



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire V880 (1050MHz)

SPECint2000 = 626
SPECint_base2000 = 560

SPEC license #: 6 Tested by: Sun Microsystems Test date: May-2003 Hardware Avail: May-2003 Software Avail: May-2003

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	337	416	272	514	
175.vpr	1400	296	473	275	510	
176.gcc	1100	184	598	174	634	
181.mcf	1800	300	600	261	689	
186.crafty	1000	172	582	147	682	
197.parser	1800	360	500	310	580	
252.eon	1300	193	675	186	701	
253.perlbnk	1800	321	561	292	615	
254.gap	1100	272	404	237	465	
255.vortex	1900	220	862	195	975	
256.bzip2	1500	246	609	228	657	
300.twolf	3000	522	575	480	625	

Hardware

CPU: UltraSPARC III Cu
 CPU MHz: 1050
 FPU: Integrated
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip
 CPU(s) orderable: 2,4,8
 Parallel: No
 Primary Cache: 32KBI+64KBD on chip
 Secondary Cache: 8MB(I+D) off chip
 L3 Cache: None
 Other Cache: None
 Memory: 2GB 4-way interleaved
 Disk Subsystem: 1 x 36GB
 Other Hardware: None

Software

Operating System: Solaris 9 4/03
 Compiler: Sun ONE Studio 8
 Sun Performance Library 8
 File System: ufs with ufs logging
 System State: Multi-User

Notes/Tuning Information

Compiler invocation:

```
C: cc
CXX: CC
F90: f90
F77: f90
```

Integer base flags:

-fast -xipo=2 with ONESTEP=yes and feedback

Integer peak flags:

ONESTEP=yes and feedback for all benchmarks

```
164.gzip: -xO4 -xbuiltin=%all -xtarget=native -xalias_level=std
          -xipo=2 -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100
175.vpr: -fast -xalias_level=std -xipo=2
          -Wc,-Qeps:enabled=1,-Qeps:rp_filtering_margin=100 -lmopt -lm
176.gcc: -fast -xipo=2 -l12amm
181.mcf: -fast -xipo=2 -xprefetch_level=3 -Wc,-Qeps:enabled=1
186.crafty: -fast -xinline= -xipo=2 -xalias_level=strong -W2,-Ashort_ldst
            Feedback adds -xlinkopt in PASS2
```



CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems
Sun Fire V880 (1050MHz)

SPECint2000 = 626
SPECint_base2000 = 560

SPEC license #: 6 | Tested by: Sun Microsystems | Test date: May-2003 | Hardware Avail: May-2003 | Software Avail: May-2003

Notes/Tuning Information (Continued)

```

197.parser: -fast -xipo=2 -xalias_level=strong
            -Wc,-Qgsched-T6,-Qipa:valueprediction
252.eon:    -fast -xipo=2 -xalias_level=compatible -noex
            -Qoption cg -Qeps:enabled=1,-Qeps:ws=32
253.perlbnk: -xO5 -xtarget=native -xipo -xalias_level=std -xsafe=mem
            -Wc,-Qeps:enabled=1,-Qeps:ws=8,-Qiselect-sw_pf_tbl_th=20,
            -Qiselect-funcalign=32,-Qicache-chbab=1
254.gap:    -fast -xipo=2 -xalias_level=strong -xvector
            -xprefetch_level=3 -W2,-Abcopy
255.vortex: -fast -xrestrict -xipo=2
            -W2,-crit,-Ainline:recursion=1:cs=500:irs=6000
            -Wc,-Qeps:enabled=1,-Qdepgraph-early_cross_call=1,
            -Qiselect-funcalign=32,-Qpeep-Sh0 -l12amm
256.bzip2:  -fast -xipo -xalias_level=strong -xrestrict
            -Wc,-Qeps:enabled=1
300.twolf:  -fast -xalias_level=strong -xsafe=mem -xipo=2
            -xprefetch=no%auto -Wc,-Qms_pipe+intdivusefp

```

Feedback is done as follows, unless otherwise noted:

```

fdo_pre0:  rm -rf ./feedback.profile ./SunWS_cache
PASS1:     -xprofile=collect:./feedback
PASS2:     -xprofile=use:./feedback

```

Portability:

```

176.gcc:   -Dalloca=__builtin_alloca -DHOST_WORDS_BIG_ENDIAN
186.crafty: -DSUN
252.eon:   -library=iostream
253.perlbnk: -DSPEC_CPU2000_SOLARIS
254.gap:   -DSYS_IS_USG -DSYS_HAS_TIME_PROTO -DSYS_HAS_SIGNAL_PROTO
            -DSYS_HAS_CALLOC_PROTO -DSYS_HAS_IOCTL_PROTO

```

Shell Environments:

```

Stack size set to unlimited via "ulimit -s unlimited"
MPSSHEAP=4M
MPSSSTACK=4M
LD_PRELOAD=mpss.so.1

```

```

Scheduling class set to Real Time with priority=15 and
time quantum=20 via "priocntl -e -c RT -p 15 -t 20"

```

Kernel Parameters (/etc/system):

```

set cpu_bringup_set=4
set autoup=900
set tune_t_fsflushr=1

```

System Settings:

```

2nd CPU disabled at boot time by using /etc/system
parameter "cpu_bringup_set"

```