# CINT2000 Result

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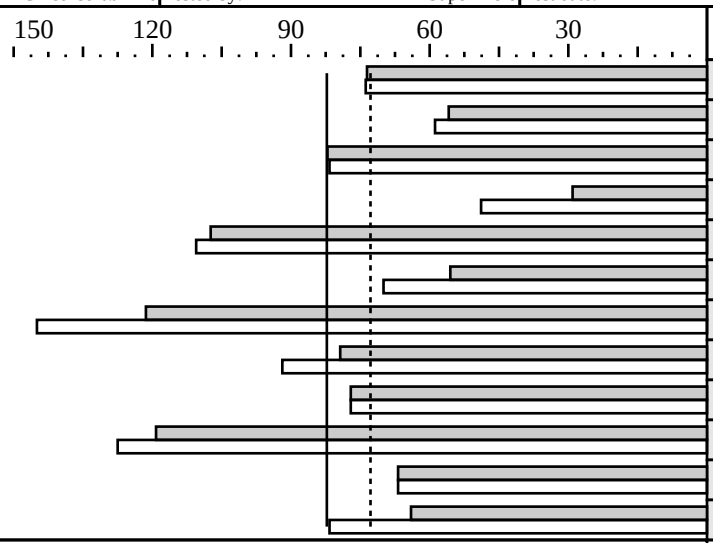
## Supermicro

Motherboard H8DM8-2, AMD Opteron(TM) 2218

SPECint_rate2000 = 82.2

SPECint_rate_base2000 = 72.8

SPEC license #01176 | Tested by: Supermicro | Test date: Sep-2006 | Hardware Avail: Sep-2006 | Software Avail: Aug-2005




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 4 | 88.3 | 73.6 | 4 | 88.0 | 73.8 |
| 175.vpr | 4 | 116 | 55.9 | 4 | 110 | 58.8 |
| 176.gcc | 4 | 62.2 | 82.1 | 4 | 62.5 | 81.7 |
| 181.mcf | 4 | 287 | 29.1 | 4 | 171 | 48.9 |
| 186.crafty | 4 | 43.2 | 107 | 4 | 42.0 | 111 |
| 197.parser | 4 | 150 | 55.5 | 4 | 119 | 70.0 |
| 252.eon | 4 | 49.7 | 121 | 4 | 41.6 | 145 |
| 253.perlbmk | 4 | 105 | 79.4 | 4 | 90.9 | 91.9 |
| 254.gap | 4 | 66.2 | 77.1 | 4 | 66.2 | 77.1 |
| 255.vortex | 4 | 74.0 | 119 | 4 | 69.1 | 127 |
| 256.bzip2 | 4 | 104 | 66.8 | 4 | 104 | 66.8 |
| 300.twolf | 4 | 217 | 64.0 | 4 | 170 | 81.7 |

### Hardware

| | |
|---|---|
| CPU: | AMD Opteron(TM) 2218 processor |
| CPU MHz: | 2600 |
| 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: | 8x2048MB, DDR2-667 ECC Dual Rank CL4 Reg |
| Disk Subsystem: | SATA, 400 GB |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | SuSE Linux Enterprise Server 9 for AMD64, SP3 |
| Compiler: | PathScale EKOPath(TM) Compiler Suite, Release 2.3 |
| File System: | Linux/reiserfs |
| System State: | Multi-user, run level 3 |

## Notes/Tuning Information

```
Tested by Supermicro Computer, Inc.

 +FDO: PASS1= -fb_create fbdata  PASS2= -fb_opt fbdata

 Baseline optimization flags:
   C programs:       -Ofast +FDO
   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
```

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## Notes/Tuning Information (Continued)

```
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
             -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
255.vortex:  -Ofast -OPT:goto=off -CG:p2align=on
             -GRA:optimize_boundary=on -IPA:min_hotness=120 +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
Taskset utility used to bind CPU(s) to processes
Memory populated at location DIMMA 1A, DIMMA 1B, DIMMA 2A, DIMMA 2B for CPU1 and DIMMB 1A, DIMMB 1B, DIMMB 2A, DIMMB 2B for CPU2
Tested systems can be used with SC811S-520 case,
To ensure system stability, a 550W (minimum) ATX power supply [ 4-pin (+12V), 8-pin (+12V) and 24-pin are required]
Product description located as of H8DM8: http://www.supermicro.com/Aplus/motherboard/Opteron2000/MCP55/H8DM8-2.cfm
```