



CFP2000 Result

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Compaq Computer Corporation AlphaServer ES40 Model 6/833

SPECfp2000 = 658

SPECfp_base2000 = 590

SPEC license #: 2 Tested by: Compaq NH Test date: Oct-2000 Hardware Avail: Jan-2001 Software Avail: Jul-2000

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
168.wupwise	1600	302	529	265	604	
171.swim	3100	268	1156	268	1156	
172.mgrid	1800	310	580	300	601	
173.applu	2100	496	424	391	537	
177.mesa	1400	196	713	198	706	
178.galgel	2900	519	558	282	1027	
179.art	2600	169	1540	133	1948	
183.quake	1300	563	231	565	230	
187.facerec	1900	231	822	194	980	
188.amp	2200	451	488	451	488	
189.lucas	2000	274	731	274	731	
191.fma3d	2100	398	528	371	565	
200.sixtrack	1100	324	340	324	339	
301.apsi	2600	470	553	450	578	

Hardware

CPU: Alpha 21264B
 CPU MHz: 833
 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: 8MB 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.quake: kcc -fast -ckapargs='-arl=4' -xtaso_short
 187.facerec: f90 -fast -O4
 188.amp: 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