CFP2000 Result

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Hewlett-Packard Company

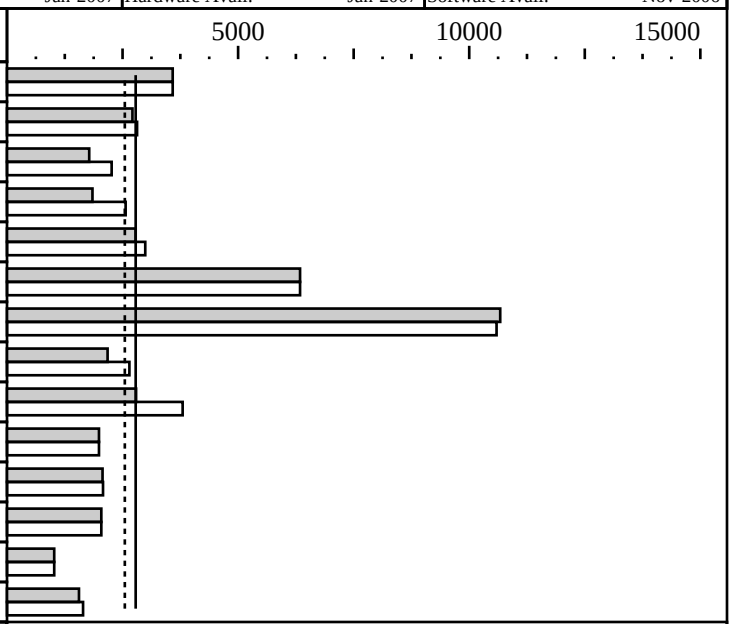
ProLiant BL460c (2.66 GHz, Intel Xeon processor X5355)

SPECfp2000 = 2784

SPECfp_base2000 = 2549

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Jan-2007 | Hardware Avail: Jan-2007 | Software Avail: Nov-2006

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	44.6	3585	44.6	3585
171.swim	3100	114	2714	110	2814
172.mgrid	1800	101	1779	79.5	2264
173.applu	2100	114	1849	81.8	2567
177.mesa	1400	50.3	2784	46.8	2991
178.galgel	2900	45.7	6340	45.7	6340
179.art	2600	24.4	10670	24.5	10592
183.equake	1300	59.7	2176	49.1	2648
187.facerec	1900	68.0	2793	50.0	3800
188.ammp	2200	111	1990	111	1990
189.lucas	2000	96.8	2067	96.3	2077
191.fma3d	2100	103	2040	103	2040
200.sixtrack	1100	108	1021	108	1021
301.apsi	2600	167	1557	158	1646



Hardware

CPU:	Intel Xeon processor X5355 (2.66 GHz, 2x4 MB L2 shared, 1333 MHz bus)
CPU MHz:	2660
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 4 cores/chip
CPU(s) orderable:	1,2 chips
Parallel:	No
Primary Cache:	32 KB I + 32 KB D on chip per core
Secondary Cache:	8 MB I+D on chip per chip (4 MB shared per 2 cores)
L3 Cache:	N/A
Other Cache:	N/A
Memory:	16 GB (8x2 GB PC2-5300F CL5)
Disk Subsystem:	2x72 GB 10 K SAS
Other Hardware:	

Software

Operating System:	SuSE Linux Enterprise Server version 10 for AMD64/EM64T Kernel 2.6.16.21-0.8-default
Compiler:	Intel C++ Compiler for EM64T-based applications, (Version 9.1 Build 20061101) Intel Fortran Compiler for EM64T-based applications, (Version 9.1 Build 20061101) 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
```

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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:      icc -fast -auto_ilp32 +FDO
    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
  Adjacent Sector Prefetch disabled
Other Configuration Notes
  Taskset utility used to bind process to CPU(s)
  "ulimit -s unlimited" set
  Single processor kernel used
```