CINT2000 Result

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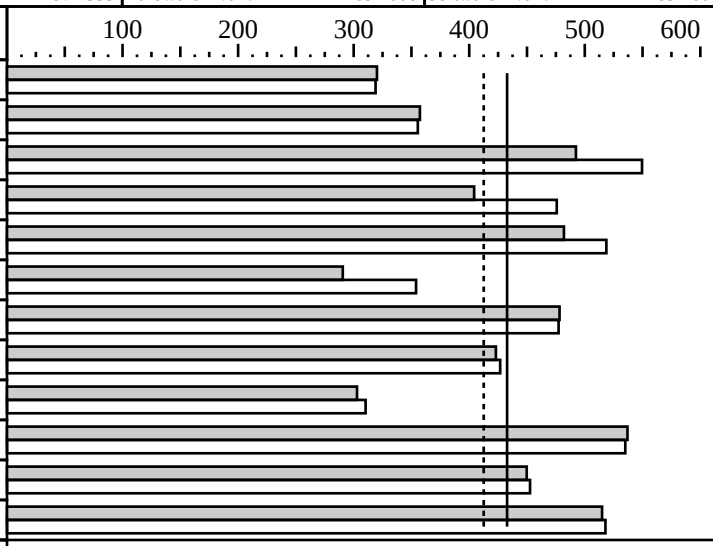
Compaq Computer Corporation
AlphaServer ES40 Model 6/667

SPECint2000 = 433

SPECint_base2000 = 413

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio
164.gzip	1400	437	320	439	319
175.vpr	1400	392	357	394	356
176.gcc	1100	223	492	200	550
181.mcf	1800	445	404	378	476
186.crafty	1000	207	482	193	519
197.parser	1800	619	291	508	354
252.eon	1300	272	478	272	477
253.perlbmk	1800	425	423	422	427
254.gap	1100	363	303	354	310
255.vortex	1900	354	537	355	535
256.bzip2	1500	334	450	331	453
300.twolf	3000	583	515	579	518



Hardware

CPU:	Alpha 21264A
CPU MHz:	667
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:	4GB (32x128MB)
Disk Subsystem:	1x4GB 1x9GB
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX V4.0F
Compiler:	Compaq C X6.2-259-449AT DIGITAL C++ V6.1-029-408B6
File System:	ufs
System State:	Multi-user

Notes/Tuning Information

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

Peak: cc [except eon: cxx] -v -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
      254.gap: -g3 -fast -O4 +GEMFB
   255.vortex: -g3 -fast +GEMFB
    256.bzip2: -g3 -fast -O4 +GEMFB
```

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Notes/Tuning Information (Continued)

```
    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
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.
```