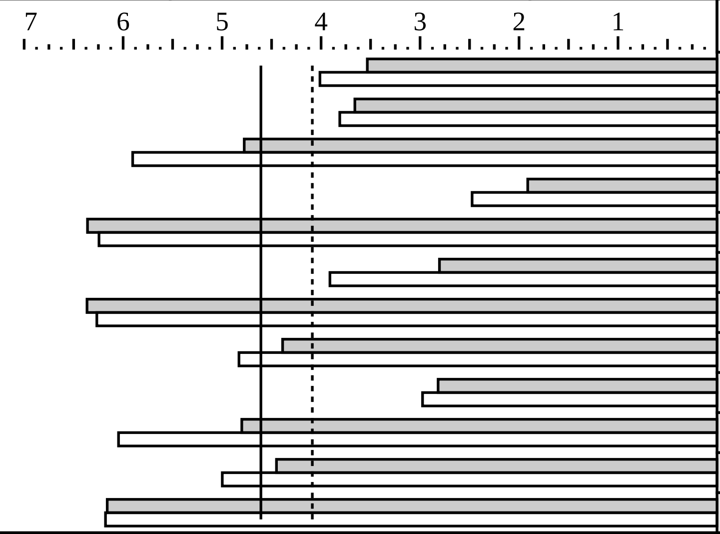
CINT2000 Result

Compaq Computer Corporation
AlphaServer GS160 Model 6/731

SPECint_rate2000 = 4.61

SPECint_rate_base2000 = 4.09

SPEC license #: 2	Tested by: Compaq NH	Test date: Apr-2000	Hardware Avail: Jun-2000	Software Avail: Jul-2000



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	1	460	3.53	1	405	4.01
175.vpr	1	444	3.66	1	426	3.81
176.gcc	1	267	4.78	1	216	5.90
181.mcf	1	1092	1.91	1	844	2.47
186.crafty	1	182	6.36	1	186	6.24
197.parser	1	745	2.80	1	534	3.91
252.eon	1	237	6.36	1	241	6.27
253.perlbmk	1	476	4.39	1	432	4.83
254.gap	1	453	2.82	1	429	2.97
255.vortex	1	459	4.80	1	365	6.05
256.bzip2	1	391	4.45	1	348	5.00
300.twolf	1	565	6.16	1	563	6.18

Hardware

CPU:	Alpha 21264A
CPU MHz:	731
FPU:	Integrated
CPU(s) enabled:	1 core, 1 chip, 1 core/chip
CPU(s) orderable:	Up to 16
Parallel:	No
Primary Cache:	64KB(I)+64KB(D) on chip
Secondary Cache:	4MB off chip per CPU
L3 Cache:	None
Other Cache:	None
Memory:	4GB
Disk Subsystem:	mfs
Other Hardware:	Ethernet

Software

Operating System:	Tru64 UNIX T5.1-9 (Release for GS160,GS320)
Compiler:	Compaq C T6.3-120-44A2I DIGITAL C++ V6.1-029-408B6
File System:	mfs
System State:	Multi-user

Notes/Tuning Information

```
Baseline C  : cc  -arch ev6 -fast GEMFB -non_shared
         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)

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 -non_shared
      254.gap: -g3 -fast -O4 +GEMFB
   255.vortex: -g3 -fast +GEMFB
    256.bzip2: -g3 -fast -O4 +GEMFB
```

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

Compaq C T6.3 is posted at http://www.unix.digital.com/dtk/
It has been available as an ADK (Advanced Developers' Kit)
since February, 2000; the final version will be posted
in July, 2000.
The SPEC CPU2000 binaries were compiled under Unix V4.0F.
sysconfigtab settings:
           max_proc_per_user = 4096
        max_threads_per_user = 4096
       per_proc_data_size     = 21474836480
   max_per_proc_data_size     = 21474836480
       per_proc_address_space = 21474836480
   max_per_proc_address_space = 21474836480
Tru64 Unix V5.1 will ship in Jul-2000 for use on the GS160,
GS320 platforms; the final version will ship Sep-2000
```