

Porting of drivers/extcon/extcon-axp288.c

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1 Introduction

The driver `drivers/extcon/extcon-axp288.c` was introduced in 2013 in the commit `f031237`. It adds axp288 extcon driver support. This driver was accompanied by changes in `Kconfig` and a `makefile` as well as changes in a header file. `Gcc` produces 1 warning.

2 `devm_extcon_dev_allocate`, arg 2

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

```
// discard calls where the before and after arg lists are identical.
// can't require that the arg list size doesn't change, because it might go
// up and down, cf phy-exynos-mipi-video.c_069d2e2/step1.cocci

@bad depends on before || after@
expression list es;
@@

devm_extcon_dev_allocate(es)

@depends on !bad && (before || after)@
expression e1,e2;
flexible expression list[1] es;
@@

devm_extcon_dev_allocate(es,
- e1
+ e2
, ...)
```

There is one result, `ce6f749` at 25%. The code change is not very helpful, because in the commit the old code is `NULL`, whereas we have an array of strings. The commit message is somewhat helpful, in that it talks about a string getting converted to an unsigned int. We can convert the type of our array elements to unsigned int, but then we have to take care of the values. The example gives no help as to what these new values should be.

=== failure for the approach