CFP2000 Result

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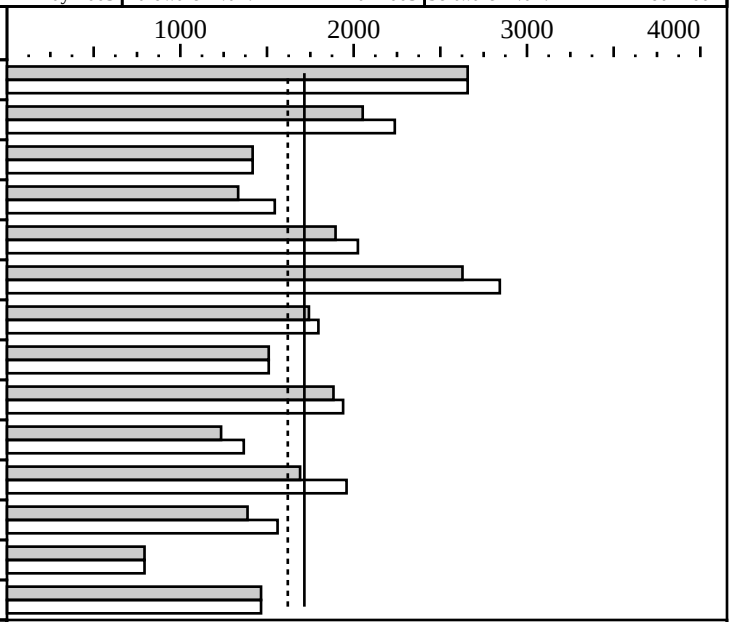
Supermicro
H8DA8 (AMD Opteron (TM) 252)

SPECfp2000 = 1716

SPECfp_base2000 = 1620

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	60.2	2658	60.2	2658
171.swim	3100	151	2052	139	2237
172.mgrid	1800	127	1417	127	1417
173.applu	2100	157	1334	136	1545
177.mesa	1400	73.9	1896	69.2	2024
178.galgel	2900	110	2628	102	2843
179.art	2600	149	1742	145	1797
183.equake	1300	86.1	1510	86.1	1510
187.facerec	1900	101	1884	98.0	1939
188.ammp	2200	178	1235	161	1366
189.lucas	2000	118	1691	102	1959
191.fma3d	2100	151	1388	135	1561
200.sixtrack	1100	139	793	139	793
301.apsi	2600	177	1466	177	1466



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 filesintel ortrancompiler80ia32 inifortvars.bat"
     "c:program filesintelcppcompiler80ia32 iniclvars.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 filesintel ortrancompiler80ia32lib"
   (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
```

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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
178.galgel:       pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
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
Tested system can be used with a 420W (minimum) ATX power supply
```