CFP2000 Result

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Hewlett-Packard Company

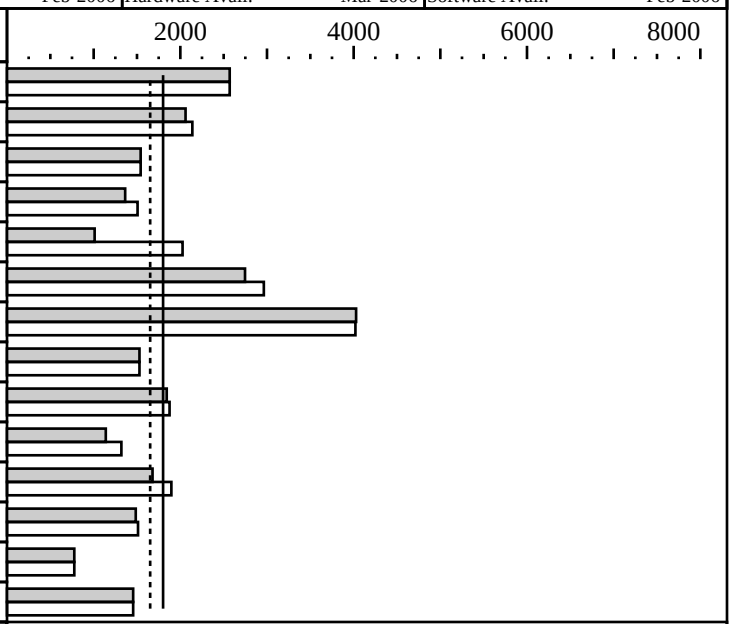
ProLiant BL45p (AMD Opteron (TM) 285)

SPECfp2000 = 1801

SPECfp_base2000 = 1652

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Feb-2006 | Hardware Avail: Mar-2006 | Software Avail: Feb-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	62.3	2570	62.3	2570
171.swim	3100	150	2060	145	2139
172.mgrid	1800	117	1542	117	1542
173.applu	2100	154	1363	139	1507
177.mesa	1400	138	1011	69.1	2026
178.galgel	2900	106	2746	97.9	2963
179.art	2600	64.5	4028	64.7	4020
183.equake	1300	85.0	1529	85.0	1529
187.facerec	1900	103	1843	101	1876
188.ammp	2200	193	1140	167	1320
189.lucas	2000	119	1679	105	1897
191.fma3d	2100	141	1486	139	1512
200.sixtrack	1100	142	776	142	776
301.apsi	2600	179	1456	179	1456



Hardware

CPU:	AMD Opteron (TM) 285
CPU MHz:	2600
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:	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 for 32-bit applications, (Version 9.0 Build 20060120Z) Intel Fortran Compiler for 32-bit applications, (Version 9.0 build 20060120Z) PGI Fortran compiler 6.0-4 for Windows XP (32-bit) PGI C compiler 6.0-4 for Windows XP (32-bit) Microsoft Visual Studio .NET 7.0.9466 (for libraries) AMD Core Math Library V3.0.0
File System:	NTFS
System State:	Default

Notes/Tuning Information

```
 +FDO: PASS1=-Qprof_gen  PASS2=-Qprof_use (Intel compiler)
 +FDO*: PASS1=-Mpfi  PASS2=-Mpfo (PGI compiler)
 +ACML is linking with AMD Core Math Library V3.0.0
 ifort is the Intel Fortran compiler, icl is the Intel C++ compiler; and
 pgf90 is the PGI Fortran compiler, pgcc is the PGI C compiler.
Base tuning for C programs:       pgcc  -fastsse -Mipa=fast,inline
Base tuning for FORTRAN programs: pgf90 -fastsse -Mipa=fast,inline +FDO* ONESTEP=1
Portability flags:
  178.galgel: -Mfixed
Peak tuning:
 168.wupwise:       pgf90 basepeak=yes
 171.swim:          ifort -Qipo  -O3  -QaxN -QxW +FDO -Qunroll0 ONESTEP=1
 172.mgrid:         pgf90 basepeak=yes
 173.applu:         ifort -Qipo  -O3  -QaxN -QxW +FDO -auto ONESTEP=1
 177.mesa:         icl   -Qipo -arch:SSE2       +FDO -Qunroll1 -Qansi_alias ONESTEP=1
                        -Qoption,c,-ip_ninl_max_stats=1500,-ip_ninl_max_total_stats=4500
 178.galgel:       pgf90 -fastsse -Mipa=fast,safe RM_SOURCES=lapak.f90 -Munix +ACML ONESTEP=1
```

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Notes/Tuning Information (Continued)

```
 179.art:           pgcc  -fastsse -Mipa=fast,inline
 183.equake:        icl   basepeak=yes
 187.facerec:       ifort -Qipo            -QxW +FDO -Qunroll3 ONESTEP=1
                        -Qoption,f,-ip_ninl_max_stats=2500,-ip_ninl_max_total_stats=7000
 188.ammp:          icl   -Oa   -arch:SSE2  -Zp4      -Qansi_alias ONESTEP=1
 189.lucas:         ifort -Qipo            -QxW      -Qunroll1 ONESTEP=1
 191.fma3d:         ifort -Qipo       -QaxN -QxW +FDO -Qansi-alias- ONESTEP=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.
```