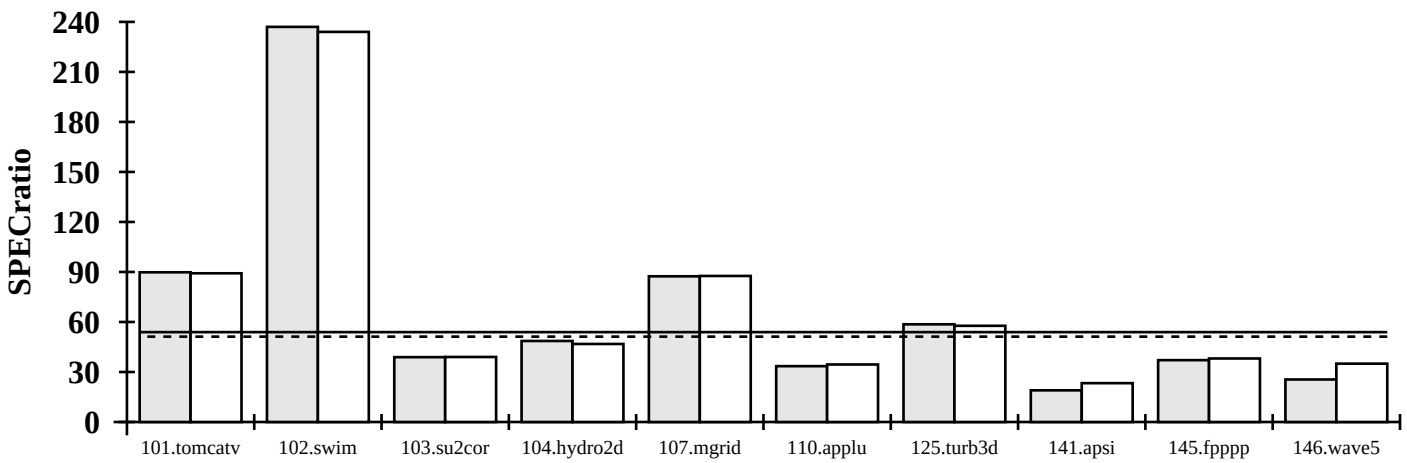
SPEC CFP95 Results

©Copyright 1995, Standard Performance Evaluation Corporation

SGI
2100: 4X 250MHz R10k

SPECfp95	=	53.9
SPECfp_base95	=	51.2

SPEC license #	04	Tested By:	SGI	Test Date:	Aug-99	Hardware Avail:	Aug-99	Software Avail:	Jul-99



Hardware/Software Configuration for:
2100: 4X 250MHz R10k

Hardware

Model Name:	2100: 4X 250MHz R10k
CPU:	250 MHz MIPS R10000 Processor Chip Revision: 3.4
FPU:	Integrated
Number of CPU(s):	4
Primary Cache:	32KBI + 32KBD on chip
Secondary Cache:	4MB (I+D)
Other Cache:	None
Memory:	1024MB
Disk Subsystem:	1 SCSI 9 GB
Other Hardware:	none

Software

Operating System:	IRIX64 6.5.5
Compiler:	MIPSpro Fortran 77 and 90 7.3
	MIPSpro Auto Parallelizing Option 7.3
	IRIX Development Foundation 1.2
File System:	XFS
System State:	Single-User

Benchmark # and Name	Reference Time	Base Run Time	Base SPEC Ratio	Run Time	SPEC Ratio
101.tomcatv	3700	41.2	89.8	41	89.2
102.swim	8600	36.4	237	37	234
103.su2cor	1400	36.0	38.9	36	39.0
104.hydro2d	2400	49.3	48.6	51	46.8
107.mgrid	2500	28.6	87.4	29	87.6
110.applu	2200	65.6	33.5	64	34.5
125.turb3d	4100	70.0	58.6	71	57.7
141.apsi	2100	111	19.0	90	23.3
145.fpppp	9600	258	37.1	252	38.1
146.wave5	3000	118	25.5	86	35.0
SPECfp_base95 (G. Mean)			51.2		
		SPECfp95 (G. Mean)			53.9

Notes/Tuning Information

```
base: f90 -Ofast=ip27 -pfa -LNO:prefetch_ahead=1:auto_dist=on
peak:
FEEDBACK:
.   PASS1 = -fb_create /tmp/FBDIR/$(EXENAME)
.   PASS2 = -fb_opt /tmp/FBDIR/$(EXENAME)
tomcatv: f90 -O3 -n32 -mips4 -LNO:prefetch_ahead=1:blocking=off:auto_dist=on -pfa
swim:     -Ofast=ip27 -LNO:prefetch_ahead=1:auto_dist=on:blocking=off -pfa
su2cor:  f90 -Ofast=ip27 -pfa -LNO:prefetch_ahead=1:auto_dist=on
hydro2d: -Ofast=ip27 -n32 -mips4 -TENV:X=4 -OPT:ieee_arith=3 -LNO:prefetch=2:fusion=2:blocking=off:auto_dist=on -pfa
mgrid:   -Ofast=ip27 -n32 -mips4 -LNO:fusion=2:prefetch=2:prefetch_ahead=1:auto_dist=on:blocking=off -pfa -LNO:ap=2
applu:    -Ofast=ip27 -LNO:fusion=2:auto_dist=on:blocking=off -pfa
turb3d:  -Ofast=ip27 -n32 -mips4 -OPT:ro=3:ieee_arith=3 -LNO:pf2=0:interchange=off:blocking=off -OPT:unroll_times_max=2 -pfa
apsi:     f77 -Ofast=ip27 -OPT:div_split -LNO:fusion=2:prefetch=0:blocking=off -bigp_off
fpppp:   f77 -Ofast=ip27 -LNO:fusion=2 FEEDBACK
wave5:   f77 -Ofast=ip27 -LNO:fusion=2 -IPA:common_pad_size=13:maxdepth=2 -OPT:unroll_size=400 -bigp_off
.
The following changes were made to the environment:
systune -i ; percent_totalmem_64k_pages = 50 ; nlpages_64k = 8000 ; quit
setenv PAGESIZE_DATA 64 ; setenv OMP_DYNAMIC FALSE ; setenv MPC_GANG OFF
setenv _DSM_PLACEMENT ROUND_ROBIN ; setenv _DSM_MUSTRUN
```

For More Information Contact:
SPEC
10754 Ambassador Drive, Suite 201
Manassas, VA 20109
(703) 331-0180
info@spec.org
http://www.spec.org/

--

Prepared By: --