



CFP2000 Result

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Compaq Computer Corporation AlphaServer DS20E Model 6/667

SPECfp2000 = 577
SPECfp_base2000 = 514

SPEC license #: 2 Tested by: Compaq NH Test date: Nov-1999 Hardware Avail: Mar-2000 Software Avail: Feb-2000

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
168.wupwise	1600	332	482	299	536
171.swim	3100	282	1101	283	1096
172.mgrid	1800	330	545	323	558
173.applu	2100	518	405	397	529
177.mesa	1400	274	511	278	504
178.galgel	2900	651	445	349	831
179.art	2600	209	1245	166	1566
183.quake	1300	532	244	530	245
187.facerec	1900	279	681	235	810
188.amp	2200	531	414	470	468
189.lucas	2000	302	662	310	645
191.fma3d	2100	431	487	406	518
200.sixtrack	1100	401	274	403	273
301.apsi	2600	578	450	555	468

Hardware

CPU: Alpha 21264A
 CPU MHz: 667
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 1 to 2
 Parallel: No
 Primary Cache: 64KB(I)+64KB(D) on chip
 Secondary Cache: 8MB off chip
 L3 Cache: None
 Other Cache: None
 Memory: 512MB (16x32MB)
 Disk Subsystem: 1x4GB
 Other Hardware: Ethernet

Software

Operating System: Tru64 UNIX V4.0F
 Compiler: Compaq C X6.2-259-449AT
 Compaq Fortran T5.3 (ft2+)
 /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 -v -arch ev6 -fast -O4 ONESTEP
 Fortran: kf90 -v -arch ev6 -O5 -fkapargs='-ur=-1' ONESTEP

Peak: -v -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)

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

Portability: galgel: -fixed

The C compiler used here will be available to customers as V6.3 at <http://www.unix.digital.com/dtk/> . It will be available as an ADK (Advanced Developers' Kit) in February, 2000 and as the final version in July, 2000.