



# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

## Compaq Computer Corporation AlphaServer ES40 Model 6/667

SPECfp\_rate2000 = 12.2  
SPECfp\_rate\_base2000 = 11.0

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

Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
168.wupwise	2	352	10.6	2	319	11.6
171.swim	2	393	18.3	2	398	18.1
172.mgrid	2	403	10.4	2	377	11.1
173.applu	2	608	8.02	2	498	9.79
177.mesa	2	260	12.5	2	243	13.3
178.galgel	2	658	10.2	2	355	19.0
179.art	2	212	28.4	2	168	35.9
183.quake	2	612	4.93	2	612	4.93
187.facerec	2	286	15.4	2	240	18.4
188.ammpp	2	531	9.61	2	572	8.93
189.lucas	2	350	13.3	2	359	12.9
191.fma3d	2	481	10.1	2	449	10.8
200.sixtrack	2	418	6.11	2	419	6.09
301.apsi	2	581	10.4	2	561	10.8

### Hardware

CPU: Alpha 21264A  
 CPU MHz: 667  
 FPU: Integrated  
 CPU(s) enabled: 2 cores, 2 chips, 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.ammpp: cc -fast -O4 -xtaso\_short  
 189.lucas: kf90 -fast -O5 -fkapargs='-ur=1' -unroll 1  
 191.fma3d: kf90 -O4



# CFP2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Compaq Computer Corporation  
AlphaServer ES40 Model 6/667

SPECfp\_rate2000 = 12.2

SPECfp\_rate\_base2000 = 11.0

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

## 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