CFP2000 Result

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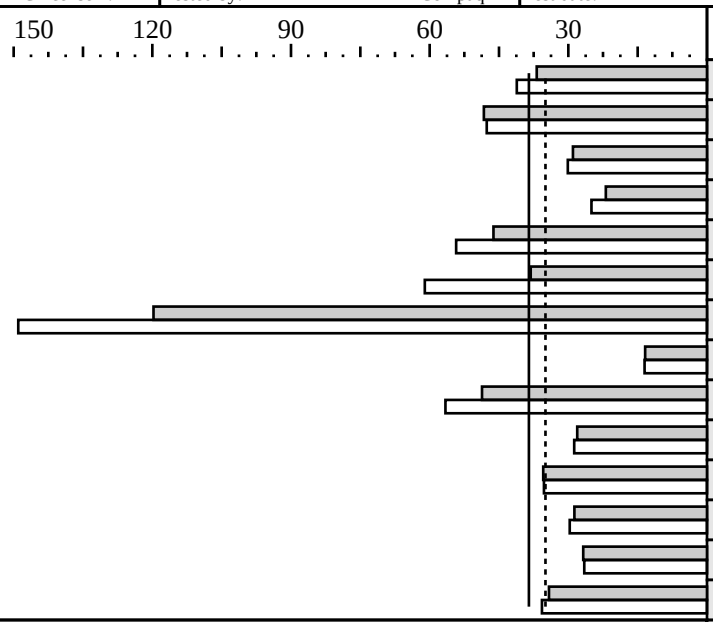
Compaq Computer Corporation
AlphaServer GS80 Model 6/731

SPECfp_rate2000 = 38.5

SPECfp_rate_base2000 = 34.9

SPEC license #: 2 | Tested by: Compaq NH | Test date: Nov-2000 | Hardware Avail: Dec-2000 | Software Avail: Jul-2000



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	8	403	36.8	8	361	41.1
171.swim	8	596	48.3	8	604	47.7
172.mgrid	8	576	29.0	8	555	30.1
173.applu	8	890	21.9	8	780	25.0
177.mesa	8	281	46.2	8	239	54.3
178.galgel	8	706	38.1	8	441	61.1
179.art	8	201	120	8	162	149
183.equake	8	902	13.4	8	893	13.5
187.facerec	8	362	48.7	8	312	56.6
188.ammp	8	727	28.1	8	711	28.7
189.lucas	8	524	35.4	8	526	35.3
191.fma3d	8	679	28.7	8	656	29.7
200.sixtrack	8	381	26.8	8	384	26.6
301.apsi	8	706	34.2	8	676	35.7

Hardware

CPU:	Alpha 21264A
CPU MHz:	731
FPU:	Integrated
CPU(s) enabled:	8 cores, 8 chips, 1 core/chip
CPU(s) orderable:	1 to 8
Parallel:	No
Primary Cache:	64KB(I)+64KB(D) on chip
Secondary Cache:	4MB off chip per cpu
L3 Cache:	None
Other Cache:	None
Memory:	128GB
Disk Subsystem:	9.1GB (ds-rz1da-vw)
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX V5.1
Compiler:	Compaq C X6.2-259-449AT Compaq Fortran V5.3 /usr/bin/f77: fort (not fort90) KAP Fortran V4.2 KAP C 4.0
File System:	ufs
System State:	Multi-user

Notes/Tuning Information

```
Baseline   C: cc    -arch ev6 -fast -O4 ONESTEP
     Fortran: kf90  -arch ev6 -O5 -fkapargs='-ur=-1' ONESTEP

Peak: -g3 -arch ev6 -non_shared ONESTEP plus:
   168.wupwise: f77 -fast -O4 -pipeline -unroll 2
      171.swim: f90 -fast -O5 -transform_loops
     172.mgrid: kf77 -O5 -transform_loops -tune ev6 -unroll 8
     173.applu: f77 -fast -O5 -transform_loops -unroll 14
      177.mesa: cc -fast -O4
    178.galgel: kf90 -O4 -unroll 2 -ldxml
                RM_SOURCES = lapak.f90
       179.art: kcc -fast -O4 -ckapargs='-arl=4 -ur=4' -unroll 10
    183.equake: kcc -fast -ckapargs='-arl=4' -xtaso_short
   187.facerec: f90 -fast -O4
      188.ammp: cc -fast -O4 -xtaso_short
     189.lucas: kf90 -fast -O5 -fkapargs='-ur=1' -unroll 1
     191.fma3d: kf90 -O4
```

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Notes/Tuning Information (Continued)

```
    200.sixtrack: f90 -fast -O5 -transform_loops
        301.apsi: kf90 -O5 -transform_loops -unroll 8 -fkapargs='-ur=1'

Portability: galgel: -fixed
```