# CINT2000 Result

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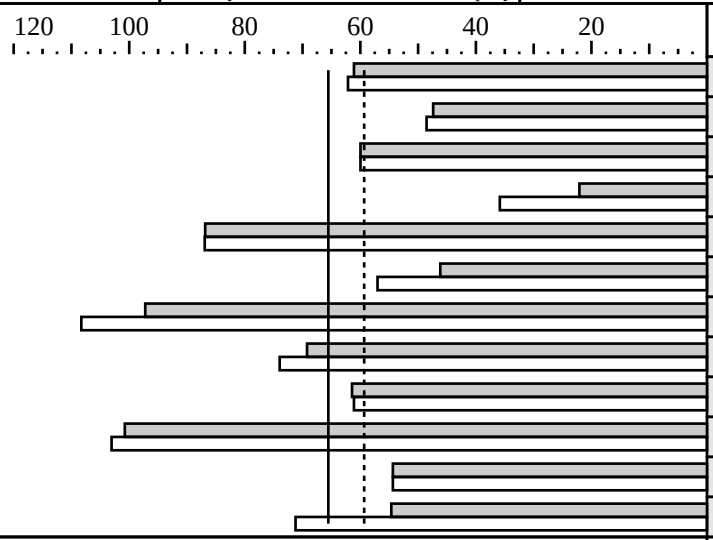
## Hewlett-Packard Company

## ProLiant BL35p (AMD Opteron (TM) 275)

SPECint_rate2000 = 65.5

SPECint_rate_base2000 = 59.3

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Aug-2005 | Hardware Avail: Jun-2005 | Software Avail: Apr-2005




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 4 | 106 | 61.1 | 4 | 105 | 62.1 |
| 175.vpr | 4 | 137 | 47.4 | 4 | 134 | 48.5 |
| 176.gcc | 4 | 85.1 | 60.0 | 4 | 85.1 | 60.0 |
| 181.mcf | 4 | 378 | 22.1 | 4 | 233 | 35.9 |
| 186.crafty | 4 | 53.4 | 86.9 | 4 | 53.4 | 86.9 |
| 197.parser | 4 | 181 | 46.2 | 4 | 146 | 57.0 |
| 252.eon | 4 | 62.0 | 97.2 | 4 | 55.7 | 108 |
| 253.perlbmk | 4 | 121 | 69.2 | 4 | 113 | 74.0 |
| 254.gap | 4 | 83.1 | 61.4 | 4 | 83.5 | 61.1 |
| 255.vortex | 4 | 87.5 | 101 | 4 | 85.5 | 103 |
| 256.bzip2 | 4 | 128 | 54.4 | 4 | 128 | 54.4 |
| 300.twolf | 4 | 255 | 54.6 | 4 | 195 | 71.2 |

### Hardware

| | |
|---|---|
| CPU: | AMD Opteron (TM) 275 |
| CPU MHz: | 2200 |
| FPU: | Integrated |
| CPU(s) enabled: | 4 cores, 2 chips, 2 cores/chip |
| CPU(s) orderable: | 1,2 |
| Parallel: | No |
| Primary Cache: | 64KBI + 64KBD (on chip) per core |
| Secondary Cache: | 1024KB(I+D) (on chip) per core |
| L3 Cache: | N/A |
| Other Cache: | N/A |
| Memory: | 4x2048MB PC3200 CL3.0 |
| Disk Subsystem: | 1x60GB ATA100 5400RPM |
| Other Hardware: | |

### Software

| | |
|---|---|
| Operating System: | SuSE Linux Enterprise Server 9 (x86_64) SP 1<br>SuSE kernel 2.6.5-7.139-smp |
| Compiler: | PathScale EKO Compiler Suite, Release 2.1 |
| File System: | Linux/ext2 |
| System State: | Multi-user run level 3 |

## Notes/Tuning Information

```
+FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata
Base tuning for C programs:   -O3 -ipa +FDO
Base tuning for C++ programs: -Ofast +FDO
Portability flags:
  186.crafty:  -DLINUX_i386
  252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64 srcalt=fmax_errno
  253.perlbmk: -DSPEC_CPU2000_LINUX_I386 -DSPEC_CPU2000_NEED_BOOL
               -DSPEC_CPU2000_GLIBC22 -DSPEC_CPU2000_LP64
  254.gap:     -DSYS_IS_USG -DSYS_HAS_IOCTL_PROTO -DSYS_HAS_TIME_PROTO
               -DSYS_HAS_SIGNAL_PROTO  -DSYS_HAS_ANSI -DSYS_HAS_CALLOC_PROTO
               -DSPEC_CPU2000_LP64
  255.vortex:  -DSPEC_CPU2000_LP64 srcalt=closed_files
Peak tuning:
  164.gzip:    -Ofast
  175.vpr:     -O2 -ipa -OPT:alias=disjoint -CG:p2align_freq=500000 -INLINE:aggressive=on
               -IPA:space=300:plimit=10000:callee_limit=5000:linear=on +FDO
  176.gcc:     basepeak=true
  181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32
  186.crafty:  -Ofast
  197.parser:  -O3 -ipa -m32 -IPA:ctype=on +FDO
```

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## Notes/Tuning Information (Continued)

```
    252.eon:     -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off -OPT:treeheight=on
                -TENV:X=4:frame_pointer=off -fno-exceptions -LNO:fu=10:full_unroll_outer=on
                 -IPA:plimit=4000:pu_reorder=1 +FDO
    253.perlbmk: -O3 -ipa -IPA:plimit=10000 +FDO
    254.gap:     -O3 -ipa -OPT:transform_to_memlib=on
    255.vortex:  -Ofast -IPA:space=70:plimit=3000
                 -OPT:goto=off:unroll_analysis=off:unroll_size=0:unroll_times_max=8
                 -LNO:opt=0 -TENV:X=4
    256.bzip2:   basepeak=true
    300.twolf:   -O2 -OPT:unroll_times=8:unroll_size=256:alias=disjoint:Ofast
                 -CG:gcm=off:p2align_freq=100000 -WOPT:mem_opnds=on -m32
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
   Taskset utility used to bind process to CPU(s)
```