# CINT2000 Result

Copyright ©1999-2005, Standard Performance Evaluation Corporation

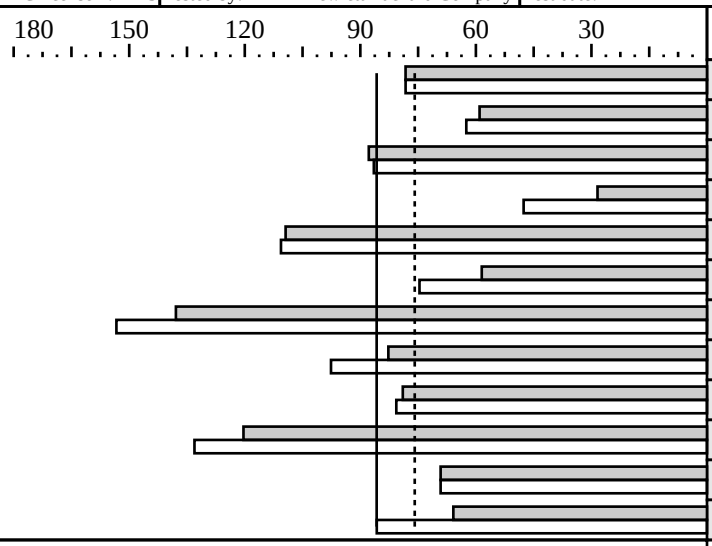
## Hewlett-Packard Company

ProLiant DL385 G2 (AMD Opteron (TM) 2220SE)

SPECint_rate2000 = 85.8

SPECint_rate_base2000 = 75.9

SPEC license #: 3 | Tested by: Hewlett-Packard Company | Test date: Oct-2006 | Hardware Avail: Jan-2007 | Software Avail: Sep-2006




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 4 | 83.0 | 78.3 | 4 | 83.0 | 78.2 |
| 175.vpr | 4 | 110 | 59.0 | 4 | 104 | 62.5 |
| 176.gcc | 4 | 58.1 | 87.8 | 4 | 59.0 | 86.5 |
| 181.mcf | 4 | 294 | 28.4 | 4 | 175 | 47.6 |
| 186.crafty | 4 | 42.4 | 109 | 4 | 42.0 | 111 |
| 197.parser | 4 | 143 | 58.5 | 4 | 112 | 74.6 |
| 252.eon | 4 | 43.7 | 138 | 4 | 39.3 | 153 |
| 253.perlbmk | 4 | 101 | 82.7 | 4 | 85.6 | 97.6 |
| 254.gap | 4 | 64.6 | 79.0 | 4 | 63.3 | 80.7 |
| 255.vortex | 4 | 73.3 | 120 | 4 | 66.3 | 133 |
| 256.bzip2 | 4 | 101 | 69.2 | 4 | 101 | 69.2 |
| 300.twolf | 4 | 211 | 65.9 | 4 | 162 | 85.7 |

### Hardware

| | |
|---|---|
| CPU: | AMD Opteron (TM) 2220SE |
| CPU MHz: | 2800 |
| FPU: | Integrated |
| CPU(s) enabled: | 4 cores, 2 chips, 2 cores/chip |
| CPU(s) orderable: | 1,2 chips |
| Parallel: | No |
| Primary Cache: | 64 KB I + 64 KB D on chip per core |
| Secondary Cache: | 1 MB I+D on chip per core |
| L3 Cache: | N/A |
| Other Cache: | N/A |
| Memory: | 16 GB (8x2 GB PC2-5300P CL5.0) |
| Disk Subsystem: | 1x36 GB 10 K SAS |
| Other Hardware: | |

### Software

| | |
|---|---|
| Operating System: | SuSE Linux Enterprise Server 9 (x86_64) SP 3<br>SuSE kernel 2.6.5-7.244-smp |
| Compiler: | PathScale EKOPath(TM) Compiler Suite, Release 2.5 |
| 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:   -Ofast +FDO
Base tuning for C++ programs: -Ofast +FDO
Portability flags:
  186.crafty:  -DLINUX_i386
  252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64
  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_CALLOC_PROTO -DSPEC_CPU2000_LP64
  255.vortex:  -DSPEC_CPU2000_LP64
Peak tuning:
  164.gzip:    -O3 -ipa -WOPT:val=0 -OPT:unroll_size=0 +FDO
  175.vpr:     -O3 -ipa -m32 +FDO
  176.gcc:     -O3 -IPA:plimit=10000 -LNO:opt=0 -OPT:goto=off +FDO
  181.mcf:     -O3 -ipa -IPA:field_reorder=on -m32 +FDO
  186.crafty:  -Ofast -CG:local_fwd_sched=on -LNO:opt=0 -WOPT:val=0 +FDO
  197.parser:  -O3 -ipa -m32 -IPA:ctype=on +FDO
  252.eon:     -Ofast -CG:gcm=off:p2align_freq=1:prefetch=off -IPA:plimit=4000
               -OPT:treeheight=on -TENV:X=4:frame_pointer=off -fno-exceptions
```

Copyright ©1999-2005, Standard Performance Evaluation Corporation



## Notes/Tuning Information (Continued)

```
                -LNO:fu=10:full_unroll_outer=on -GRA:optimize_boundary=on +FDO
  253.perlbmk: -O2 -ipa -OPT:Ofast:transform_to_memlib=off
                -fno-math-errno -IPA:plimit=10000 +FDO
  254.gap:     -Ofast -IPA:min_hotness=5 -OPT:alias=disjoint -CG:movnti=1 +FDO
  255.vortex:  -Ofast -OPT:goto=off +FDO
  256.bzip2:   basepeak=true
  300.twolf:   -O2 -CG:gcm=off:p2align_freq=100000
                -OPT:Ofast:unroll_times_max=8:unroll_size=256:alias=disjoint
                -WOPT:mem_opnds=on -m32 +FDO
BIOS Configuration Notes
  Node Interleaving Disabled
Other Configuration Notes
  Taskset utility used to bind process to CPU(s)
```