

Kernel driver wl-gpio

Author: Ville Syrjala <syrjala@sci.fi>

Description

GPIO 1-wire bus master driver. The driver uses the GPIO API to control the wire and the GPIO pin can be specified using GPIO machine descriptor tables. It is also possible to define the master using device tree, see [Documentation/devicetree/bindings/wl/wl-gpio.yaml](#)

Example (mach-at91)

```
#include <linux/gpio/machine.h>
#include <linux/wl-gpio.h>

static struct gpiod_lookup_table foo_wl_gpiod_table = {
    .dev_id = "wl-gpio",
    .table = {
        GPIO_LOOKUP_IDX("at91-gpio", AT91_PIN_PB20, NULL, 0,
            GPIO_ACTIVE_HIGH|GPIO_OPEN_DRAIN),
    },
};

static struct wl_gpio_platform_data foo_wl_gpio_pdata = {
    .ext_pullup_enable_pin = -EINVAL,
};

static struct platform_device foo_wl_device = {
    .name           = "wl-gpio",
    .id             = -1,
    .dev.platform_data = &foo_wl_gpio_pdata,
};

...
at91_set_GPIO_periph(foo_wl_gpio_pdata.pin, 1);
at91_set_multi_drive(foo_wl_gpio_pdata.pin, 1);
gpiod_add_lookup_table(&foo_wl_gpiod_table);
platform_device_register(&foo_wl_device);
```