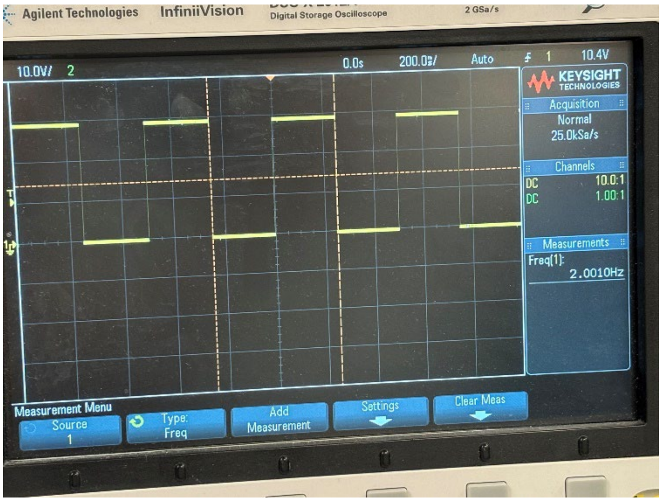
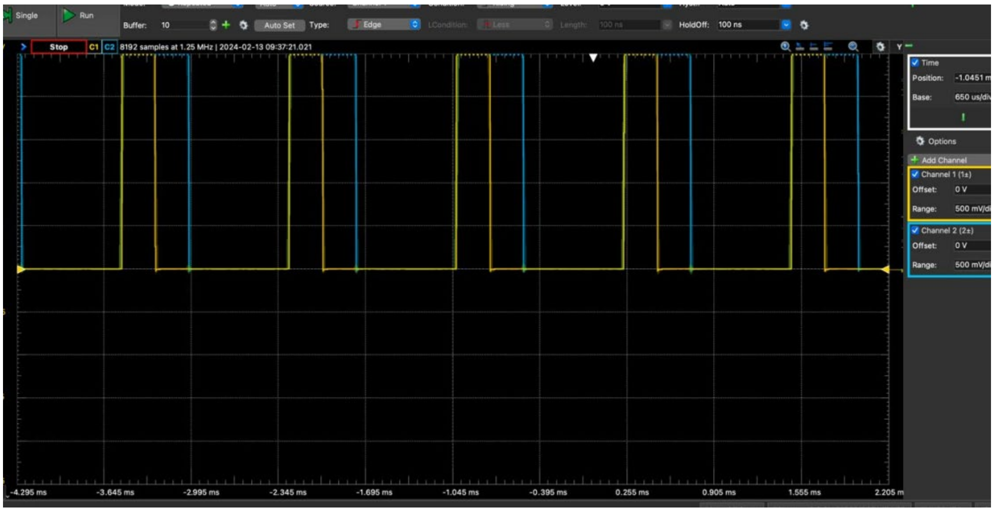
1. Using a timer clock source of 8 MHz, calculate PSC and ARR values to get a 60 Hz interrupt.
    - To get the 60Hz interrupt, we pick an arbitrary value for PSC and ARR that could be represented by a 16 bits. Hence, we use 7999 for the PSC. To calculate the ARR, we use the formula ARR = clock source / target freq * (PSC + 1), which is equal to 8 000 000 / (60 * (7999 + 1)) or 16.7 Hz.
2. Look through the Table 13 "STM32F072x8/xB pin definitions" in the chip datasheet and list all pins that can have the timer 3 capture/compare channel 1 alternate function. If the pin is included on the LQFP64 package that we are using, list the alternate function number that you would use to select it.
    - PA6
    - PB5
    - PC6
    - PE3 – not on our board.
3. List your measured value of the timer UEV interrupt period from first experiment.
    - The picture below depicts the LED states which is why it is 2 Hz. Since we are toggling between the two LEDs each interrupt, we know that the frequency is 4Hz.



4. Describe what happened to the measured duty-cycle as the CCRx value increased in PWM mode 1.

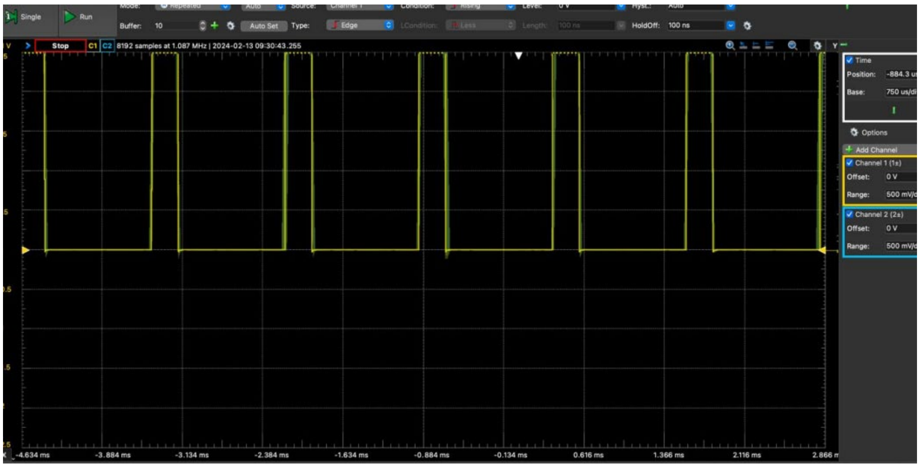
   - When CCR1 increases in PWM mode 1, the duty cycle increases.



5. Describe what happened to the measured duty-cycle as the CCRx value increased in PWM mode 2.

   - When CCR2 value increases in the PWM mode 2, the duty cyle decreases.

6. Include at least one logic analyzer screenshot of a PWM capture.



7. What PWM mode is shown in figure 3.6 of the lab manual (PWM mode 1 or 2)?

   - PWM mode 2 is shown in figure 3.6 of the lab manual.