CFP2000 Result

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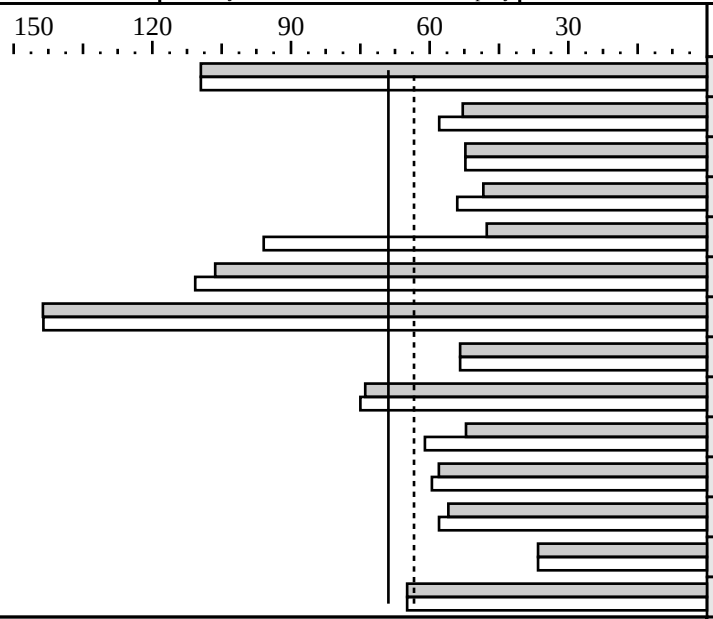
Hewlett-Packard Company

ProLiant DL145 G2 (AMD Opteron (TM) 285)

SPECfp_rate2000 = 68.9

SPECfp_rate_base2000 = 63.4

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	4	67.8	110	4	67.8	110
171.swim	4	272	52.8	4	248	57.9
172.mgrid	4	160	52.3	4	160	52.3
173.applu	4	201	48.4	4	180	54.0
177.mesa	4	136	47.6	4	67.7	95.9
178.galgel	4	126	106	4	122	111
179.art	4	84.0	144	4	84.0	144
183.equake	4	113	53.4	4	113	53.4
187.facerec	4	119	73.9	4	118	75.0
188.ammp	4	196	52.1	4	167	61.0
189.lucas	4	160	58.0	4	156	59.5
191.fma3d	4	174	56.0	4	168	58.0
200.sixtrack	4	140	36.6	4	140	36.6
301.apsi	4	186	64.9	4	186	64.9

Hardware

CPU:	AMD Opteron (TM) 285
CPU MHz:	2600
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) per core
Secondary Cache:	1024KB(I+D) (on chip) per core
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8x2048MB 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
  The start /b /wait /affinity command is used to bind CPU(s) to processes.
  /NUMPROC=1 flag was added to boot.ini to invoke uniprocessor environment.
```