CFP2000 Result

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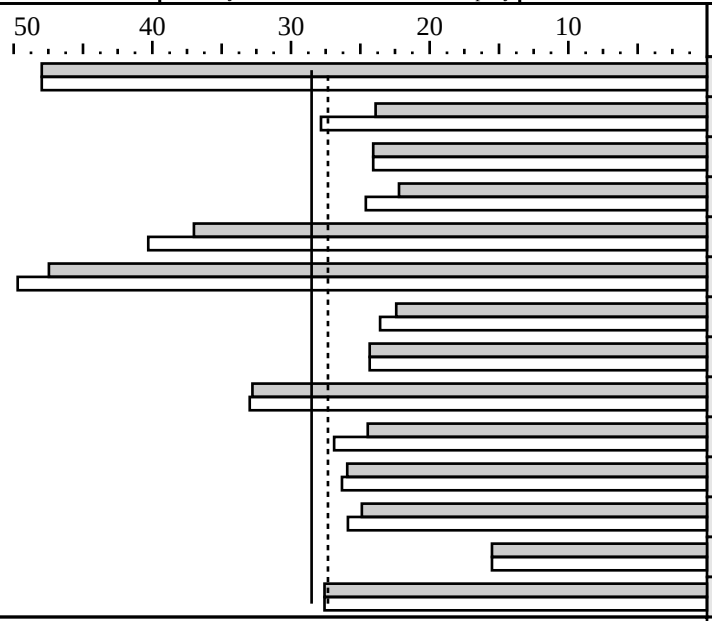
Hewlett-Packard Company

ProLiant DL385 (AMD Opteron (TM) 275)

SPECfp_rate2000 = 28.5

SPECfp_rate_base2000 = 27.3

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	77.4	48.0	2	77.4	48.0
171.swim	2	301	23.9	2	258	27.8
172.mgrid	2	173	24.1	2	173	24.1
173.applu	2	219	22.2	2	198	24.6
177.mesa	2	87.8	37.0	2	80.6	40.3
178.galgel	2	142	47.5	2	135	49.7
179.art	2	269	22.4	2	256	23.6
183.equake	2	124	24.3	2	124	24.3
187.facerec	2	134	32.8	2	134	33.0
188.ammp	2	209	24.5	2	190	26.9
189.lucas	2	179	25.9	2	176	26.3
191.fma3d	2	196	24.9	2	188	25.9
200.sixtrack	2	165	15.5	2	165	15.5
301.apsi	2	219	27.6	2	219	27.6

Hardware

CPU:	AMD Opteron (TM) 275
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	2 cores, 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 filesintel ortrancompiler80ia32 inifortvars.bat"
   "c:program filesintelcppcompiler80ia32 iniclvars.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 filesintel ortrancompiler80ia32lib"
(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)

```
  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
BIOS Configuration Notes
  Node Interleaving is Disabled
```