



CFP2000 Result

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Supermicro Motherboard H8DA8 rev2.01

SPECfp2000 = 1433

SPECfp_base2000 = 1325

SPEC license #01176 Tested by: Supermicro Test date: Feb-2006 Hardware Avail: Mar-2005 Software Avail: Sep-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	79.6	2009	79.9	2002	
171.swim	3100	152	2038	158	1960	
172.mgrid	1800	151	1189	152	1188	
173.applu	2100	178	1180	170	1238	
177.mesa	1400	198	707	97.0	1444	
178.galgel	2900	133	2179	121	2396	
179.art	2600	76.3	3408	76.3	3408	
183.quake	1300	97.5	1334	95.5	1362	
187.facerec	1900	129	1471	129	1471	
188.amp	2200	248	888	218	1010	
189.lucas	2000	132	1512	117	1706	
191.fma3d	2100	182	1154	180	1169	
200.sixtrack	1100	201	548	200	549	
301.apsi	2600	254	1024	254	1022	

Hardware

CPU: AMD Opteron 265
 CPU MHz: 1800
 FPU: Integrated
 CPU(s) enabled: 2 cores, 1 chip, 2 cores/chip
 CPU(s) orderable: 1
 Parallel: no
 Primary Cache: 64KBI + 64KBD on chip
 Secondary Cache: 1024KB (I+D) (on chip) per core
 L3 Cache: N/A
 Other Cache: N/A
 Memory: 4x512MB, Registered, ECC, Buffered, Single Rank, DDR400 CL3
 Disk Subsystem: Seagate Barracuda 7200.9, 120 GB, 7200 RPM
 Other Hardware: None

Software

Operating System: Windows 2003 Enterprise Edition W/SP1
 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

Tested by Supermicro Computer, Inc.

+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.amm:           icl      -Oa -QxW -Zp4 -Qansi_alias
189.lucas:         ifort    -Qipo -QxW -Qunroll1
191.fma3d:         pgf90    -Mipa=fast,inline -fastsse -Mno vect +FDO
200.sixtrack:     pgf90    -fastsse -Mipa=fast,inline
301.apsi:          pgf90    -fastsse -Mipa=fast,inline

```

The system under test can be built with a ATX 650 power supply.