CFP2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

Hewlett-Packard Company

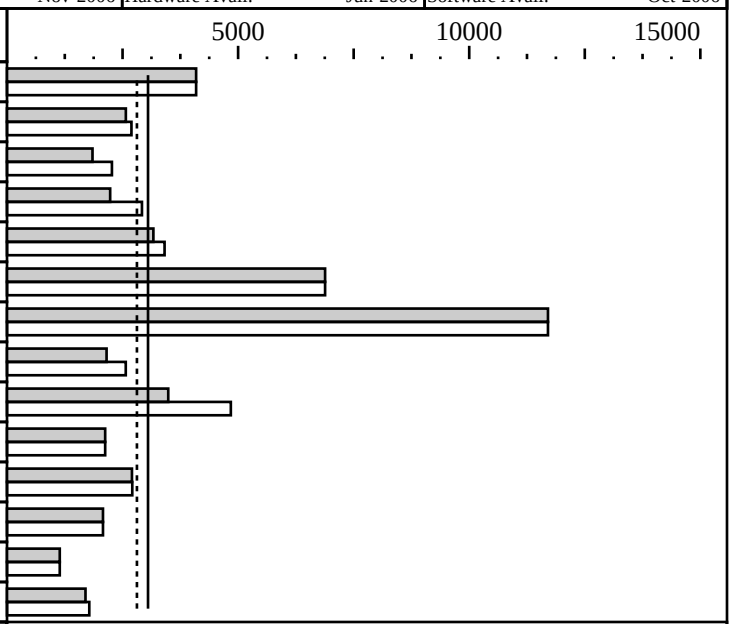
ProLiant DL140 G3 (3.0 GHz, Intel Xeon processor 5160)

SPECfp2000 = 3051

SPECfp_base2000 = 2811

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	39.1	4092	39.1	4092
171.swim	3100	121	2571	115	2692
172.mgrid	1800	97.3	1850	79.3	2270
173.applu	2100	94.1	2232	71.9	2920
177.mesa	1400	44.2	3167	41.1	3409
178.galgel	2900	42.1	6882	42.1	6882
179.art	2600	22.2	11704	22.2	11704
183.equake	1300	60.3	2154	50.6	2569
187.facerec	1900	54.5	3489	39.2	4842
188.ammp	2200	104	2124	104	2124
189.lucas	2000	74.0	2703	73.8	2710
191.fma3d	2100	101	2076	101	2076
200.sixtrack	1100	96.4	1141	96.4	1141
301.apsi	2600	153	1698	146	1780



Hardware

CPU:	Intel Xeon processor 5160 (1333 MHz system 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:	32 KB I + 32 KB D on chip per core
Secondary Cache:	4 MB I+D on chip per chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	8 GB (8 x 1 GB PC2-5300F)
Disk Subsystem:	1 x 36 GB 15 K SAS
Other Hardware:	

Software

Operating System:	RedHat Enterprise Linux 4.0 Advanced Server for AMD64/EM64T, Update 4 Kernel 2.6.9-42.EL
Compiler:	Intel C++ Compiler for EM64T-based applications, (Version 9.1 Build 20060925) Intel Fortran Compiler for EM64T-based applications, (Version 9.1 Build 20060925) PathScale EKOPath(TM) Compiler Suite, Release 2.5
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
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation

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
  Other Configuration Notes
    Single Processor Kernel used
```