ARM Project #5

This project aims to generate different analog output waveforms from the STM32 Value Line Discovery kit.

1. For the Value Line Discovery kit used, follow the circuit diagram and find out the values of V_{DDA}, V_{SSA}, V_{REF+} and V_{REF-}.
2. Write a simple program to generate a DC voltage of 1 Volt at the output of DAC Channel 1. Measure the output using an avometer to confirm your program.
3. Write a program to generate a triangular wave with a fundamental frequency of 1 kHz and amplitude of 2 V_{p-p} using software triggering and simple delay loops.
4. Write a program to generate the same triangular wave as in part 3 but using timer triggering. Comment on the comparison between the results of these two parts.
5. Write a program to allow the kit to work as an ECG simulator.