



# CFP2000 Result

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Einix  
A4800

SPECfp\_rate2000 = 13.5  
SPECfp\_rate\_base2000 = 12.7

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	158	11.7	1	120	15.5
171.swim	1	178	20.2	1	178	20.2
172.mgrid	1	177	11.8	1	178	11.8
173.applu	1	220	11.1	1	207	11.8
177.mesa	1	105	15.5	1	97.2	16.7
178.galgel	1	185	18.2	1	187	18.0
179.art	1	206	14.6	1	180	16.7
183.quake	1	125	12.1	1	112	13.5
187.facerec	1	152	14.5	1	149	14.7
188.amp	1	228	11.2	1	213	12.0
189.lucas	1	158	14.7	1	150	15.5
191.fma3d	1	194	12.5	1	190	12.8
200.sixtrack	1	247	5.16	1	224	5.71
301.apsi	1	259	11.7	1	253	11.9

### Hardware

CPU: AMD Opteron 144, 1.8 GHz  
CPU MHz: 1800  
FPU: Integrated  
CPU(s) enabled: 1 core, 1 chip, 1 core/chip  
CPU(s) orderable: 1,2,4  
Parallel: No  
Primary Cache: 64KBI + 64KBD on chip  
Secondary Cache: 1024KB(I+D) on chip  
L3 Cache: N/A  
Other Cache: N/A  
Memory: 4x512MB PC2700 DDR ECC Registered SDRAM CL2.5  
Disk Subsystem: IDE 7200 RPM  
Other Hardware: None

### Software

Operating System: SuSE Linux Enterprise Server 8 for AMD64  
Compiler: Intel C/C++ 7.0 build 20021212Z and Intel Fortran 7.0 build 20021212Z  
File System: ext2  
System State: Run level 3

## Notes/Tuning Information

The binaries were built on SuSE Linux Professional 8.1 running on an Opteron system

+FDO: PASS1=-prof\_gen PASS2=-prof\_use

icc and ifc are the Intel C/C++ and Fortran compilers

Portability:

178.galgel: -FI

Baseline: C icc +FDO -O3 -xW -ipo

Baseline: Fortran ifc +FDO -O3 -xW -ipo

Peak tuning:

168.wupwise: ifc -xK -axW -ipo -fno-alias -Qoption,f,-ip\_ninl\_max\_stats=2000,-Qoption,f,-ip\_ninl\_max\_total\_stats=4500

171.swim: ifc +FDO -O3 -xK -ipo -unroll2 -prefetch-

172.mgrid: ifc +FDO -O3 -axW -ipo -fno-alias

173.applu: ifc +FDO -O3 -xK -ipo -scalar\_rep-

177.mesa: icc +FDO -O3 -xW -ipo -fno-alias -Qoption,c,-ip\_ninl\_max\_stats=1500 -Qoption,c,-ip\_ninl\_max\_total\_stats=3500 -static

178.galgel: ifc +FDO -O3 -xW -ipo -unroll1

179.art: icc -xW -ipo -fno-alias -nolib\_inline



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## Notes/Tuning Information (Continued)

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183.equake:      icc      -O3  -xK      -ipo -fno-alias
187.facerec:    ifc +FDO -O3      -axW -ipo -unroll1
188.ammp:       icc      -O3  -xW      -fno-alias -prefetch-
189.lucas:      ifc +FDO -xW      -ipo -static -auto
191.fma3d:      ifc +FDO -O3 -xW      -ipo -static -Zp8
200.sixtrack:   ifc      -ipo -fno-alias -align
301.apsi:       ifc +FDO -xW      -ipo -fno-alias -ansi_alias-

```

ONESTEP is used for all base and peak runs