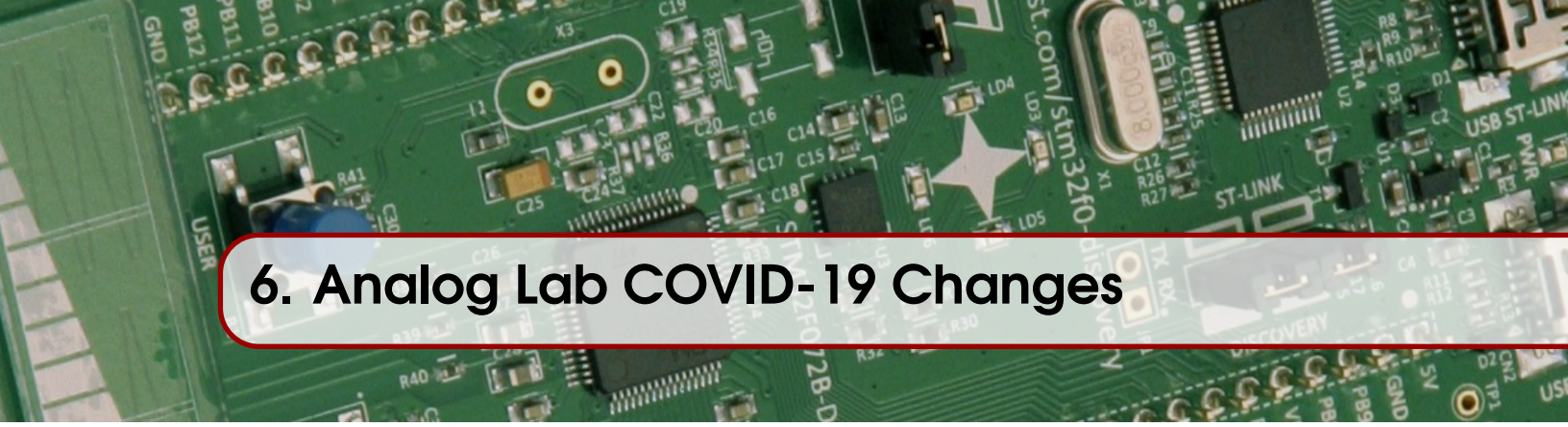

6. Analog Lab COVID-19 Changes

6.1 Lab Assignment

6.1 Measuring a Potentiometer With the ADC.

1. If you do not have access to a potentiometer, you can connect a wire to ground or VDD and watch the LED turn on and off.

   6.1 Submit either a video connecting to GND and VDD and turning on/off the LED or a screenshot of UART printing out the ADC value as they change from GND to VDD
   ex: (0, 0, 0, 0, 120, 150, 255, 255, 255, 255, 255) ■

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6.2 Generating Waveforms with the DAC New assignment will be to display the DAC waveforms on an LED.

1. If you do not have an LED, use one of the 4 onboard LEDs.
   - Set the corresponding GPIO (PC6,7,8,9) to high impedance (INPUT, NOPULL) so the DAC voltage doesn't hurt the pin and it doesn't disrupt the LED
   - Connect the output pin of the DAC (PA4,5) to the LED pin
2. Set the output rate of the DAC slow enough to be seen on the LEDs (no larger than 128 Hz)

   6.2 Submit either a video of the pulsing LED or connect the DAC output to the ADC input and print ADC values to UART, and get a screenshot of a period or two of the values
   ex: (127, 151, 175, 197, 216, 232, 244, 251, 254, 251, 244, 232, 216, 197, 175, 151, 127, 102, 78, 56, 37, 21, 9, 2, 0, 2, 9, 21, 37, 56, 78, 102) ■

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