



# CFP2000 Result

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## Supermicro H8DSP-8 Motherboard

SPECfp2000 = 1941  
SPECfp\_base2000 = 1788

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	57.2	2799	57.9	2763	
171.swim	3100	140	2219	135	2294	
172.mgrid	1800	108	1673	108	1673	
173.applu	2100	143	1465	132	1591	
177.mesa	1400	129	1084	68.5	2044	
178.galgel	2900	97.6	2971	91.1	3183	
179.art	2600	59.0	4408	59.0	4408	
183.earthquake	1300	77.3	1681	76.8	1692	
187.facerec	1900	95.4	1991	95.5	1989	
188.amp	2200	180	1222	149	1480	
189.lucas	2000	111	1800	97.0	2061	
191.fma3d	2100	130	1616	129	1629	
200.sixtrack	1100	130	845	130	846	
301.apsi	2600	165	1575	165	1576	

### Hardware

CPU: AMD Opteron (TM) 254  
 CPU MHz: 2800  
 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: 4x Kingston 1GB, Registered, ECC, DDR400, CL3  
 Disk Subsystem: 1X Hitachi SATA 400 GB 7200RPM  
 Other Hardware: None

### Software

Operating System: Windows Server 2003 Enterprise Edition w/ SP1  
 Compiler: Intel C++ 9.0 build 20050430z for IA32, Intel Fortran 9.0 build 20050430z for IA32, PGI Fortran compiler 6.0-4 for Windows XP, PGI C compiler 6.0-4 for Windows XP, ACML Version 2.5.3 (bundled with PGI 6.0-4)  
 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 -arch:SSE2 -Qunroll1 -Qansi_alias +FDO
```



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## Notes/Tuning Information (Continued)

-Qoption,f,-ip\_ninl\_max\_stats=1500,-ip\_ninl\_max\_total\_stats=4500

```

178.galgel:      pgf90  -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90
                -Munix -lacml
179.art:         pgcc   basepeak=yes
183.quake:      icl    -fast -arch:SSE2 -QaxW +FDO
187.facerec:    pgf90  -fastsse -Mipa=fast,inline +FDO
188.amp:        icl    -Oa  -arch:SSE2 -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

```

The system under test can be built with an ATX 450W power supply.