



CFP2000 Result

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Supermicro
H8DSR-8 Motherboard (AMD Opteron (TM) 256)

SPECfp2000 = **2029**
SPECfp_base2000 = **1859**

SPEC license #01176 | Tested by: Supermicro | Test date: Apr-2006 | Hardware Avail: Apr-2006 | Software Avail: Oct-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	54.8	2921	55.3	2894	
171.swim	3100	138	2242	132	2340	
172.mgrid	1800	103	1752	103	1750	
173.applu	2100	138	1526	127	1649	
177.mesa	1400	122	1146	59.8	2341	
178.galgel	2900	93.5	3100	87.8	3303	
179.art	2600	56.8	4578	56.8	4578	
183.quake	1300	75.5	1723	74.8	1739	
187.facerec	1900	89.2	2130	89.2	2130	
188.amp	2200	171	1287	140	1569	
189.lucas	2000	109	1843	96.5	2072	
191.fma3d	2100	125	1687	123	1713	
200.sixtrack	1100	122	904	121	905	
301.apsi	2600	167	1556	167	1553	

Hardware

CPU: AMD Opteron (TM) 256
 CPU MHz: 3000
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 1
 Parallel: no
 Primary Cache: 64KBI + 64KBD on chip
 Secondary Cache: 1024KB (I+D) on chip
 L3 Cache: N/A
 Other Cache: N/A
 Memory: 4 X Apacer 78.A1071.404, 2GB DDR-400 CL3 ECC Reg
 Disk Subsystem: 1 X IDE, Seagate ST3250823A 250GB
 Other Hardware: None

Software

Operating System: Windows server 2003 Enterprise Edition 32-bit Version w/ Service Pack 1
 Compiler: Intel C++ 9.0 build 20050912Z for IA32, Intel Fortran 9.0 build 20050912Z for IA32, Microsoft Visual Studio .NET 2003 7.0.9466 (libraries) PGI Fortran compiler 6.0-5 for Windows XP, PGI C compiler 6.0-5 for Windows XP, ACML Version 2.5.3 (bundled with PGI 6.0-5)
 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 -Mvect
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
177.mesa: icl -Qipo -QxW -Qunroll1 -Qansi_alias +FDO
```



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Notes/Tuning Information (Continued)

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-Option,c,-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.quake:      icl    -O3 -Qipo -QxW +FDO
187.facerec:    pgf90  basepeak=1
188.ampp:       icl    -Oa  -QxW  -Zp4 -Qansi_alias
189.lucas:      ifort  -Qipo -QxW -Qunroll1
191.fma3d:      pgf90  -Mipa=fast,inline -fastsse -Mnovect +FDO
200.sixtrack:   pgf90  -fastsse -Mipa=fast,inline
301.apsi:       pgf90  -fastsse -Mipa=fast,inline

```

Tested system was built with chassis SC813S+-500,
Product description located as of:

<http://www.supermicro.com/Aplus/motherboard/Opteron/HT2000/H8DSR-8.cfm>

To ensure system stability, a 600W (minimum) ATX power supply [8-pin (+12V) and (20+4)-pin are required]) and 24-pin are required]

Other Configuration Notes

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