



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems  
Sun Fire V240 (1002MHz)

SPECint2000 = 553  
SPECint\_base2000 = 482

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

Benchmark	Reference Time	Base Runtime	Base Ratio	Runtime	Ratio	300 600 900 1200			
164.gzip	1400	332	421	271	517	[Bar chart]			
175.vpr	1400	336	417	311	450	[Bar chart]			
176.gcc	1100	204	538	180	610	[Bar chart]			
181.mcf	1800	641	281	386	466	[Bar chart]			
186.crafty	1000	176	567	153	655	[Bar chart]			
197.parser	1800	423	426	370	486	[Bar chart]			
252.eon	1300	207	629	199	652	[Bar chart]			
253.perlbnk	1800	345	521	318	566	[Bar chart]			
254.gap	1100	264	416	234	471	[Bar chart]			
255.vortex	1900	246	773	217	876	[Bar chart]			
256.bzip2	1500	334	450	325	461	[Bar chart]			
300.twolf	3000	579	518	540	556	[Bar chart]			

### Hardware

CPU: UltraSPARC IIIi  
CPU MHz: 1002  
FPU: Integrated  
CPU(s) enabled: 1 core, 1 chip, 1 core/chip  
CPU(s) orderable: 1-2  
Parallel: No  
Primary Cache: 32KBI+64KBD on chip  
Secondary Cache: 1MB(I+D) on chip  
L3 Cache: None  
Other Cache: None  
Memory: 4GB 8-way interleaved  
Disk Subsystem: 2 x 36GB SEAGATE ST336605L  
Other Hardware: None

### Software

Operating System: Solaris 8 HW 12/02  
Compiler: Sun ONE Studio 8 (pre-FCS build 03/9)  
Sun Performance Library 8 (pre-FCS build 3/9)  
File System: ufs with ufs logging  
System State: Multi-User

## Notes/Tuning Information

\*\*\*\*\*

SPEC has determined that this result was not in compliance with the SPEC continued availability policy. Specifically, although the configuration tested was available within the required 3 months of publication, it was then unavailable for a period of 30 days or more during the first 90 days after initial overall availability. The vendor informs SPEC that the configuration is again available, on or before the date of this notice, 08/13/2003.

\*\*\*\*\*

Compiler invocation:  
C: cc  
CXX: CC  
F90: f90  
F77: f90



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems  
Sun Fire V240 (1002MHz)

SPECint2000 = 553  
SPECint\_base2000 = 482

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

## Notes/Tuning Information (Continued)

Integer base flags:

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

Integer peak flags:

ONESTEP=yes and feedback for all benchmarks

164.gzip: -xO5 -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 -ll2amm

181.mcf: -fast -xipo=2 -xprefetch\_level=3 -Wc,-Qeps:enabled=1  
-W2,-Apf:l1list=3:noninnerl1list

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  
-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 -Wc,-Qms\_pipe+alldoall

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=2 -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"  
PRISM\_HEAP=268435456  
PRISM\_MODE=2

Kernel Parameters (/etc/system):

default  
autoup=900  
tune\_t\_fsflushr=1



# CINT2000 Result

Copyright ©1999-2004, Standard Performance Evaluation Corporation

Sun Microsystems  
Sun Fire V240 (1002MHz)

SPECint2000 =	553
SPECint_base2000 =	482

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

## Notes/Tuning Information (Continued)

System Settings:

2nd CPU physically removed from the system