

NY8 系列动态更新 V\_HRCx1 不经除级说明应用注意事项

内容: NY8 系列动态更新 V\_HRC 不经除级操作说明。

原因: 使用 TMx\_HRC 时, 更新 PWM Duty (Timer 溢出后再更新 PWM Duty) 会出现一个周期的 PWM 信号异常。

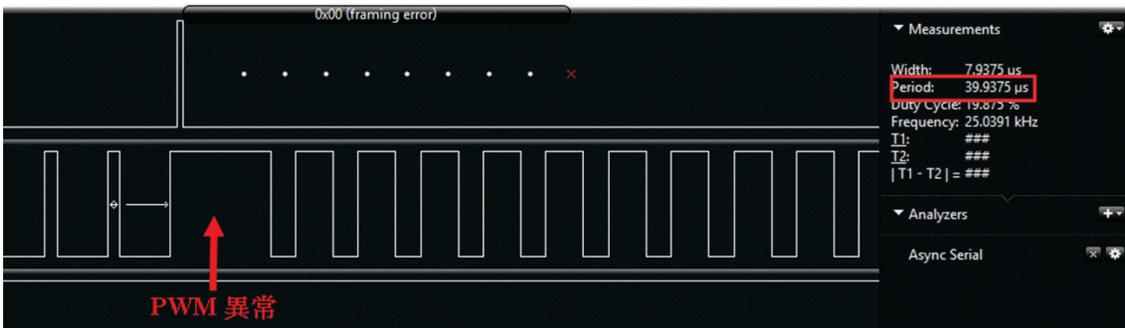
方法: 使用不经除级时, 先 Disable PWM and Timer1, 并且重载 Timer1 并更新 PWM Duty, 再启动 Enable PWM and Timer1。

● Register 说明:

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 说明:



- **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;

```

- 适用 IC Body 如下:

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