CFP2000 Result

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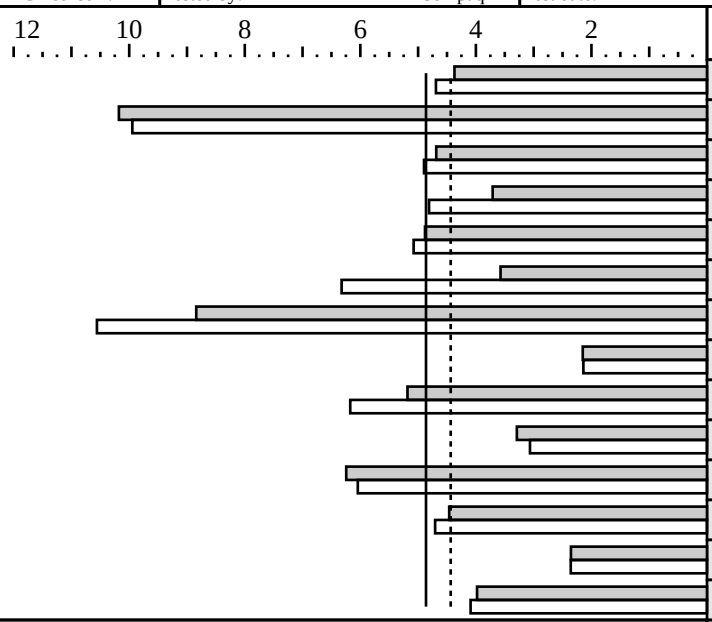
Compaq Computer Corporation
AlphaServer ES40 Model 6/500

SPECfp_rate2000 = 4.86

SPECfp_rate_base2000 = 4.44

SPEC license #: 2 | Tested by: Compaq NH | Test date: Sep-2000 | Hardware Avail: Apr-1999 | Software Avail: Jul-2000



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	1	425	4.37	1	396	4.69
171.swim	1	353	10.2	1	362	9.95
172.mgrid	1	446	4.69	1	426	4.90
173.applu	1	657	3.71	1	506	4.81
177.mesa	1	333	4.88	1	320	5.08
178.galgel	1	941	3.57	1	532	6.32
179.art	1	341	8.84	1	286	10.6
183.equake	1	701	2.15	1	705	2.14
187.facerec	1	425	5.18	1	357	6.17
188.ammp	1	776	3.29	1	833	3.06
189.lucas	1	372	6.24	1	384	6.04
191.fma3d	1	546	4.46	1	518	4.71
200.sixtrack	1	542	2.35	1	541	2.36
301.apsi	1	758	3.98	1	737	4.09

Hardware

CPU:	Alpha 21264
CPU MHz:	500
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	1 to 4
Parallel:	No
Primary Cache:	64KB(I)+64KB(D) on chip
Secondary Cache:	4MB off chip
L3 Cache:	None
Other Cache:	None
Memory:	16GB
Disk Subsystem:	1x18GB BD018122C0
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX V4.0G
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
```