CFP2000 Result

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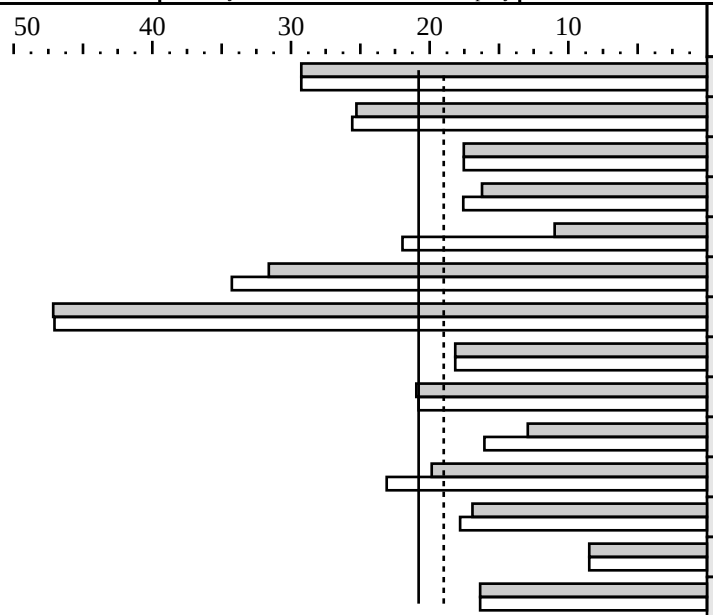
Hewlett-Packard Company

ProLiant DL145 G2 (AMD Opteron (TM) 280)

SPECfp_rate2000 = 20.8

SPECfp_rate_base2000 = 19.0

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Dec-2005 | Hardware Avail: Sep-2005 | Software Avail: Nov-2005



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	63.4	29.3	1	63.4	29.3
171.swim	1	142	25.3	1	141	25.6
172.mgrid	1	119	17.5	1	119	17.5
173.applu	1	150	16.2	1	139	17.6
177.mesa	1	148	11.0	1	74.0	22.0
178.galgel	1	106	31.6	1	98.2	34.3
179.art	1	64.0	47.1	1	64.1	47.1
183.equake	1	83.1	18.2	1	83.1	18.2
187.facerec	1	105	21.0	1	106	20.8
188.ammp	1	197	12.9	1	159	16.1
189.lucas	1	117	19.9	1	100	23.1
191.fma3d	1	144	16.9	1	137	17.8
200.sixtrack	1	150	8.49	1	150	8.49
301.apsi	1	184	16.4	1	184	16.4

Hardware

CPU:	AMD Opteron (TM) 280
CPU MHz:	2400
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 8.1 Build 20050524Z) Intel Fortran Compiler for 32-bit applications, (version 8.1 build 20050517Z) 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 V2.6.0
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 V2.6.0
 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.

Submitted_by: "Schmidt, David (Performance Eng.)" <D.Schmidt@hp.com>
Submitted: Mon Dec 12 19:17:10 2005
Submission: cpu2000-20051212-05251.sub
```