

# Porting of drivers/pinctrl/pinctrl-tb10x.c

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## 1 Introduction

The driver drivers/pinctrl/pinctrl-tb10x.c was introduced in 2013 in the commit 5aad0db. It is a TB10x pin control driver. This driver was accompanied by changes in Kconfig and a makefile, and a new documentation file. Gcc produces 1 error and 2 warnings that reduce to 1 error.

## 2 struct pinmux\_ops.set\_mux

Gcc reports that the field `set_mux` of the structure `struct pinmux_ops` is not known. We try the following patch query (step1.cocci):

```
@bad1 depends on before@
struct pinmux_ops *e;
@@

e->set_mux

@bad2 depends on before@
struct pinmux_ops e;
@@

e.set_mux

@bad3 depends on before@
identifier i;
expression e;
@@

struct pinmux_ops i = {
    .set_mux
    = e,
};

@depends on !bad1 && !bad2 && !bad3@
struct pinmux_ops *e;
@@

+ e->set_mux

@depends on !bad1 && !bad2 && !bad3@
struct pinmux_ops e;
@@
```

```

+ e.set_mux

@depends on !bad1 && !bad2 && !bad3@
identifier i;
expression e;
@@

struct pinmux_ops i = {
+ .set_mux
  = e,
};

```

The first reported commit is 03e9f0c at 22%. This commit contains many examples showing that the `set_mux` field should be converted back to `enable`, and the function should be renamed to replace the suffix of `set_mux` by a suffix of `enable`.

This gives the following semantic patch. This is not suitable for use with prequel, due to the inverted direction and to the function rename.

```

@r@
identifier i,fn;
@@

struct pinmux_ops i = {
- .set_mux
+ .enable
  = fn,
};

@script:ocaml@
fn << r.fn;
fn2;
@@

fn2 := make_ident fn

@@
identifier r.i,r.fn;
@@

struct pinmux_ops i = {
  .enable =
-   fn
+   fn2
  ,
};

```

=== success 1/2, 03e9f0c