

How To Debug Button

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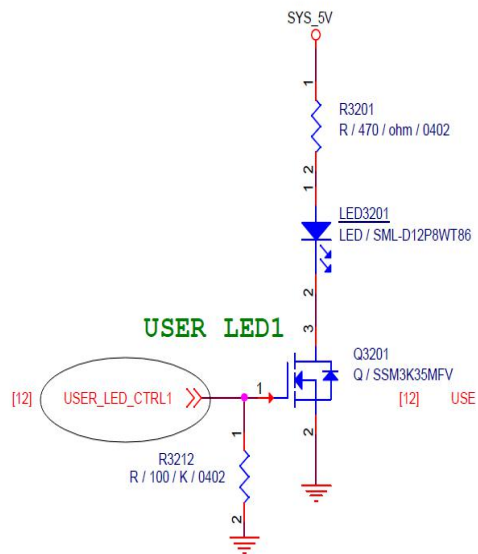
1. Introduction

Button is a kind of common input device.this document will help you to use button.

2. Led Profile

2.1. Led Schematic Diagram

Led0



2.2. Correspondence between LED and GPIO

Led No	Led Name	Contrl Pin	GPIO	ON/OFF
Led0	USER_LED1	USER_LED_CTRL1	GPIO196	High/on low/off

3. Button detection

Take <power key> for example

```
#define POWERKEY_LED_CTRL

#ifdef POWERKEY_LED_CTRL
#include <mt-plat/mt_gpio.h>
#include <mach/gpio_const.h>
#define led_0      196|0x80000000
#endif
```

In the code path: /alps/kernel-3.18/drivers/input/keyboard/mediatek/Kpd.c

```
#ifdef CONFIG_KPD_PWRKEY_USE_PMIC
void kpd_pwrkey_pmic_handler(unsigned long pressed)
{
    kpd_print("Power Key generate, pressed=%ld\n", pressed);
    if (!kpd_input_dev) {
        kpd_print("KPD input device not ready\n");
        return;
    }

    +#ifdef POWERKEY_LED_CTRL
    +if(pressed)
    +{
        +mt_set_gpio_mode(led_0,GPIO_MODE_00);
        +mt_set_gpio_dir(led_0,GPIO_DIR_OUT);
        +mt_set_gpio_out(led_0,GPIO_OUT_ONE);
    +}
    +else
    +{
        +mt_set_gpio_mode(led_0,GPIO_MODE_00);
        +mt_set_gpio_dir(led_0,GPIO_DIR_OUT);
        +mt_set_gpio_out(led_0,GPIO_OUT_ZERO);
    +}
    +#endif
    kpd_pmic_pwrkey_hal(pressed);
    #if (defined(CONFIG_ARCH_MT8173) || defined(CONFIG_ARCH_MT8163))
        if (pressed) /* keep the lock while the button in held pushed */
            wake_lock(&pwrkey_lock);
        else /* keep the lock for extra 500ms after the button is released */
```

```
        wake_lock_timeout(&pwrkey_lock, HZ/2);  
#endif  
}  
#endif
```

When you press the power key, LED light on; when you release the power key, LED lights off.