

Forum: [16-bit PIC24/dsPIC](#)

Topic: [dspic33ev dead time 無法產生問題](#)

Subject: [dspic33ev dead time 無法產生問題](#)

作者: ccm1978

2017年04月08日 22:52:46

你好!

目前使用dsPIC33EV256GM104 PWM 弁錠发X現一些問題想請教.

1.pwm 的push pull模式 dead time 無法產生,基本上設定都和 "Section 14. High-Speed"14-7的設定一樣,週期&duty cycle調整都可調沒問題,就是dead time 暫存器 DTRX ALTDTRX 怎麼調整都無法產生 ,duty cycle 調到100%就會看到 PWMH & PWML 交互產生的方波,完全沒有dead time,PWM CODE如下, 請幫我看一下是否有錯誤,還是哪裡沒設定好.謝謝!

```
void System_Colck(void)
{
60MIPS
    CLKDIVbits.PLLPRE = 0;
    PLLFBDbits.PLLDIV = 65;
    CLKDIVbits.PLLPOST = 0;120MHz
    while (OSCCONbits.COSC!= 0b011)
    while (OSCCONbits.LOCK!= 1) {};//PLL LOCK
}

void System_Init(void)
{
    TRISB &= ~0xfc00;
    IOCON1 = 0x0000;
    ANSELB = 0x0000;
}

void PWM_Init(void)
{
    asm volatile ("mov #0xabcd,w10");
    asm volatile ("mov #0x4321,w11");
    asm volatile ("mov #0x0003,w0");
    asm volatile ("mov w10, PWMKEY");
    asm volatile ("mov w11, PWMKEY");
    asm volatile ("mov w0,FCLCON1");
    asm volatile ("mov #0xabcd,w10");
    asm volatile ("mov #0x4321,w11");
    asm volatile ("mov #0xC800,w0");
    asm volatile ("mov w10, PWMKEY");
    asm volatile ("mov w11, PWMKEY");
    asm volatile ("mov w0,IOCON1");

    asm volatile ("mov #0xabcd,w10");
```

```
asm volatile ("mov #0x4321,w11");
asm volatile ("mov #0x0003,w0");
asm volatile ("mov w10, PWMKEY");
asm volatile ("mov w11, PWMKEY");
asm volatile ("mov w0,FCLCON2");
asm volatile ("mov #0xabcd,w10");
asm volatile ("mov #0x4321,w11");
asm volatile ("mov #0xC800,w0");
asm volatile ("mov w10, PWMKEY");
asm volatile ("mov w11, PWMKEY");
asm volatile ("mov w0,IOCON2");
```

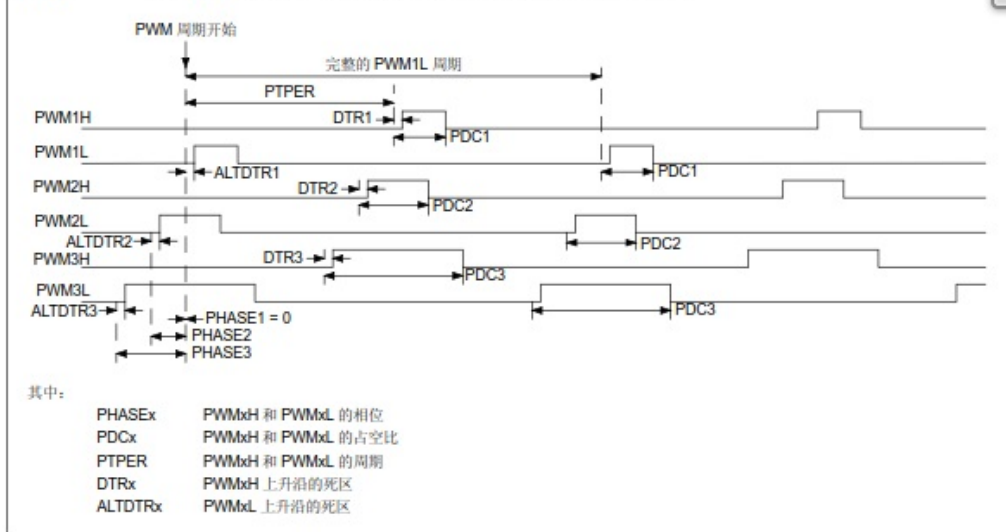
```
asm volatile ("mov #0xabcd,w10");
asm volatile ("mov #0x4321,w11");
asm volatile ("mov #0x0003,w0");
asm volatile ("mov w10, PWMKEY");
asm volatile ("mov w11, PWMKEY");
asm volatile ("mov w0,FCLCON3");
asm volatile ("mov #0xabcd,w10");
asm volatile ("mov #0x4321,w11");
asm volatile ("mov #0xC800,w0");
asm volatile ("mov w10, PWMKEY");
asm volatile ("mov w11, PWMKEY");
asm volatile ("mov w0,IOCON3");
```

```
PTPER = 1500; //主控#26102;基周期
PHASE1 = 0;
PHASE2 = 0;
PHASE3 = 0;
PDC1 = 1500;
PDC2 = 1500;
PDC3 = 1500; //PWM DUTY
DTR1 = DTR2 = DTR3 = 30;
ALTDTR1 = ALTDTR2 = ALTDTR3 = 30;
PWMCON1 = 0x0000;
PWMCON2 = 0x0000;
PWMCON3 = 0x0000;
PTCON2 = 0x0000;
PTCON = 0x8000;
```

```
}
```

附加檔案:

图 14-7: 推挽 PWM 模式——独立占空比和相位, 固定主周期, 边沿对齐



例 14-6: 推挽 PWM 模式——独立占空比和相位, 固定主周期, 边沿对齐

```

/* Set PWM Period on Primary Time Base */
PTPER = 1000;

/* Set Phase Shift */
PHASE1 = 0;
PHASE2 = 100;
PHASE3 = 200;

/* Set Duty Cycles */
PDC1 = 150;
PDC2 = 200;
PDC3 = 400;

/* Set Dead Time Values */
DTR1 = DTR2 = DTR3 = 25;
ALTDTR1 = ALTDTR2 = ALTDTR3 = 25;

/* Set PWM Mode to Push-Pull */
IOCON1 = IOCON2 = IOCON3 = 0xC800;

/* Set Primary Time Base, Edge-Aligned Mode and Independent Duty Cycles */
PWMCON1 = PWMCON2 = PWMCON3 = 0x0000;

/* Configure Faults */
FCLCON1 = FCLCON2 = FCLCON3 = 0x0003;

/* 1:1 Prescaler */
PTCON2 = 0x0000;

/* Enable PWM Module */
PTCON = 0x8000;
    
```