CFP2000 Result

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Hewlett-Packard Company

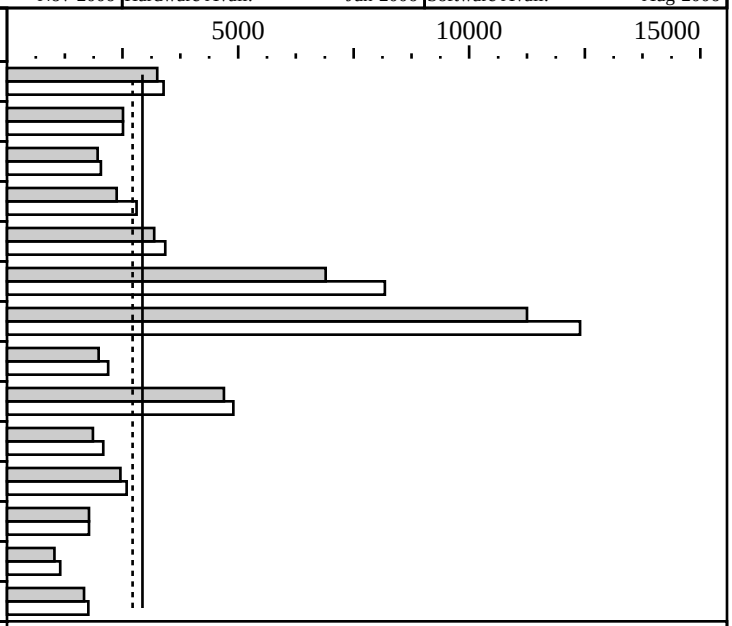
ProLiant DL140 G3 (3.0 GHz, Intel Xeon processor 5160)

SPECfp2000 = 2933

SPECfp_base2000 = 2719

SPEC license #: 2323 | Tested by: QLogic Corporation | Test date: Nov-2006 | Hardware Avail: Jun-2006 | Software Avail: Aug-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	49.2	3250	47.2	3388
171.swim	3100	124	2509	124	2509
172.mgrid	1800	91.8	1961	88.6	2031
173.applu	2100	88.5	2373	74.9	2803
177.mesa	1400	44.0	3184	40.9	3424
178.galgel	2900	42.1	6892	35.5	8175
179.art	2600	23.1	11249	21.0	12399
183.equake	1300	65.6	1983	59.4	2189
187.facerec	1900	40.5	4693	38.8	4897
188.ammp	2200	118	1859	106	2083
189.lucas	2000	81.5	2454	77.3	2589
191.fma3d	2100	118	1774	118	1774
200.sixtrack	1100	107	1026	95.5	1152
301.apsi	2600	156	1667	148	1760



Hardware

CPU:	Intel Xeon processor 5160 (1333 MHz system bus)
CPU MHz:	3000
FPU:	Integrated
CPU(s) enabled:	4 cores, 2 chips, 2 cores/chip
CPU(s) orderable:	1,2 chips
Parallel:	No
Primary Cache:	32KBI + 32KBD on chip, per core
Secondary Cache:	4MB (I+D) on chip, per chip
L3 Cache:	N/A
Other Cache:	N/A
Memory:	4 GB (4 x 1 GB PC2-5300F)
Disk Subsystem:	SATA, 60 GB
Other Hardware:	None

Software

Operating System:	SUSE Linux Enterprise Server 10 (x86_64)
Compiler:	QLogic PathScale Fortran and C Compilers, Release 2.5 Intel Math Kernel Library 8.1 compat-libstdc++5 for SLES 10
File System:	ext2
System State:	Multi-user, run level 3

Notes/Tuning Information

```
Tested by QLogic Corporation
 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
 +MKL means linking with Intel Math Kernel Library 8.1 with these LD flags:
      -L$(SPEC)/mkl -lmkl_lapack -lmkl
 Base tuning for C programs:       -Ofast -WOPT:mem_opnds=on -march=core +FDO
 Base tuning for FORTRAN programs: -Ofast -LNO:fusion=2 -march=core +FDO
 Portability flags:
   178.galgel:    -fixedform
 Peak tuning:
   168.wupwise:   -Ofast -LNO:fusion=2 -OPT:unroll_size=0
                  -CG:local_fwd_sched=on -march=core
   171.swim:      basepeak=yes
   172.mgrid:     -Ofast -LNO:blocking=off:fusion=2 -march=core
   173.applu:     -Ofast -LNO:fission=1:fusion=2:full_unroll_size=9000
                  -OPT:treeheight=on:unroll_size=0 -march=core
   177.mesa:      -O2 -ipa -IPA:plimit=20000 -WOPT:aggstr=0
                  -march=core +FDO
```

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Notes/Tuning Information (Continued)

```
    178.galgel:    -Ofast -CG:load_exe=1:local_fwd_sched=on:prefetch=off
                   -OPT:early_intrinsics=on -march=core +MKL
                    RM_SOURCES= lapak.f90
    179.art:       -Ofast -WOPT:mem_opnds=on:unroll=2 -march=core
    183.equake:    -Ofast -OPT:treeheight=on -m32 -march=core +FDO
    187.facerec:   -Ofast -IPA:plimit=1500 -LNO:fusion=2
                -OPT:IEEE_NaN_Inf=off:ro=3:unroll_size=0 -march=core +FDO
    188.ammp:      -O3 -OPT:IEEE_arith=3:Ofast:alias=disjoint -ffast-math
                   -march=core
    189.lucas:     -Ofast -CG:load_exe=2 -LNO:fusion=0 -march=core
    191.fma3d:     basepeak=yes
    200.sixtrack:  -O3 -CG:cflow=off -OPT:Ofast:early_intrinsics=on
                   -march=core +FDO
    301.apsi:      -Ofast -LNO:opt=0 -march=core


  Taskset utility used to bind process to CPU(s)
```