CFP2000 Result

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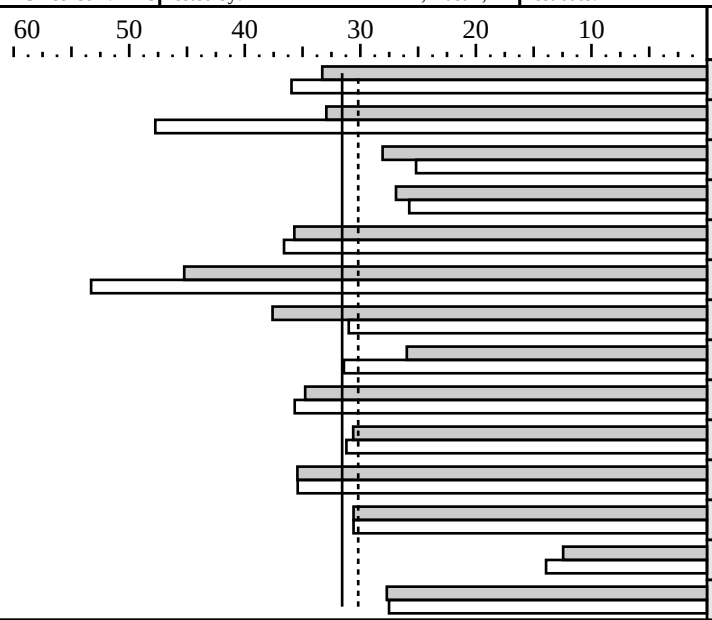
Advanced Micro Devices

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.equake	2	116	26.0	2	96.0	31.4
187.facerec	2	127	34.8	2	124	35.7
188.ammp	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
```

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Notes/Tuning Information (Continued)

```
   179.art:        icl                -Qipo -Oa                -Qunroll4 -Zp4
   183.equake:     icl      -O3 -QxK  -Qipo -Oa shlW32M6.lib             -Zp4
   187.facerec:    ifl +FDO -O3 -QaxW -Qipo     -Qscalar_rep- -Qunroll1
   188.ammp:       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.
```