

NY8 系列動態更新 V_HRCx1 不經除級說明應用注意事項

內容： NY8 系列動態更新 V_HRC 不經除級操作說明。

原因： 使用 TMx_HRC 時，更新 PWM Duty (Timer 溢出後再更新 PWM Duty) 會出現一個週期的 PWM 信號異常。

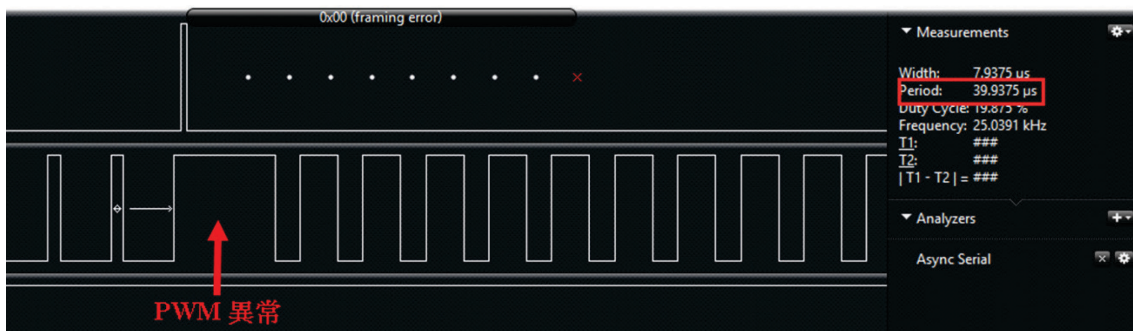
方法： 使用不經除級時，先 Disable PWM and Timer1，並且重新載入 Timer1 並更新 PWM Duty，再啟動 Enable PWM and Timer1。

● Register 說明:

3.4.2 → T1CR1 (Timer1-Control-Register1)

Name	SFR Type	Addr.	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
T1CR1	S	0x1	PWM1OEN	PWM1OAL	TM1OE	VFSEL1	TM1_HRC	T1OS	T1RL	T1EN
R/W Property			R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W
Initial Value			0	0	0	0	0	0	0	0

● Waveform 說明:



- **ASM Code:**

```

;PWM Duty Setting
movia 0xE0
sfun PWM1DUTY ; Move 08H to PWM1DUTY LB register ( PWM1DUTY[7:0]=E0H )
movia 0x08
sfun T1CR2 ; Prescaler 1:1,Timer1 clock source is instruction clock
movia 0x8B
sfun T1CR1 ; Enable PWM1,Active_High,Non-Stop mode,reloaded from TMR1[7:0],enable Timer1,Enabla TMR1_IHRC
lcall F_Delay

movia 0x00
sfun T1CR1 ; Disable PWM1 and Timer1
movia C_TMR1_Data
sfun TMR1 ; Upload TMR1 register

movia 0xF0
sfun PWM1DUTY ; Move 01H to PWM1DUTY LB register ( PWM1DUTY[7:0]=80H )
movia 0x8B
sfun T1CR1 ; Enable PWM1,Active_High,Non-Stop mode,reloaded from TMR1[7:0],enable Timer1,Enabla TMR1_IHRC
lcall F_Delay
movia 0x0B
sfun T1CR1 ; Disable PWM1

```

- **C Code:**

```

//PWM Duty Setting
PWM1DUTY = 0xE0; // Move 01H to PWM1DUTY LB register ( PWM1DUTY[7:0]=e0H )
T1CR2 = C_PS1_Dis | C_TMR1_ClkSrc_Inst; // Prescaler 1:1 , Timer1 clock source is instruction clock
T1CR1 = 0x8B; // Enable PWM1,Active_High,Non-Stop mode,reloaded from TMR1[9:0],enable Timer1,Enabla TMR1_IHRC
F_Delay();

T1CR1 = 0x00; // Dissble PWM1 and Timer1
TMR1 = 0xFF; // Upload TMR1 register

PWM1DUTY = 0xF0; // Move 01H to PWM1DUTY LB register ( PWM1DUTY[7:0]=80H )
T1CR1 = 0x8B; // Enable PWM1,Active_High,Non-Stop mode,reloaded from TMR1[9:0],enable Timer1,Enabla TMR1_IHRC
F_Delay();
T1CR1 = 0x0B; // Dissble PWM1;

```

- 適用 IC Body 如下：

1. NY8B 系列：NY8BE64A。
2. NY8T 系列：NY8TE64A。