



CFP2000 Result

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Hewlett-Packard Company
ProLiant DL385 (AMD Opteron (TM) 275)

SPECfp2000 = 1542
SPECfp_base2000 = 1486

SPEC license #: 3 Tested by: Hewlett-Packard Company Test date: Jul-2005 Hardware Avail: Jul-2005 Software Avail: Jun-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	70.3	2278	70.3	2278	
171.swim	3100	154	2008	152	2044	
172.mgrid	1800	130	1383	130	1383	
173.applu	2100	163	1291	152	1385	
177.mesa	1400	86.9	1611	80.5	1738	
178.galgel	2900	116	2495	107	2711	
179.art	2600	161	1612	160	1622	
183.quake	1300	90.3	1439	90.3	1439	
187.facerec	1900	115	1658	115	1653	
188.amp	2200	200	1101	185	1191	
189.lucas	2000	126	1590	110	1823	
191.fma3d	2100	157	1337	149	1408	
200.sixtrack	1100	164	669	164	669	
301.apsi	2600	201	1292	201	1292	

Hardware

CPU: AMD Opteron (TM) 275
CPU MHz: 2200
FPU: Integrated
CPU(s) enabled: 1 core, 1 chip, 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: 4x2048MB PC3200 CL3.0
Disk Subsystem: 1x36.4GB 15K Ultra320 SCSI
Other Hardware:

Software

Operating System: Windows Server 2003 Enterprise SP1
Compiler: Intel C++ Compiler 8.0 Build 20040318Z
Intel Fortran Compiler for 32-bit applications 8.1 build 20050517Z
PGI Fortran compiler 6.0-4 for Windows XP (32-bit)
Microsoft Visual Studio .NET 7.0.9466 (for libraries)
MicroQuill Smartheap Library 7.0
AMD Core Math Library V2.6.0
File System: NTFS
System State: Default

Notes/Tuning Information

```
+FDO: PASS1=-Qprof_gen PASS2=-Qprof_use
+ACML is linking with AMD Core Math Library V2.6.0
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)
Base tuning for C programs: icl -fast -arch:SSE2 -QaxW +FDO
Base tuning for FORTRAN programs: pgf90 -fastsse -Mipa=fast,inline
Portability flags:
178.galgel: -Mfixed
Peak tuning:
```



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Notes/Tuning Information (Continued)

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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
178.galgel:      pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML
179.art:          icl -Qipo -Zp4 +FDO
183.equake:       icl basepeak=yes
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

```

Other Configuration Notes

/NUMPROC=1 flag was added to boot.ini to invoke uniprocessor environment.

BIOS Configuration Notes

Node Interleaving is Disabled