```
#include <linux/bitops.h>
```

```
#define BIT(nr)         (1UL << (nr))
```

对某位置 1

```
#define BIT_MASK(nr)        (1UL << ((nr) % BITS_PER_LONG))
```

某位为 0 ，其他位都为 1

```
/**
 * set_bit - Atomically set a bit in memory
 * @nr: the bit to set
 * @addr: the address to start counting from
*/
void set_bit(int nr, volatile unsigned long *addr)


/**
 * clear_bit - Clears a bit in memory
 * @nr: Bit to clear
 * @addr: Address to start counting from

*/
void clear_bit(int nr, volatile unsigned long *addr)
```

```
    if (test_bit(PWMF_REQUESTED, &pwm->flags))
        return -EBUSY;

......

set_bit(PWMF_REQUESTED, &pwm->flags);
```

```
#define DEC_EXP_CFG_ENABLE_POS      0
#define DEC_EXP_CFG_ENABLE_MASK     (1 << DEC_EXP_CFG_ENABLE_POS)

dec_exp_register->cfg &= ~DEC_EXP_CFG_ENABLE_MASK;
dec_exp_register->cfg |= 1 << DEC_EXP_CFG_ENABLE_POS;
```

可以改为

```
dec_exp_register->cfg &= BIT_MASK(DEC_EXP_CFG_ENABLE_POS);
dec_exp_register->cfg |= BIT(DEC_EXP_CFG_ENABLE_POS);
```

or

```
clear_bit(DEC_EXP_CFG_ENABLE_POS, &dec_exp_register->cfg);
set_bit(DEC_EXP_CFG_ENABLE_POS, &dec_exp_register->cfg);
```