

Have anyone ever had trouble when updating frequency can cause the two complementary pwm outputs not have the same frequency?

I'm using STM32F407VGT6 Discovery, controlling the PWM frequency.

```

01. static void TIM1_Configuration(void)
02. {
03.     /* Time Base configuration */
04.     TIM_TimeBaseStructure.TIM_Prescaler           = 0;
05.     TIM_TimeBaseStructure.TIM_CounterMode        = TIM_CounterMode_CenterAligned1;
06.     TIM_TimeBaseStructure.TIM_Period             = Timer_Period;
07.     TIM_TimeBaseStructure.TIM_RepetitionCounter  = 0; // update event is generated at each
counter overflow
08.     TIM_TimeBaseInit(TIM1, &TIM_TimeBaseStructure);
09.     TIM1->EGR = TIM_PSCReloadMode_Update;
10.     TIM1->CR1 |= TIM_CR1_URS;
11.     TIM1->CR1 &= (uint16_t)~TIM_OPMODE_Single;
12.
13.     /* Channel 1, 3 Configuration in PWM mode */
14.     TIM_OCInitStructure.TIM_OCMode              = TIM_OCMode_PWM2;
15.     TIM_OCInitStructure.TIM_OutputState        = TIM_OutputState_Enable; //Co the dung 2 lenh nay
de ngat xung
16.     TIM_OCInitStructure.TIM_OutputNState      = TIM_OutputNState_Enable;
17.     TIM_OCInitStructure.TIM_Pulse              = Channel_Pulse;
18.     TIM_OCInitStructure.TIM_OCPolarity        = TIM_OCPolarity_High; //Khong lien quan den
trang thai sau khi ngat xung
19.     TIM_OCInitStructure.TIM_OCNPolarity       = TIM_OCNPolarity_High; //Khong lien quan den
trang thai sau khi ngat xung
20.     TIM_OCInitStructure.TIM_OCIdleState       = TIM_OCIdleState_Reset;
21.     TIM_OCInitStructure.TIM_OCNIdleState      = TIM_OCNIdleState_Reset;
22.     TIM_OC1PreloadConfig(TIM1, TIM_CCMR1_OC1PE);
23.     TIM_OC1Init(TIM1, &TIM_OCInitStructure);
24.     TIM1->CR1 |= TIM_CR1_ARPE; // Set the ARR Preload Bit
25.
26.     /* Automatic Output enable, Break, dead time and lock configuration*/
27.     TIM_BDTRInitStructure.TIM_OSSRState       = TIM_OSSRState_Disable;
28.     TIM_BDTRInitStructure.TIM_OSSIState       = TIM_OSSIState_Disable;
29.     TIM_BDTRInitStructure.TIM_LOCKLevel       = TIM_LOCKLevel_OFF;
30.     TIM_BDTRInitStructure.TIM_DeadTime        = 0;
31.     TIM_BDTRInitStructure.TIM_Break           = TIM_Break_Disable;
32.     TIM_BDTRInitStructure.TIM_AutomaticOutput = TIM_AutomaticOutput_Disable;
33.     TIM_BDTRConfig(TIM1, &TIM_BDTRInitStructure);
34.
35.     /* TIM1 counter enable */
36.     TIM_Cmd(TIM1, ENABLE); //1Tcy
37.
38.     /* Main Output Enable */
39.     TIM_CtrlPWMOutputs(TIM1, ENABLE);
40. }
41.
42. void TIM1_PWM_Freq_Update(void)
43. {
44.     TIM1->CR1 |= TIM_CR1_UDIS;
45.
46.     TIM1->ARR = Timer_Period;
47.
48.     TIM1->CR1 &= (uint16_t)~TIM_CR1_UDIS;
49. }

```

