# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

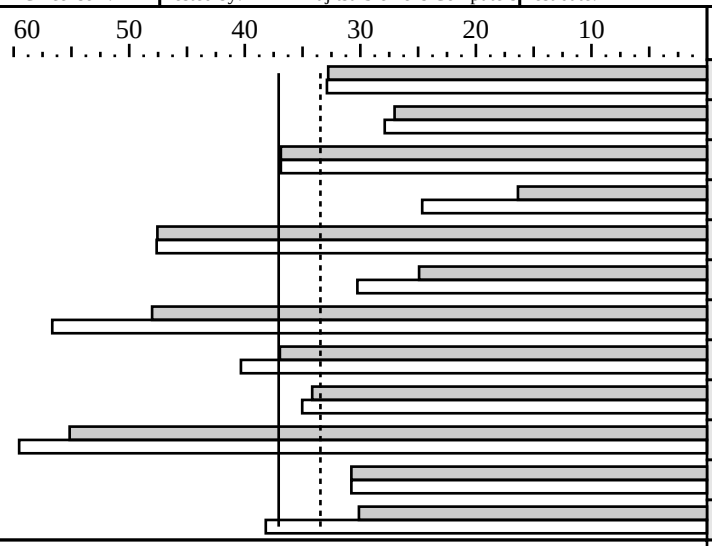
## Fujitsu Siemens Computers

CELSIUS V810, Opteron (TM) 250, Linux 64-bit

SPECint_rate2000 = 37.1

SPECint_rate_base2000 = 33.5

SPEC license #: 22 | Tested by: Fujitsu Siemens Computers | Test date: Nov-2004 | Hardware Avail: Aug-2004 | Software Avail: Oct-2004




| Benchmark | Base Copies | Base Runtime | Base Ratio | Copies | Runtime | Ratio |
|---|---|---|---|---|---|---|
| 164.gzip | 2 | 99.1 | 32.8 | 2 | 98.8 | 32.9 |
| 175.vpr | 2 | 120 | 27.0 | 2 | 116 | 27.9 |
| 176.gcc | 2 | 69.2 | 36.9 | 2 | 69.2 | 36.9 |
| 181.mcf | 2 | 255 | 16.4 | 2 | 169 | 24.6 |
| 186.crafty | 2 | 48.8 | 47.6 | 2 | 48.7 | 47.6 |
| 197.parser | 2 | 168 | 24.9 | 2 | 138 | 30.3 |
| 252.eon | 2 | 62.8 | 48.0 | 2 | 53.2 | 56.7 |
| 253.perlbmk | 2 | 113 | 37.0 | 2 | 104 | 40.3 |
| 254.gap | 2 | 74.7 | 34.2 | 2 | 72.9 | 35.0 |
| 255.vortex | 2 | 79.9 | 55.2 | 2 | 74.1 | 59.5 |
| 256.bzip2 | 2 | 113 | 30.8 | 2 | 113 | 30.8 |
| 300.twolf | 2 | 231 | 30.1 | 2 | 182 | 38.2 |

### Hardware

| | |
|---|---|
| CPU: | AMD Opteron (TM) 250 |
| CPU MHz: | 2400 |
| FPU: | Integrated |
| CPU(s) enabled: | 2 cores, 2 chips, 1 core/chip |
| CPU(s) orderable: | 1,2 |
| Parallel: | No |
| Primary Cache: | 64KBI + 64KBD on chip |
| Secondary Cache: | 1024KB(I+D) on chip |
| L3 Cache: | N/A |
| Other Cache: | N/A |
| Memory: | 4 x 512 MB PC3200 CL3-3-3 DDR SDRAM |
| Disk Subsystem: | S-ATA 7200 rpm |
| Other Hardware: | None |

### Software

| | |
|---|---|
| Operating System: | SuSE Linux 9.1 (AMD64) 2.6.4-52-smp |
| Compiler: | PathScale EKO Compiler Suite, Release 1.4 - (both for C and C++) |
| File System: | Linux/Reiser |
| System State: | Multi-user SuSE Run level 3 |

## Notes/Tuning Information

```
Tested by Fujitsu Siemens Computers

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

 Portability Flags:
   186.crafty:  -DLINUX_i386
   252.eon:     -DHAS_ERRLIST -DSPEC_CPU2000_LP64
                Approved srcalt fmax_errno is used
   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
   300.twolf:   -DHAVE_SIGNED_CHAR

 Baseline optimization flags:
   C programs:       -O3 -ipa +FDO
   C++ programs:     -Ofast +FDO
```

Copyright ©1999-2004, Standard Performance Evaluation Corporation



## Notes/Tuning Information (Continued)

```
Peak tuning:
164.gzip:  -Ofast +FDO
175.vpr:   -O2 -ipa -OPT:alias=disjoint -CG:p2align_freq=500000 +FDO
   loader  -INLINE:aggressive=on
           -IPA:space=300:plimit=10000:callee_limit=5000:linear=on
176.gcc:   basepeak = true
181.mcf:   -O3 -ipa -IPA:field_reorder=on -m32 +FDO
186.crafty: -Ofast +FDO
197.parser: -O3 -ipa -m32 +FDO
   loader   -IPA:ctype=on
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 +FDO
   loader  -IPA:plimit=4000:pu_reorder=1
253.perlbmk: -O3 -ipa +FDO
   loader    -IPA:plimit=10000
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 +FDO
256.bzip2: basepeak = true
300.twolf: -O2
           -OPT:unroll_times_max=8:unroll_size=256:alias=disjoint:Ofast
           -CG:gcm=off:p2align_freq=100000 -WOPT:mem_opnds=on
           -m32 +FDO

BIOS Version 1.05
BIOS default settings have been used. These include
- Node Memory Interleave disabled
- ACPI SRAT Table enabled

For information about Fujitsu Siemens Computers in your country please see:
http://www.fujitsu-siemens.com/countries
```