equake:      icl          -O3 -QxK  -Qipo -Oa  shlw32M6.lib -Zp4
187.facerec:     ifl +FDO -O3 -QaxW -Qipo          -Qscalar_rep- -Qunroll11
188.ampp:        icl          -QxW          -Oa
189.lucas:       ifl +FDO -O3 -QxW  -Qipo          -Qprefetch-
191.fma3d:       ifl basepeak=1
200.sixtrack:    ifl          -Qipo -Oa          -Zp4
301.apsi:        f90 -Optimize:5 -fast

```

ONESTEP is used for all base and peak runs

The tested system can be assembled using an ATX case such as the Antec KS-282, a 480W power supply, and a PCI or AGP video card.