CINT2000 Result

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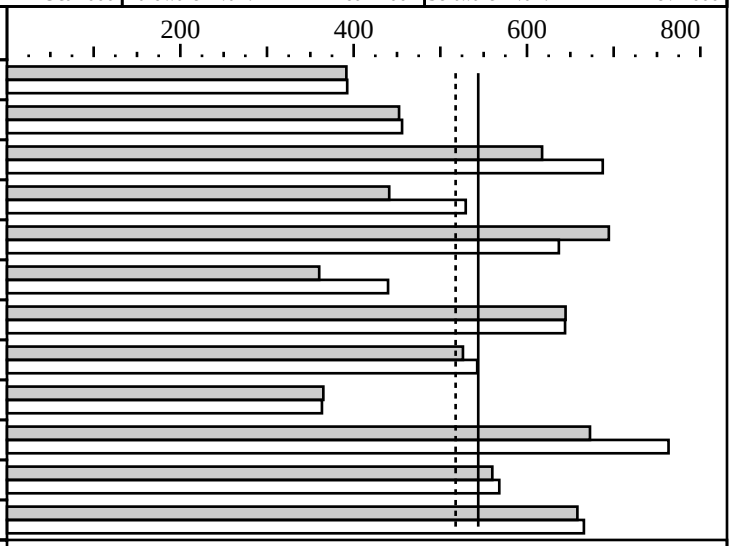
Compaq Computer Corporation
AlphaServer ES40 Model 6/833

SPECint2000 = 544

SPECint_base2000 = 518

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	358	392	357	393
175.vpr	1400	309	452	307	456
176.gcc	1100	178	617	160	687
181.mcf	1800	408	441	340	529
186.crafty	1000	144	694	157	637
197.parser	1800	500	360	409	440
252.eon	1300	202	645	202	644
253.perlbmk	1800	342	526	332	543
254.gap	1100	301	365	303	363
255.vortex	1900	282	673	249	763
256.bzip2	1500	268	560	264	568
300.twolf	3000	456	658	451	666



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:	1x8GB BD0096349A
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX V5.1 + Patch Kit 1 libc
Compiler:	Compaq C V6.3-129-44A8I Compaq C++ V6.2-033-4298H
File System:	AdvFS
System State:	Multi-user

Notes/Tuning Information

```
Baseline C  : cc  -arch ev6 -fast GEMFB ONESTEP
        C++: cxx -arch ev6 -O2 ONESTEP

GEMFB: fdo_pre0     = mkdir /tmp/pb; rm -f /tmp/pb/${baseexe}*
       PASS1_CFLAGS = -prof_gen_noopt    -prof_dir /tmp/pb
       PASS2_CFLAGS = -prof_use_feedback -prof_dir /tmp/pb
       (base uses directory /tmp/pb; peak uses /tmp/pp)

SPIKEFB: fdo_post2  = spike -feedback ${baseexe} -o tmp ${baseexe};
                      mv tmp ${baseexe}
Peak: cc [except eon: cxx] -arch ev6 ONESTEP plus:
     164.gzip: -g3 -fast -O4 +GEMFB
      175.vpr: -g3 -fast -O4 +GEMFB
      176.gcc: -g3 -fast -O4 -xtaso_short +GEMFB
      181.mcf: -g3 -fast -xtaso_short +GEMFB
   186.crafty: -g3 -fast -O4 -inline speed
   197.parser: -g3 -fast -O4 -xtaso_short +GEMFB
      252.eon: -O2
  253.perlbmk: -g3 -fast +GEMFB +SPIKEFB
      254.gap: -g3 -fast -O4 +GEMFB
```

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Notes/Tuning Information (Continued)

```
    255.vortex: -g3 -fast +GEMFB +SPIKEFB
     256.bzip2: -g3 -fast -O4 +GEMFB
     300.twolf: -g3 -fast -O4 +GEMFB

Portability: gcc: -Dalloca=__builtin_alloca; crafty: -DALPHA
perlbmk: -DSPEC_CPU2000_DUNIX; vortex: -DSPEC_CPU2000_LP64
gap: -DSYS_HAS_CALLOC_PROTO -DSYS_IS_BSD -DSYS_HAS_IOCTL_PROTO -DSPEC_CPU2000_LP64

Information on UNIX V5.1 Patches can be found at
http://ftp1.service.digital.com/public/unix/v5.1/
```