



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Supermicro Motherboard H8DA8 rev2.01

SPECfp_rate2000 = 56.5
SPECfp_rate_base2000 = 51.5

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	86.4	86.0	4	86.4	85.9
171.swim	4	286	50.3	4	254	56.7
172.mgrid	4	179	46.7	4	177	47.2
173.applu	4	227	42.9	4	204	47.8
177.mesa	4	202	32.1	4	99.1	65.6
178.galgel	4	153	87.7	4	144	93.7
179.art	4	96.2	125	4	96.2	125
183.quake	4	126	48.0	4	124	48.7
187.facerec	4	147	59.8	4	147	59.8
188.amp	4	263	38.7	4	226	45.3
189.lucas	4	176	52.8	4	162	57.1
191.fma3d	4	213	45.8	4	210	46.3
200.sixtrack	4	205	24.8	4	205	24.9
301.apsi	4	265	45.5	4	265	45.5

Hardware	
CPU:	AMD Opteron 265
CPU MHz:	1800
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1, 2
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:	8x512MB, 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



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Supermicro
Motherboard H8DA8 rev2.01

SPECfp_rate2000 = 56.5
SPECfp_rate_base2000 = 51.5

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

Notes/Tuning Information (Continued)

```

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.ampp:         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.
The start /b /wait /affinity command is used to bind CPU(s) to processes.