



CFP2000 Result

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Hewlett-Packard Company
ProLiant BL35p (AMD Opteron (TM) 275)

SPECfp2000 = 1510
SPECfp_base2000 = 1449

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	70.7	2263	70.7	2263	
171.swim	3100	168	1848	158	1965	
172.mgrid	1800	133	1351	133	1351	
173.applu	2100	169	1242	155	1351	
177.mesa	1400	87.3	1605	81.0	1727	
178.galgel	2900	120	2423	110	2637	
179.art	2600	165	1579	164	1582	
183.earth	1300	93.4	1392	93.4	1392	
187.facerec	1900	116	1638	116	1636	
188.amp	2200	203	1084	186	1180	
189.lucas	2000	132	1514	115	1732	
191.fma3d	2100	160	1311	152	1379	
200.sixtrack	1100	164	669	164	669	
301.apsi	2600	204	1276	204	1276	

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) per core
Secondary Cache: 1024KB(I+D) (on chip) per core
L3 Cache: N/A
Other Cache: N/A
Memory: 2x2048MB PC3200 CL3.0
Disk Subsystem: 1x60GB ATA100 5400RPM
Other Hardware:

Software

Operating System: Windows Server 2003 Enterprise SP1
Compiler: Intel C++ Compiler 8.0 Build 20040318Z
Intel Fortran Compiler 8.1 build 20050517Z
PGI Fortran compiler 6.0-4 for Windows XP
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 V2.0
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.
"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:
168.wupwise: pgf90 basepeak=yes
```



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Notes/Tuning Information (Continued)

```

171.swim:      ifort -Qipo -O3 -QaxN -QxW +FDO -Qunroll10      +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 -Qunroll11 -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.quake:    icl basepeak=yes
187.facerec:  ifort -Qipo -QxW +FDO -Qunroll13 +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 -Qunroll11 +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

```

BIOS Configuration Notes

Node Interleaving is Disabled

Other Configuration Notes

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