CFP2000 Result

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Supermicro

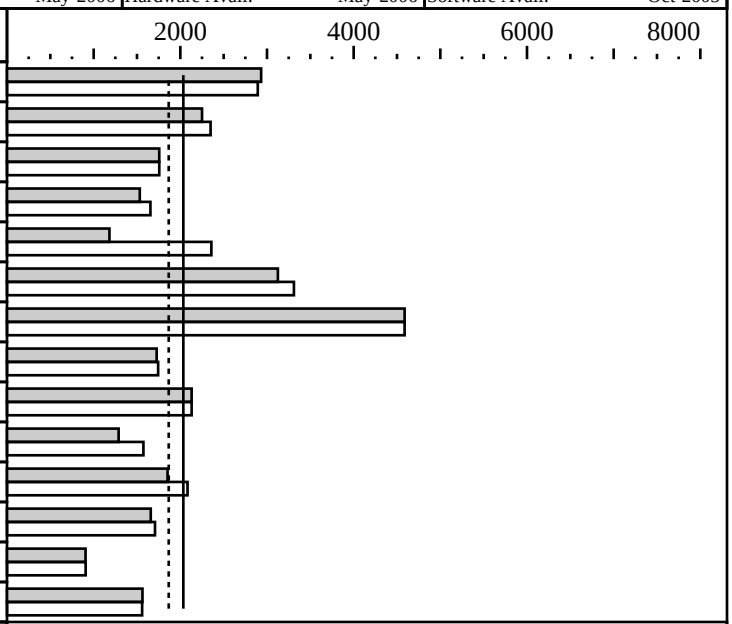
H8QC8 Motherboard (AMD Opteron(TM) 856)

SPECfp2000 = 2035

SPECfp_base2000 = 1866

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	54.6	2932	55.3	2894
171.swim	3100	138	2250	132	2349
172.mgrid	1800	102	1757	102	1757
173.applu	2100	137	1532	127	1655
177.mesa	1400	118	1182	59.4	2358
178.galgel	2900	92.8	3126	87.6	3311
179.art	2600	56.7	4588	56.7	4588
183.equake	1300	75.3	1727	74.5	1744
187.facerec	1900	89.2	2130	89.2	2130
188.ammp	2200	171	1288	140	1574
189.lucas	2000	108	1853	96.0	2083
191.fma3d	2100	127	1659	123	1708
200.sixtrack	1100	121	906	121	907
301.apsi	2600	166	1563	167	1559



Hardware

CPU:	AMD Opteron(TM) 856
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1, 2, 3, 4 chips
Parallel:	no
Primary Cache:	64KBI + 64KBD on chip
Secondary Cache:	1024KB (I+D) on chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4x2086MB, DDR-400 CL3 ECC Reg
Disk Subsystem:	1 X IDE, Seagate , 80 GB
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 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

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Tested by Supermicro
  +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 -Mnovect
  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
```

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Notes/Tuning Information (Continued)

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177.mesa:           icl     -Qipo -QxW -Qunroll1 -Qansi_alias +FDO
                         -Qoption,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.equake:         icl     -O3 -Qipo -QxW +FDO
187.facerec:        pgf90   basepeak=1
188.ammp:           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 SC748S-R1000,
Product description located as of:
http://www.supermicro.com/Aplus/motherboard/Opteron/nForce/H8QC8.cfm
To ensure system stability, a 1000W (minimum) ATX power supply [8-pin (+12V), 8-pin (+12V) and 24-pin are required]
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