# CFP2000 Result



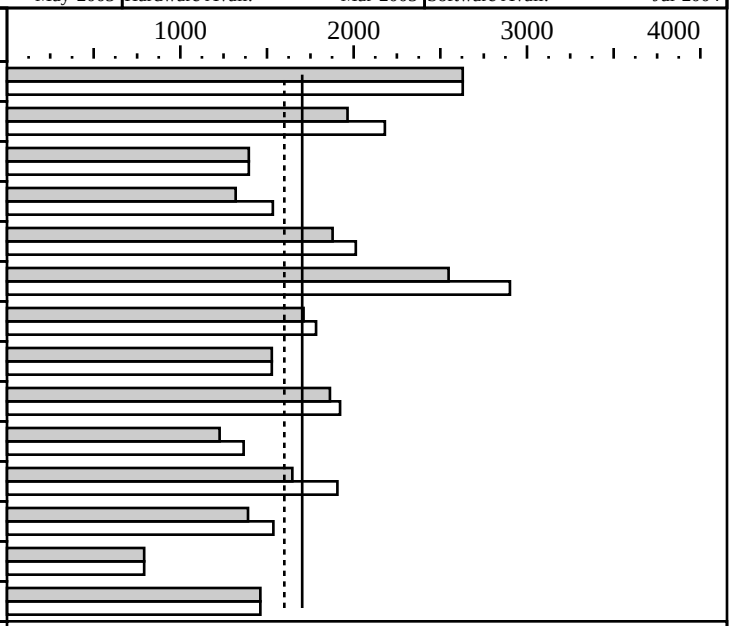
## Supermicro
## H8DAR-8 (AMD Opteron (TM) 252)

SPECfp2000 = 1704

SPECfp_base2000 = 1600

SPEC license #01176 | Tested by: supermicro | Test date: May-2005 | Hardware Avail: Mar-2005 | Software Avail: Jul-2004

| Benchmark | Reference Time | Base Runtime | Base Ratio | Runtime | Ratio |
|---|---|---|---|---|---|
| 168.wupwise | 1600 | 60.8 | 2630 | 60.8 | 2630 |
| 171.swim | 3100 | 158 | 1965 | 142 | 2181 |
| 172.mgrid | 1800 | 129 | 1395 | 129 | 1395 |
| 173.applu | 2100 | 159 | 1319 | 137 | 1534 |
| 177.mesa | 1400 | 74.5 | 1879 | 69.6 | 2012 |
| 178.galgel | 2900 | 114 | 2547 | 100.0 | 2901 |
| 179.art | 2600 | 152 | 1711 | 146 | 1783 |
| 183.equake | 1300 | 85.1 | 1528 | 85.1 | 1528 |
| 187.facerec | 1900 | 102 | 1862 | 98.9 | 1921 |
| 188.ammp | 2200 | 179 | 1227 | 161 | 1365 |
| 189.lucas | 2000 | 121 | 1647 | 105 | 1907 |
| 191.fma3d | 2100 | 151 | 1390 | 137 | 1537 |
| 200.sixtrack | 1100 | 139 | 791 | 139 | 791 |
| 301.apsi | 2600 | 178 | 1462 | 178 | 1462 |




### Hardware

| | |
|---|---|
| CPU: | AMD Opteron (TM) 252 |
| CPU MHz: | 2600 |
| 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 1024MB PC3200 REG ECC CL3 DDR SDRAM |
| Disk Subsystem: | 1 X 300GB IDE |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | Windows Enterprise Server 2003 |
| Compiler: | Intel C++ 8.0 build 20040714Z, Intel Fortran 8.1 build 20041019Z, PGI Fortran compiler 5.2-4 for Windows XP, AMD Core Math library Version 2.1 (ACML), Microsoft Visual Studio .NET 7.0.9466 (libraries), MicroQuill Smartheap Library 7.0 |
| File System: | NTFS |
| System State: | Default |

## Notes/Tuning Information

```
Tested by Supermicro
  +FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use
  +ACML is linking with AMD Core Math Library V2.1
  ONESTEP is set for all peak runs.
  ifort is the Intel Fortran compiler, icl is the Intel C++ compiler and
  pgf90 is the PGI Fortran compiler.
  The Intel C++ 8.0 and the Intel Fortran 8.1 compilers are setup in the following order:
     "c:\program files\intel\fortran\compiler80\ia32\bin\ifortvars.bat"
     "c:\program files\intel\cpp\compiler80\ia32\bin\iclvars.bat"
  To make sure that the correct libraries are selected, the following link option is
  added for the peak runs where Intel Fortran 8.1 compiler is used:
      LDOPT = -Fe$@ -link -LIBPATH:"c:\program files\intel\fortran\compiler80\ia32\lib"
   (denoted by +LIBPATH:INTEL8.1 in the optimization flags listed below)
  Portability:
    178.galgel: -Mfixed
  Baseline: C      : icl   -fast -arch:SSE2 -QaxW +FDO
  Baseline: Fortran: pgf90 -fastsse -Mipa=fast,inline
```

## Notes/Tuning Information (Continued)

```
Peak tuning:
168.wupwise:       pgf90 basepeak=yes
171.swim:         ifort -Qipo  -O3  -QaxN -QxW +FDO -Qunroll0     +LIBPATH:INTEL8.1
172.mgrid:         pgf90 basepeak=yes
173.applu:        ifort -Qipo  -O3  -QaxN -QxW +FDO -auto         +LIBPATH:INTEL8.1
177.mesa:          icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias
                       -Qoption,f,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
179.art:           icl   -Qipo             -Zp4 +FDO
183.equake:        icl   basepeak=yes
Tested system can be used with a 420W (minimum) ATX power supply
187.facerec:      ifort -Qipo             -QxW +FDO -Qunroll3     +LIBPATH:INTEL8.1
                       -Qoption,f,-ip_ninl_max_stats=2500,-ip_ninl_max_total_stats=7000
188.ammp:          icl   -Oa   -arch:SSE2  -Zp4      -Qansi_alias
189.lucas:        ifort -Qipo             -QxW      -Qunroll1     +LIBPATH:INTEL8.1
191.fma3d:        ifort -Qipo       -QaxN -QxW +FDO -Qansi-alias- +LIBPATH:INTEL8.1
200.sixtrack:      pgf90 basepeak=yes
301.apsi:          pgf90 basepeak=yes
```