CFP2000 Result

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Hewlett-Packard Company

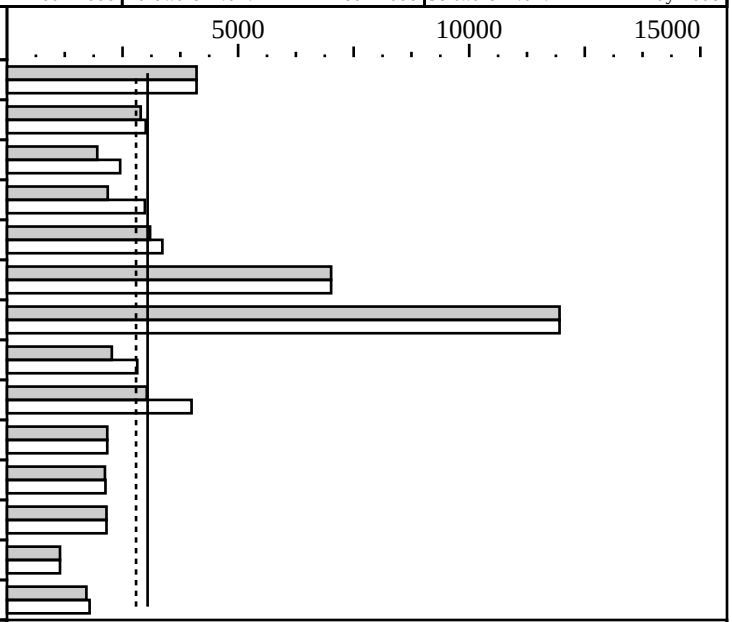
ProLiant DL360 G5 (3.0GHz, Intel Xeon processor 5160)

SPECfp2000 = 3042

SPECfp_base2000 = 2792

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	39.0	4101	39.0	4101
171.swim	3100	107	2893	103	3002
172.mgrid	1800	92.2	1953	73.5	2448
173.applu	2100	96.3	2180	70.4	2983
177.mesa	1400	45.2	3096	41.6	3362
178.galgel	2900	41.4	7012	41.4	7012
179.art	2600	21.7	11954	21.7	11954
183.equake	1300	57.3	2268	46.1	2818
187.facerec	1900	62.8	3024	47.6	3993
188.ammp	2200	101	2169	101	2169
189.lucas	2000	94.4	2119	93.9	2131
191.fma3d	2100	97.6	2153	97.6	2153
200.sixtrack	1100	95.9	1147	95.9	1147
301.apsi	2600	151	1718	145	1787



Hardware

CPU:	Intel Xeon processor 5160 (3.0GHz, 4MB L2 shared, 1333MHz bus)
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 2 cores/chip
CPU(s) orderable:	1,2 chips
Parallel:	No
Primary Cache:	32KB (I) + 32KB (D) (on chip) per core
Secondary Cache:	4096KB(I+D) (on chip) shared
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8x1024MB PC2-5300F
Disk Subsystem:	1x36GB 10K SAS
Other Hardware:	

Software

Operating System:	RedHat Enterprise Linux 4.0 Advanced Server for AMD/EM64T, Update 3 Kernel 2.6.9-34.EL
Compiler:	Intel C++ Compiler for EM64T-based applications, (Version 9.1 Build 20060323) Intel Fortran Compiler for EM64T-based applications, (Version 9.1 Build 20060323) PathScale EKOPath(TM) Compiler Suite, Release 2.4
File System:	ext2
System State:	Multi-user run level 3

Notes/Tuning Information

```
+FDO: PASS1= -prof_gen  PASS2=-prof_use (Intel Compiler)
+FDO: PASS1= -fb_create fbdata PASS2=-fb_opt fbdata (PathScale Compiler)
ifort is the Intel Fortran compiler, icc is the Intel C++ compiler; and
pathf95 is PathScale Fortran compiler, pathcc is the PathScale C compiler.
Base tuning for C programs:  icc -fast -auto_ilp32 +FDO
Base tuning for FORTRAN programs:  ifort -fast +FDO
Portability:
  -DSPEC_CPU2000_LP64 applied to all benchmarks
  178.galgel:   -FI
Peak tuning:
  168.wupwise:  basepeak=1
  171.swim:     pathf95 -Ofast -LNO:fusion=2:simd=0 -WOPT:val=0 -march=em64t
  172.mgrid:    pathf95 -Ofast -CG:load_exe=0 -LNO:blocking=off:prefetch_ahead=5
                -OPT:ro=3:unroll_size=256 -WOPT:mem_opnds=on -march=em64t
  173.applu:    pathf95 -O3 -ipa -CG:load_exe=0
                -LNO:fission=1:fusion=2:blocking=off:full_unroll_size=9000
                -OPT:IEEE_a=3:ro=3 -TENV:X=3 -march=em64t
```

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Notes/Tuning Information (Continued)

```
    177.mesa:     pathcc -O2 -ipa -OPT:Ofast -fno-math-errno -CG:local_fwd_sched=on
                  -GRA:optimize_boundary=on -march=em64t +FDO
    178.galgel:   basepeak=1
    179.art:      basepeak=1
    183.equake:   icc -fast +FDO ONESTEP=yes -rcd -auto-ilp32
    187.facerec:  pathf95 -Ofast -IPA:plimit=1500 -LNO:fusion=2
                  -OPT:IEEE_NaN_Inf=off:ro=3:unroll_size=0 -march=em64t +FDO
    188.ammp:     basepeak=1
    189.lucas:    ifort -fast ONESTEP=yes
    191.fma3d:    basepeak=1
    200.sixtrack: basepeak=1
    301.apsi:     pathf95 -Ofast -CG:load_exe=0 -LNO:opt=0:prefetch=1 -march=em64t
  BIOS Configuration Notes
      Power Regulator set to Static High Performance Mode
    Other Configuration Notes
      Single processor kernel used
```