CINT2000 Result

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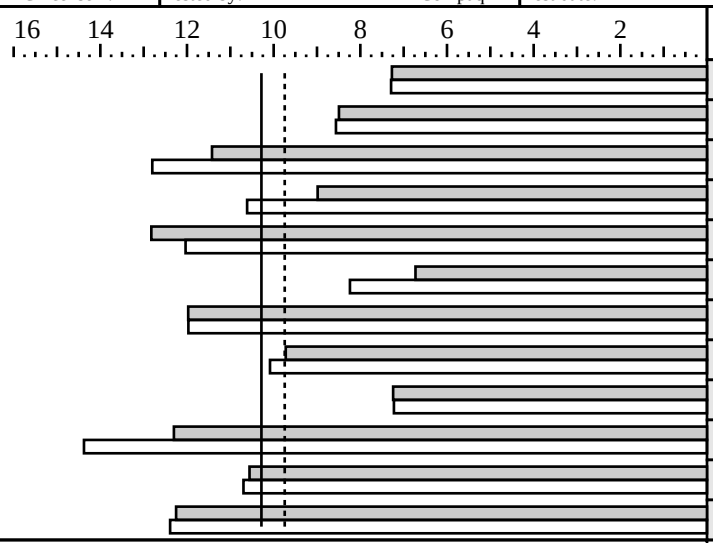
Compaq Computer Corporation
AlphaServer ES40 Model 6/667

SPECint_rate2000 = 10.3

SPECint_rate_base2000 = 9.74

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



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	2	447	7.27	2	446	7.29
175.vpr	2	382	8.49	2	379	8.56
176.gcc	2	223	11.4	2	199	12.8
181.mcf	2	465	8.99	2	393	10.6
186.crafty	2	181	12.8	2	193	12.0
197.parser	2	621	6.73	2	507	8.24
252.eon	2	252	12.0	2	252	12.0
253.perlbmk	2	430	9.72	2	414	10.1
254.gap	2	352	7.24	2	353	7.22
255.vortex	2	358	12.3	2	307	14.4
256.bzip2	2	330	10.6	2	325	10.7
300.twolf	2	568	12.3	2	562	12.4

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:	1x8GB BD0096349A
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX V5.1 Libc from UNIX V5.1 Patch Kit 1
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/
```