

# CodeSonar Analysis Report

generated by Administrator on Wed Aug 23 15:50:01 2017  
for analysis at-test analysis 1

# Summary

Table 1: at-test analysis 1 Summary

Active Warnings	File Count	Project Name	Time Started	Time Finished	Machine
18	127	at-test	Mon Mar 27 01:41:30 2017	Mon Mar 27 01:42:22 2017	Jacks-MBP

Figure 1: at-test analysis 1, Warnings by Class

# Warnings

Figure 1: at-test analysis 1, Warnings by Class

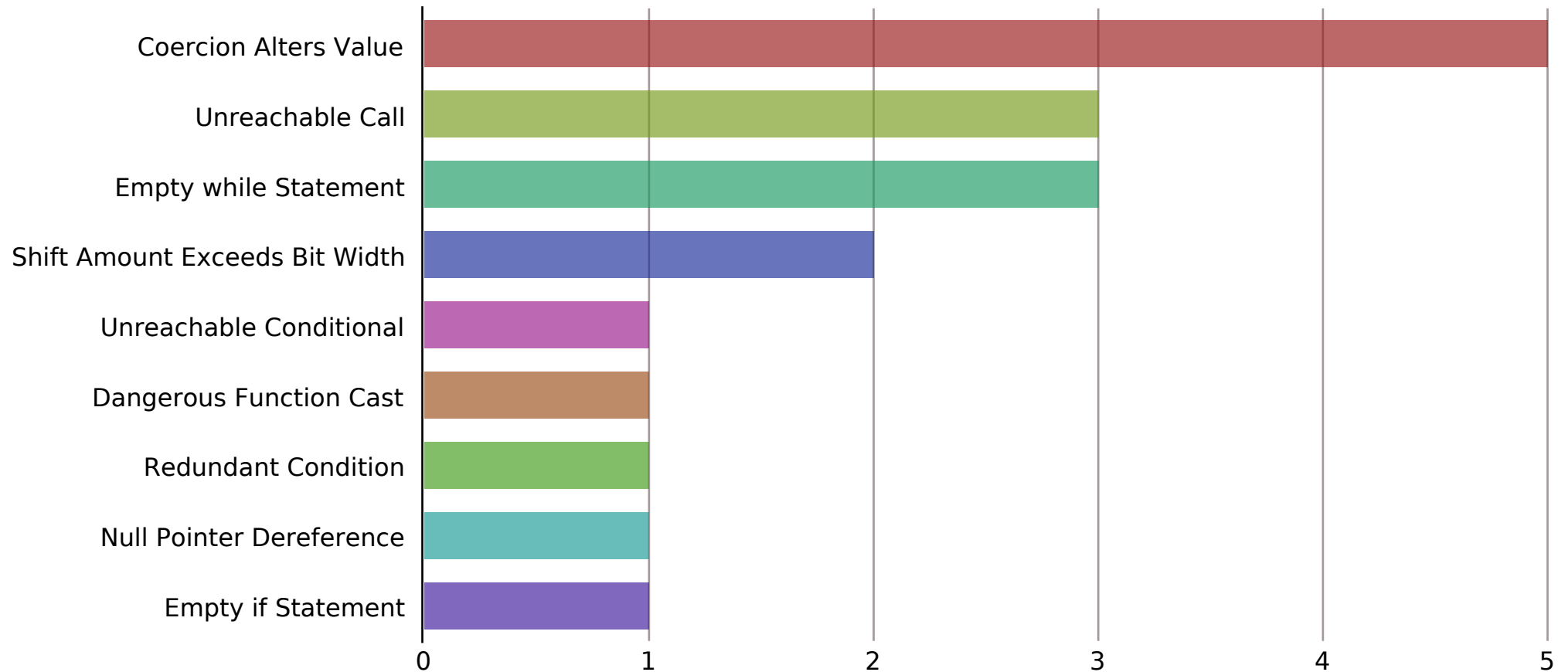


Table 3: at-test analysis 1, Warnings by File

Table 2: at-test analysis 1, Warnings by Class

Warning Class	Active Warnings
Coercion Alters Value	5
Empty while Statement	3
Unreachable Call	3
Shift Amount Exceeds Bit Width	2
Redundant Condition	1
Unreachable Conditional	1
Null Pointer Dereference	1
Dangerous Function Cast	1
Empty if Statement	1

Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
at-master-test.c	11	486	C
startup-gcc.c	6	330	C
ieee-addr.c	1	92	C

Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
stdio.h	0	27	C
types.h	0	7	C
_pthreadtypes.h	0	233	C
_timespec.h	0	50	C
timespec.h	0	63	C
_timeval.h	0	89	C
_sigset.h	0	43	C
select.h	0	87	C
_endian.h	0	39	C
endian.h	0	69	C
types.h	0	246	C
stdarg.h	0	127	C
stdio.h	0	769	C
crypto.h	0	104	C
sha256.h	0	103	C
trickle.h	0	94	C
radio.h	0	294	C

Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
mac.h	0	101	C
timesynch.h	0	150	C
rucb.h	0	79	C
route.h	0	84	C
rmh.h	0	102	C
rimestats.h	0	69	C
polite.h	0	192	C
polite-announcement.h	0	68	C
netflood.h	0	110	C
route-discovery.h	0	97	C
multihop.h	0	110	C
mesh.h	0	146	C
ipolite.h	0	197	C
memb.h	0	138	C
packetqueue.h	0	222	C
list.h	0	157	C
collect-link-estimate.h	0	126	C

Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
collect-neighbor.h	0	107	C
neighbor-discovery.h	0	95	C
queuebuf.h	0	117	C
chameleon.h	0	57	C
channel.h	0	64	C
tsch-conf.h	0	201	C
tcpip.h	0	378	C
uipt.h	0	684	C
uip.h	0	2219	C
frame802154.h	0	230	C
llsec802154.h	0	96	C
packetbuf.h	0	371	C
abc.h	0	144	C
broadcast.h	0	139	C
unicast.h	0	90	C
stunicast.h	0	112	C
runicast.h	0	117	C

Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
collect.h	0	171	C
announcement.h	0	274	C
rime.h	0	115	C
ioc.h	0	278	C
watchdog.h	0	42	C
leds.h	0	98	C
soc-adc.h	0	140	C
adc.h	0	75	C
at-master.h	0	123	C
cpu.h	0	72	C
ieee-addr.h	0	108	C
linkaddr.h	0	138	C
rom-util.h	0	130	C
sys-ctrl.h	0	342	C
cfs.h	0	285	C
cfs-coffee.h	0	146	C
cfs-coffee-arch.h	0	186	C



Table 3: at-test analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
cc2538-dev.h	0	126	C
flash.h	0	127	C
energest.h	0	155	C
loader.h	0	132	C
procinit.h	0	44	C
gptimer.h	0	335	C
rtimer-arch.h	0	96	C
rtimer.h	0	169	C
etimer.h	0	254	C
ctimer.h	0	166	C
clock.h	0	146	C
timer.h	0	101	C
autostart.h	0	62	C
cc-gcc.h	0	43	C
cc.h	0	165	C
lc-switch.h	0	75	C
lc.h	0	130	C

Table 4: at-test analysis 1, Warning Instances

File	Active Warnings	Total Lines	Language
pt.h	0	322	C
process.h	0	531	C
contiki-default-conf.h	0	285	C
core_cmFunc.h	0	87	C
cmsis_gcc.h	0	1373	C
core_cmInstr.h	0	87	C
core_cm3.h	0	1776	C
cc2538_cm3.h	0	144	C
nvic.h	0	69	C
reg.h	0	64	C
gpio.h	0	635	C
board.h	0	524	C

(Showing 100 of 127 Files)

Table 4: at-test analysis 1, Warning Instances

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
58	Shift Amount Exceeds Bit Width	at-master-test.c	config_gpio	133	None	None

Table 4: at-test analysis 1, Warning Instances

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
58	Shift Amount Exceeds Bit Width	at-master-test.c	config_gpio	137	None	None
49	Null Pointer Dereference	startup-gcc.c	reset_handler	317	None	None
49	Coercion Alters Value	at-master-test.c	at_cmd_flop_callback	160	None	None
49	Coercion Alters Value	at-master-test.c	at_cmd_reset_callback	203	None	None
49	Coercion Alters Value	at-master-test.c	at_cmd_adc_callback	309	None	None
49	Coercion Alters Value	at-master-test.c	at_cmd_read_callback	353	None	None
49	Coercion Alters Value	at-master-test.c	at_cmd_gpio_callback	257	None	None
38	Dangerous Function Cast	at-master-test.c	at_cmd_reset_callback	216	None	None
20	Redundant Condition	at-master-test.c	at_cmd_gpio_callback	269	None	None
18	Unreachable Call	at-master-test.c	at_cmd_gpio_callback	270	None	None
18	Unreachable Call	ieee-addr.c	ieee_addr_cpy_to	49	None	None
18	Unreachable Call	startup-gcc.c	reset_handler	320	None	None
15	Unreachable Conditional	startup-gcc.c	nmi_handler	302	None	None
12	Empty if Statement	at-master-test.c	process_thread_at_test_process	438	None	None
12	Empty while Statement	startup-gcc.c	default_handler	308	None	None
12	Empty while Statement	startup-gcc.c	nmi_handler	302	None	None
12	Empty while Statement	startup-gcc.c	reset_handler	326	None	None

# Analysis Metrics

Table 5: at-test analysis 1 Metrics

Metric Name	Value
Blank Lines	3159
Code Lines	9659
Comment Lines	12749
Include file instances	3
Lines with Code	11908
Lines with Comments	14998
Mixed Lines	2249
Top-level file instances	3
Total Lines	27816
User-defined functions	17

# File Metrics

Table 6: at-test analysis 1 File Metrics Summary

Metric Name	Max	Min	Avg
Blank Lines	388	0	24.87
Code Lines	713	0	76.06
Comment Lines	1302	0	100.39
Cyclomatic Complexity	76	0	0.71
Lines with Code	952	0	93.76
Lines with Comments	1422	0	118.09
Mixed Lines	649	0	17.71
Modified Cyclomatic Complexity	75	0	0.70
Taint Propagator Total	0	0	0
Taint Sink Total	10	0	0.09
Taint Source Total	0	0	0
Total Lines	2219	2	219.02

Table 7: at-test analysis 1 File Metrics Details

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File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
uip.h	2219	698	1422	578	1302	219
core_cm3.h	1776	952	1085	303	436	388
cmsis_gcc.h	1373	734	382	713	361	278
reent.h	794	558	220	462	124	112
stdio.h	769	622	126	577	81	66
cdefs.h	707	446	211	415	180	81
uioppt.h	684	159	487	122	450	75
gpio.h	635	240	536	66	362	33
contiki-conf.h	620	307	288	260	241	72
process.h	531	90	386	88	384	57
board.h	524	162	368	139	345	17
features.h	515	276	205	270	199	40
at-master-test.c	486	367	84	367	84	35
stdint.h	466	388	34	387	33	45
stddef.h	443	313	166	246	99	31
ieee754.h	434	303	68	293	58	73

Table 7: at-test analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
tcpip.h	378	55	283	53	281	42
packetbuf.h	371	153	185	141	173	45
sys-ctrl.h	342	150	249	81	180	12
gptimer.h	335	137	325	8	196	2
stdlib.h	335	291	28	277	14	30
startup-gcc.c	330	254	234	83	63	13
pt.h	322	57	231	56	230	35
radio.h	294	62	186	61	185	47
config.h	286	218	35	210	27	41
contiki-default-conf.h	285	95	185	63	153	37
cfs.h	285	61	200	60	199	25
ioc.h	278	154	147	124	117	7
announcement.h	274	35	213	34	212	27
etimer.h	254	23	208	22	207	24
_default_types.h	250	214	14	213	13	23
types.h	246	175	55	153	33	38
_pthreadtypes.h	233	116	105	80	69	48

Table 7: at-test analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
frame802154.h	230	101	138	65	102	27
packetqueue.h	222	31	168	30	167	24
_types.h	213	149	35	141	27	37
tsch-conf.h	201	97	85	90	78	26
ipolite.h	197	28	151	27	150	19
string.h	196	156	29	148	21	19
newlib.h	195	16	151	15	150	29
_intsup.h	195	163	26	162	25	7
polite.h	192	25	150	24	149	18
cfs-coffee-arch.h	186	83	97	80	94	9
collect.h	171	86	71	74	59	26
rtimer.h	169	37	115	33	111	21
ctimer.h	166	20	133	19	132	14
cc.h	165	64	96	47	79	22
list.h	157	30	111	29	110	17
energgest.h	155	94	44	91	41	20
timesynch.h	150	12	125	11	124	14



Table 7: at-test analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
cfs-coffee.h	146	12	122	11	121	13
mesh.h	146	24	110	23	109	13
clock.h	146	18	115	17	114	14
cc2538_cm3.h	144	63	119	11	67	14
abc.h	144	21	108	20	107	16
soc-adc.h	140	52	136	2	86	2
_ansi.h	140	93	35	92	34	13
broadcast.h	139	20	107	19	106	13
memb.h	138	21	102	20	101	16
linkaddr.h	138	24	103	20	99	15
loader.h	132	28	107	12	91	13
lc.h	130	14	108	10	104	12
rom-util.h	130	40	78	39	77	13
flash.h	127	38	101	22	85	4
stdarg.h	127	67	59	54	46	14
cc2538-dev.h	126	42	90	33	81	3
collect-link-estimate.h	126	16	94	15	93	17

Table 7: at-test analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
at-master.h	123	40	84	39	83	0
queuebuf.h	117	43	63	36	56	18
runicast.h	117	28	76	27	75	14
rime.h	115	43	60	42	59	13
stunicast.h	112	28	70	27	69	15
multihop.h	110	30	68	29	67	13
netflood.h	110	27	72	26	71	12
ieee-addr.h	108	18	89	14	85	5
collect-neighbor.h	107	42	51	41	50	15
crypto.h	104	17	78	16	77	10
sha256.h	103	17	79	16	78	8
rmh.h	102	29	63	28	62	11
mac.h	101	24	58	23	57	20
timer.h	101	13	79	12	78	10
leds.h	98	31	63	24	56	11
route-discovery.h	97	31	56	30	55	11
llsec802154.h	96	33	61	22	50	13

Table 7: at-test analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
rtimer-arch.h	96	15	73	14	72	9
neighbor-discovery.h	95	28	57	27	56	11
trickle.h	94	27	55	26	54	13
ieee-addr.c	92	34	54	34	54	4
_stdint.h	90	70	12	65	7	13
unicast.h	90	19	60	18	59	12
_timeval.h	89	48	37	42	31	10
core_cmFunc.h	87	22	53	19	50	15
select.h	87	46	29	42	25	16
core_cmInstr.h	87	22	53	19	50	15
route.h	84	25	50	24	49	10
rucb.h	79	30	38	29	37	12
adc.h	75	8	61	7	60	7
lc-switch.h	75	8	57	7	56	11
cpu.h	72	6	62	5	61	5
project-conf.h	70	11	55	10	54	5

(Showing 100 of 127 Files)