# CINT2000 Result

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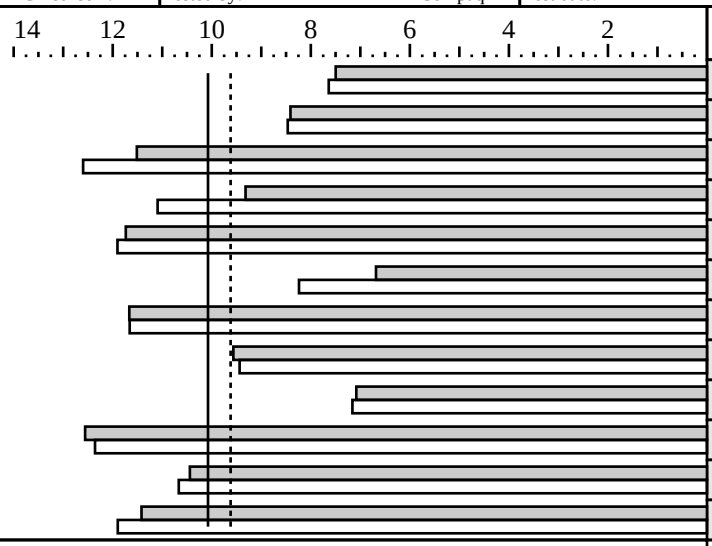
## Compaq Computer Corporation
## AlphaServer DS20E Model 6/667

SPECint_rate2000 = 10.1

SPECint_rate_base2000 = 9.62

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




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 2 | 433 | 7.50 | 2 | 425 | 7.64 |
| 175.vpr | 2 | 386 | 8.41 | 2 | 384 | 8.47 |
| 176.gcc | 2 | 222 | 11.5 | 2 | 203 | 12.6 |
| 181.mcf | 2 | 448 | 9.32 | 2 | 376 | 11.1 |
| 186.crafty | 2 | 198 | 11.7 | 2 | 195 | 11.9 |
| 197.parser | 2 | 625 | 6.68 | 2 | 507 | 8.24 |
| 252.eon | 2 | 259 | 11.7 | 2 | 259 | 11.7 |
| 253.perlbmk | 2 | 437 | 9.56 | 2 | 442 | 9.44 |
| 254.gap | 2 | 360 | 7.08 | 2 | 356 | 7.16 |
| 255.vortex | 2 | 351 | 12.6 | 2 | 357 | 12.4 |
| 256.bzip2 | 2 | 333 | 10.4 | 2 | 326 | 10.7 |
| 300.twolf | 2 | 610 | 11.4 | 2 | 585 | 11.9 |

### Hardware

| | |
|---|---|
| CPU: | Alpha 21264A |
| CPU MHz: | 667 |
| FPU: | Integrated |
| CPU(s) enabled: | 2 cores, 2 chips, 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: | 2GB |
| Disk Subsystem: | 3x4GB (rz29B-va) |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | Tru64 UNIX V4.0G |
| Compiler: | Compaq C X6.2-259-449AT<br>DIGITAL C++ V6.1-029-408B6 |
| File System: | ufs |
| 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)

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
      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
```