



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems  
Sun Blade 1500 (1.5GHz)

SPECint2000 = 796  
SPECint\_base2000 = 697

SPEC license #: 6 Tested by: Sun Microsystems, Santa Clara Test date: Dec-2004 Hardware Avail: Feb-2005 Software Avail: Jan-2005

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	
164.gzip	1400	210	666	181	772	
175.vpr	1400	233	600	228	614	
176.gcc	1100	157	702	124	887	
181.mcf	1800	523	344	304	591	
186.crafty	1000	122	822	102	979	
197.parser	1800	294	613	261	689	
252.eon	1300	134	973	134	973	
253.perlbnk	1800	237	759	216	833	
254.gap	1100	181	607	163	675	
255.vortex	1900	145	1310	138	1377	
256.bzip2	1500	242	621	234	641	
300.twolf	3000	406	738	377	797	

### Hardware

CPU: UltraSPARC IIIi  
 CPU MHz: 1503  
 FPU: Integrated  
 CPU(s) enabled: 1 core, 1 chip, 1 core/chip  
 CPU(s) orderable: 1  
 Parallel: No  
 Primary Cache: 32KBI+64KBD on chip  
 Secondary Cache: 1MB(I+D) off chip  
 L3 Cache: None  
 Other Cache: None  
 Memory: 4GB (4x1GB DIMM)  
 Disk Subsystem: 1 x 120GB IDE  
 Other Hardware: None

### Software

Operating System: Solaris 10  
 Compiler: Sun Studio 9  
 File System: ufs  
 System State: Multi-User

## Notes/Tuning Information

Compiler invocation:

C: cc  
CXX: CC

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=30, -Qeps:do\_spec\_load=1  
 175.vpr: -fast -xalias\_level=std -xipo=2  
 -Wc,-Qeps:enabled=1,-Qeps:rp\_filtering\_margin=100,-Qeps:do\_spec\_load=1 -lmopt -lm  
 176.gcc: -fast -xipo=2 -l12amm  
 181.mcf: -fast -xipo=2 -xprefetch\_level=3 -Wc,-Qeps:enabled=1  
 -W2,-Apf:l1list=3:noinnerl1list  
 186.crafty: -fast -xinline= -xipo=2 -xalias\_level=strong -W2,-Ashort\_ldst  
 Feedback adds -xlinkopt in PASS2  
 197.parser: -fast -xipo=2 -xalias\_level=strong



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems  
Sun Blade 1500 (1.5GHz)

SPECint2000 = 796  
SPECint\_base2000 = 697

SPEC license #: 6 | Tested by: Sun Microsystems, Santa Clara | Test date: Dec-2004 | Hardware Avail: Feb-2005 | Software Avail: Jan-2005

## Notes/Tuning Information (Continued)

```

-Wc,-Qgsched-T6,-Qipa:valueprediction
252.eon: basepeak=yes
253.perlbmk: -xO5 -xtarget=native -xmalign=4s -xipo -Wc,-Qeps:enabled=1
-Qeps:ws=8,-xalias_level=std -xsafe=mem -Wc,-Qiselect-funcalign=32,
-Qicache-chbab=1 -Wc,-Qiselect-sw_pf_tbl_th=20,-Qeps:do_spec_load=1 -xprefetch=no
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 -ll2amm
256.bzip2: -fast -xipo -xalias_level=strong -xrestrict
-Wc,-Qeps:enabled=1 -xsafe=mem -Qeps:rp_filtering_margin=99
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
srcalt = fmax_errno
253.perlbmk: -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=512K
MPSSSTACK=512K
LD_PRELOAD=mpss.so.1

```

Kernel Parameters (/etc/system):

```

autoup=900
tune_t_fsflushr=1

```