CodeSonar Analysis Report

generated by Administrator on Wed Aug 23 15:54:55 2017

for analysis powertrace analysis 1

Summary

Table 1: powertrace analysis 1 Summary

Active Warnings	File Count	Project Name	Time Started	Time Finished	Machine
6	115	powertrace	Tue Jul 11 19:05:55 2017	Tue Jul 11 19:06:51 2017	eduECFA.kent.ac.uk

Warnings

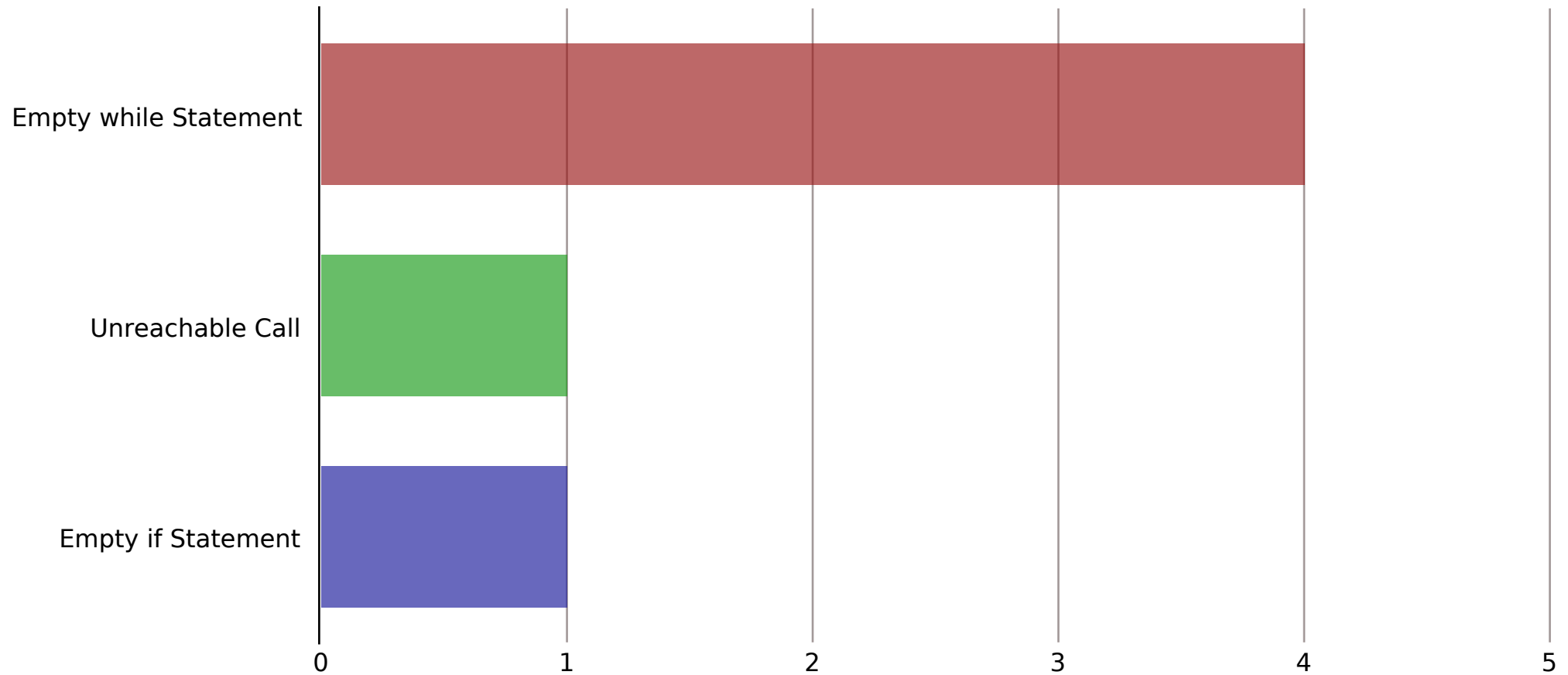Figure 1: powertrace analysis 1, Warnings by Class

Table 2: powertrace analysis 1, Warnings by Class

Warning Class	Active Warnings
Empty while Statement	4
Empty if Statement	1
Unreachable Call	1

Table 3: powertrace analysis 1, Warnings by File

File	Active Warnings	Total Lines	Language
startup_gcc.c	3	301	C
ieee-addr.c	1	90	C
fault-handlers.c	1	54	C
example-powertrace.c	1	92	C
ccfg.c	0	482	C
stdio.h	0	27	C
types.h	0	7	C
_pthreadtypes.h	0	233	C
types.h	0	246	C

File	Active Warnings	Total Lines	Language
stdarg.h	0	127	C
stdio.h	0	769	C
leds.h	0	98	C
sensors.h	0	72	C
button-sensor.h	0	42	C
powertrace.h	0	57	C
random.h	0	52	C
trickle.h	0	94	C
radio.h	0	294	C
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

File	Active Warnings	Total Lines	Language
netflood.h	0	110	C
route-discovery.h	0	97	C
multihop.h	0	110	C
mesh.h	0	146	C
tcpip.h	0	378	C
string.h	0	2	C
cdefs.h	0	707	C
lock.h	0	24	C
_types.h	0	8	C
_types.h	0	213	C
stddef.h	0	443	C
reent.h	0	794	C
ieeefp.h	0	434	C
config.h	0	286	C
newlib.h	0	195	C
_ansi.h	0	140	C
string.h	0	196	C

File	Active Warnings	Total Lines	Language
uipopt.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
collect.h	0	171	C
linkaddr.h	0	138	C
announcement.h	0	274	C
rime.h	0	115	C
energest.h	0	155	C
loader.h	0	132	C
procinit.h	0	44	C

File	Active Warnings	Total Lines	Language
rtimer-arch.h	0	74	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
pt.h	0	322	C
process.h	0	531	C
contiki-default-conf.h	0	285	C
hw_gpio.h	0	2247	C
gpio.h	0	704	C
hw_cpu_scs.h	0	3885	C

File	Active Warnings	Total Lines	Language
cpu.h	0	453	C
debug.h	0	85	C
hw_nvic.h	0	1026	C
interrupt.h	0	510	C
hw_ints.h	0	113	C
hw_ioc.h	0	9839	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
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

File	Active Warnings	Total Lines	Language
hw_memmap.h	0	157	C
ioc.h	0	1160	C
board.h	0	264	C
contiki-conf.h	0	424	C
contiki-version.h	0	41	C
rom.h	0	678	C

(Showing 100 of 115 Files)

Table 4: powertrace analysis 1, Warning Instances

Score	Warning Class	File Name	Procedure Name	Line Number	State	Owner
18	Unreachable Call	ieee-addr.c	ieee_addr_cpy_to	51	None	None
12	Empty if Statement	example-powertrace.c	process_thread_example_broadcast_process	70	None	None
12	Empty while Statement	fault-handlers.c	FaultISR	52	None	None
12	Empty while Statement	startup_gcc.c	FaultISRHandler	280	None	None
12	Empty while Statement	startup_gcc.c	IntDefaultHandler	298	None	None
12	Empty while Statement	startup_gcc.c	NmiSRHandler	262	None	None

Analysis Metrics

Table 5: powertrace analysis 1 Metrics

Metric Name	Value
Blank Lines	3924
Code Lines	14936
Comment Lines	22624
Include file instances	10
Lines with Code	16737
Lines with Comments	24425
Mixed Lines	1801
Top-level file instances	5
Total Lines	43285
User-defined functions	8

File Metrics

Table 6: powertrace analysis 1 File Metrics Summary

Metric Name	Max	Min	Avg
Blank Lines	393	0	34.12
Code Lines	3202	0	129.88
Comment Lines	6249	0	196.73
Cyclomatic Complexity	9	0	0.23
Lines with Code	3203	0	145.54
Lines with Comments	6250	0	212.39
Mixed Lines	570	0	15.66
Modified Cyclomatic Complexity	8	0	0.22
Taint Propagator Total	0	0	0
Taint Sink Total	2	0	0.03
Taint Source Total	0	0	0
Total Lines	9839	2	376.39

Table 7: powertrace analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
hw_ioc.h	9839	3203	6250	3202	6249	387
hw_cpu_scs.h	3885	1348	2145	1347	2144	393
hw_gpio.h	2247	1042	932	1041	931	274
uip.h	2219	698	1422	578	1302	219
hw_ccfg.h	1910	737	962	736	961	212
ioc.h	1160	300	904	203	807	53
hw_nvic.h	1026	663	880	93	310	53
reent.h	794	558	220	462	124	112
stdio.h	769	622	126	577	81	66
cdefs.h	707	446	211	415	180	81
gpio.h	704	182	509	146	473	49
uipopt.h	684	159	487	122	450	75
rom.h	678	429	120	409	100	149
process.h	531	90	386	88	384	57
features.h	515	276	205	270	199	40
interrupt.h	510	117	368	116	367	26

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
ccfg.c	482	265	203	202	140	77
stdint.h	466	388	34	387	33	45
cpu.h	453	168	264	167	263	22
stddef.h	443	313	166	246	99	31
ieeefp.h	434	303	68	293	58	73
contiki-conf.h	424	190	194	175	179	55
tcpip.h	378	55	283	53	281	42
packetbuf.h	371	153	185	141	173	45
pt.h	322	57	231	56	230	35
startup_gcc.c	301	157	174	107	124	20
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
announcement.h	274	35	213	34	212	27
board.h	264	100	166	95	161	3
etimer.h	254	23	208	22	207	24
_default_types.h	250	214	14	213	13	23

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
types.h	246	175	55	153	33	38
_pthreadtypes.h	233	116	105	80	69	48
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
hw_chip_def.h	198	111	77	110	76	11
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
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
hw_memmap.h	157	113	147	7	41	3

Table 7: powertrace analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
list.h	157	30	111	29	110	17
energest.h	155	94	44	91	41	20
timesynch.h	150	12	125	11	124	14
mesh.h	146	24	110	23	109	13
clock.h	146	18	115	17	114	14
abc.h	144	21	108	20	107	16
_ansi.h	140	93	35	92	34	13
broadcast.h	139	20	107	19	106	13
linkaddr.h	138	24	103	20	99	15
memb.h	138	21	102	20	101	16
loader.h	132	28	107	12	91	13
lc.h	130	14	108	10	104	12
setup.h	128	22	97	21	96	10
stdarg.h	127	67	59	54	46	14
collect-link-estimate.h	126	16	94	15	93	17
hw_types.h	123	27	84	26	83	13
runicast.h	117	28	76	27	75	14

Table 7: powertrace analysis 1 File Metrics Details

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
queuebuf.h	117	43	63	36	56	18
rime.h	115	43	60	42	59	13
hw_ints.h	113	50	101	5	56	7
stunicast.h	112	28	70	27	69	15
multihop.h	110	30	68	29	67	13
netflood.h	110	27	72	26	71	12
collect-neighbor.h	107	42	51	41	50	15
ieee-addr.h	105	12	94	9	91	2
rmh.h	102	29	63	28	62	11
timer.h	101	13	79	12	78	10
mac.h	101	24	58	23	57	20
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
neighbor-discovery.h	95	28	57	27	56	11
trickle.h	94	27	55	26	54	13
example-powertrace.c	92	33	43	33	43	16

File	Total Lines	Lines with Code	Lines with Comments	Code Lines	Comment Lines	Blank Lines
ieee-addr.c	90	29	55	29	55	6
_stdint.h	90	70	12	65	7	13
unicast.h	90	19	60	18	59	12
debug.h	85	14	65	13	64	7
route.h	84	25	50	24	49	10
hw_ccfg_simple_struct.h	81	29	71	5	47	5
rucb.h	79	30	38	29	37	12
lc-switch.h	75	8	57	7	56	11
rtimer-arch.h	74	13	59	12	58	3
sensors.h	72	27	36	23	32	13
rimestats.h	69	20	44	15	39	10
polite-announcement.h	68	6	57	5	56	6
channel.h	64	19	38	18	37	8
autostart.h	62	18	40	15	37	7
contiki.h	58	17	34	16	33	8
powertrace.h	57	12	38	11	37	8

(Showing 100 of 115 Files)