



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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.quake	1300	85.0	1529	85.0	1529	
187.facerec	1900	103	1843	101	1876	
188.amp	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
```



CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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

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.amp:          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.