

Porting of drivers/thermal/qcom-spmi-temp-alarm.c

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1 Introduction

The driver `drivers/thermal/qcom-spmi-temp-alarm.c` was introduced in 2013 in the commit `c610afa`. It is a QPNP PMIC temperature alarm driver. This driver was accompanied by changes in documentation, a make file and a Kconfig file. Gcc produces 1 warning.

2 `struct thermal_zone_of_device_ops.get_temp`

Gcc reports that the field `get_temp` of the structure `struct thermal_zone_of_device_ops` is initialized to a value of the wrong type. We try the following patch query (`step1.cocci`):

```
@r1 depends on before@
identifier i,f1;
@@

struct thermal_zone_of_device_ops i = {
    .get_temp = \(\f1\|\&\f1\),
};

@r2 depends on before expression@
struct thermal_zone_of_device_ops e;
struct thermal_zone_of_device_ops *ep;
identifier f2;
@@

<+...\(e.get_temp\|ep->get_temp\)...+> = \(\f2\|\&\f2\)

@r depends on before@
identifier f,r1.f1,r2.f2;
@@

(
(
f1
|f2
)
&
f
)

@@
type T;
```

```

identifier r.f;
@@
- T
  f(...) { ... }

@@
identifier r.f;
parameter p;
@@
f(...,
- P
  ,...) { ... }

@@
identifier r.f;
parameter p;
@@
f(...,
+ P
  ,...) { ... }

```

There is one result, 17e8351 at 6%. The combination of the commit message and several examples in the patch show that the change should be as follows:

```

@r1 depends on before@
identifier i,f1;
@@
struct thermal_zone_of_device_ops i = {
  .get_temp = f1,
};

@@
identifier r.f,temp;
parameter p;
@@
f(...,
- long
+ int
  temp) { ... }

```

This is the only change between the two versions.
 == success (1/1)