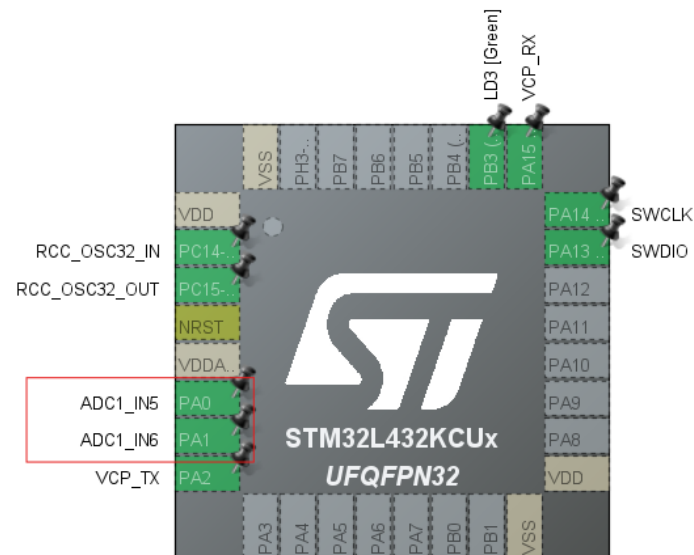
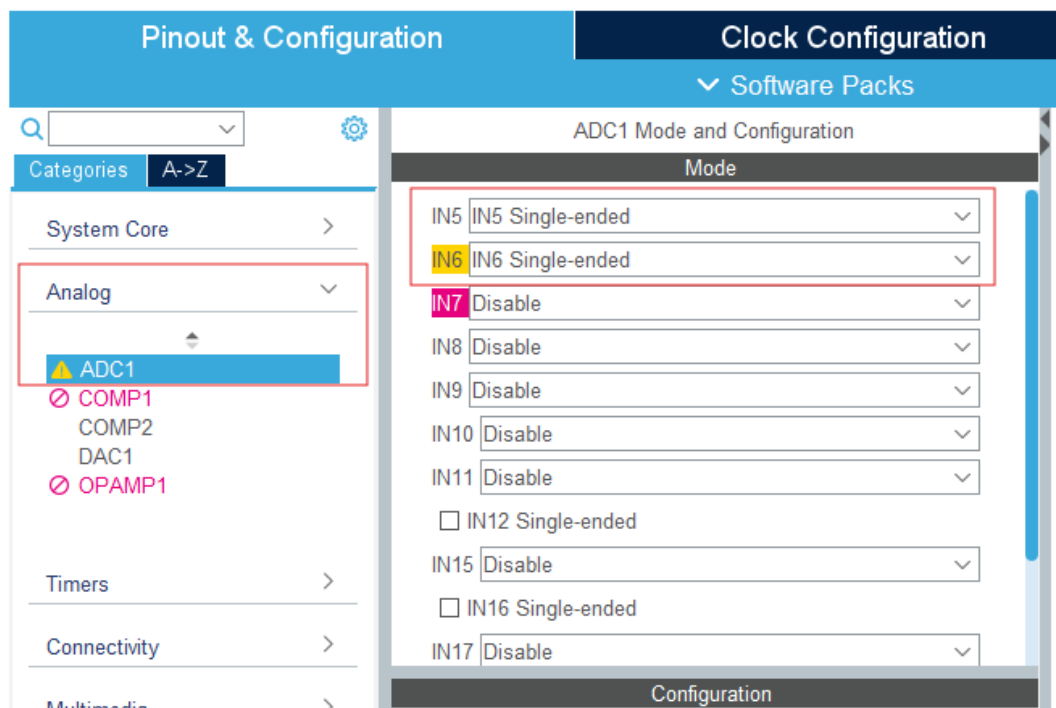


Project 3: Setting up your .ioc file

1. Pin Setup - Change PA0 to “ADC1_IN5”, PA_1 to “ADC1_IN6”.



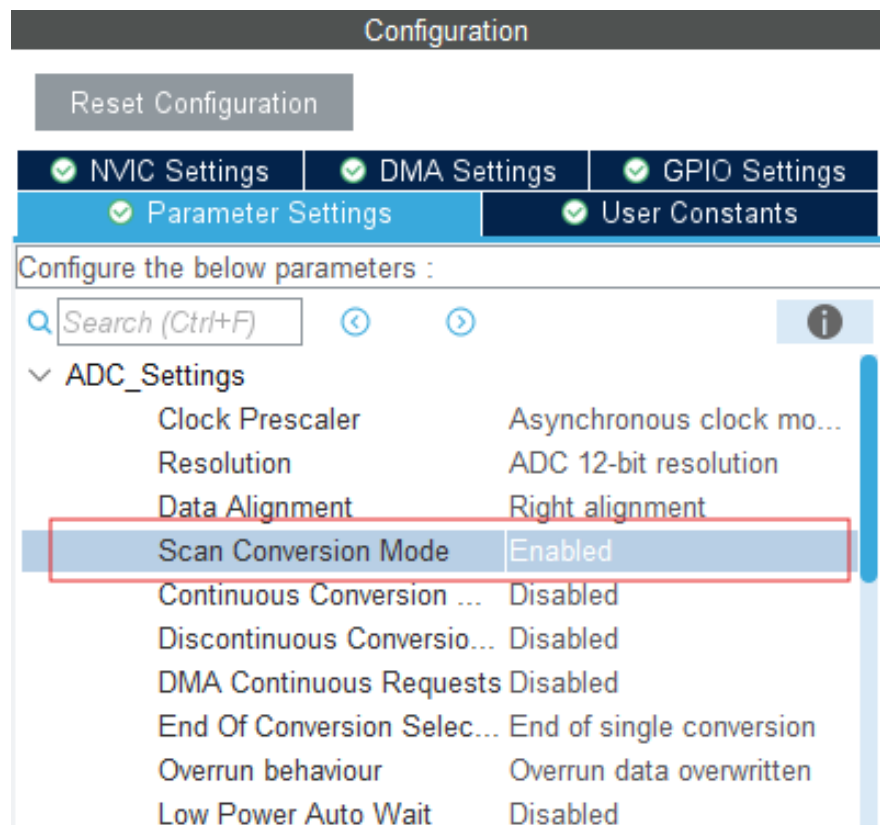
2. At the “Pinout & Configuration” tab, go to Analog -> ADC1, under “ADC1 Mode and Configuration” change IN5 and IN6 to “Single-ended”.



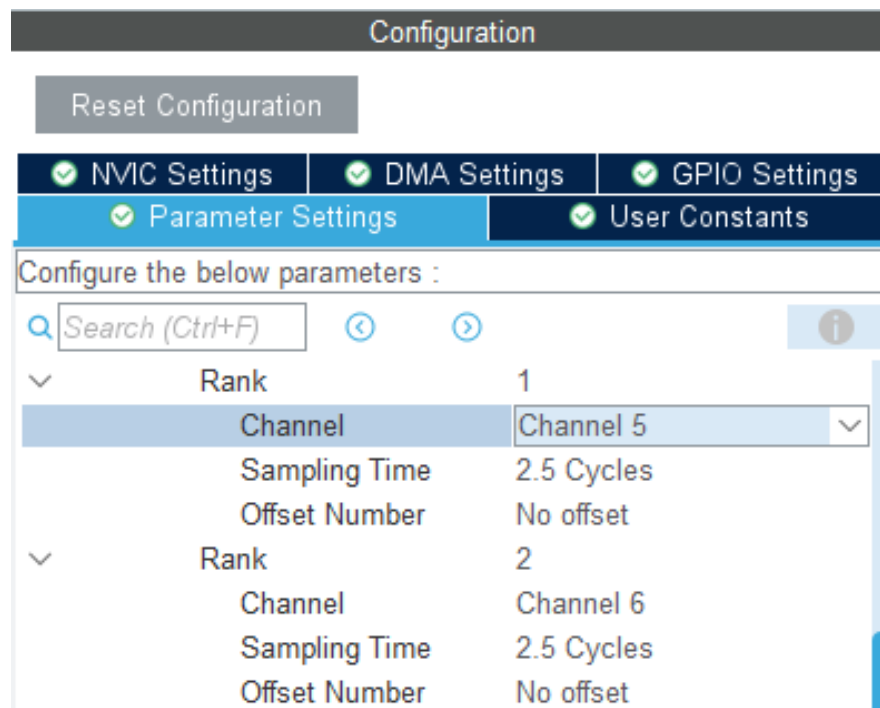
3. Scroll down to Configuration and find “Number Of Conversion”, set it to “2”.

The screenshot displays the STM32CubeMX configuration tool. The left sidebar shows the 'Categories' list with 'ADC1' selected under the 'Analog' category. The main window is titled 'ADC1 Mode and Configuration'. It is divided into two sections: 'Mode' and 'Configuration'. The 'Mode' section lists input channels (IN5 to IN11) with their respective configurations (e.g., IN5 Single-ended, IN6 Single-ended, IN7 Disable, etc.). The 'Configuration' section contains a 'Reset Configuration' button and tabs for 'NVIC Settings', 'DMA Settings', 'GPIO Settings', 'Parameter Settings', and 'User Constants'. The 'Parameter Settings' tab is active, showing a search bar and a list of parameters. The 'ADC_Regular_ConversionMode' section is expanded, showing parameters like 'Enable Regular Conversion' (Enable), 'Enable Regular Oversampling' (Disable), 'Number Of Conversion' (2), 'External Trigger Conversion' (Regular Conversion launch), and 'External Trigger Conversion' (None). The 'Number Of Conversion' parameter is highlighted with a blue background and has a red arrow pointing to its value '2'. Below this, there are two expandable sections for 'Rank' (1 and 2) and 'ADC_Injected_ConversionMode' (Enable Injected Conversion: Disable). At the bottom, there is an 'Analog Watchdog 1' section with 'Enable Analog Watchdog' (checkbox).

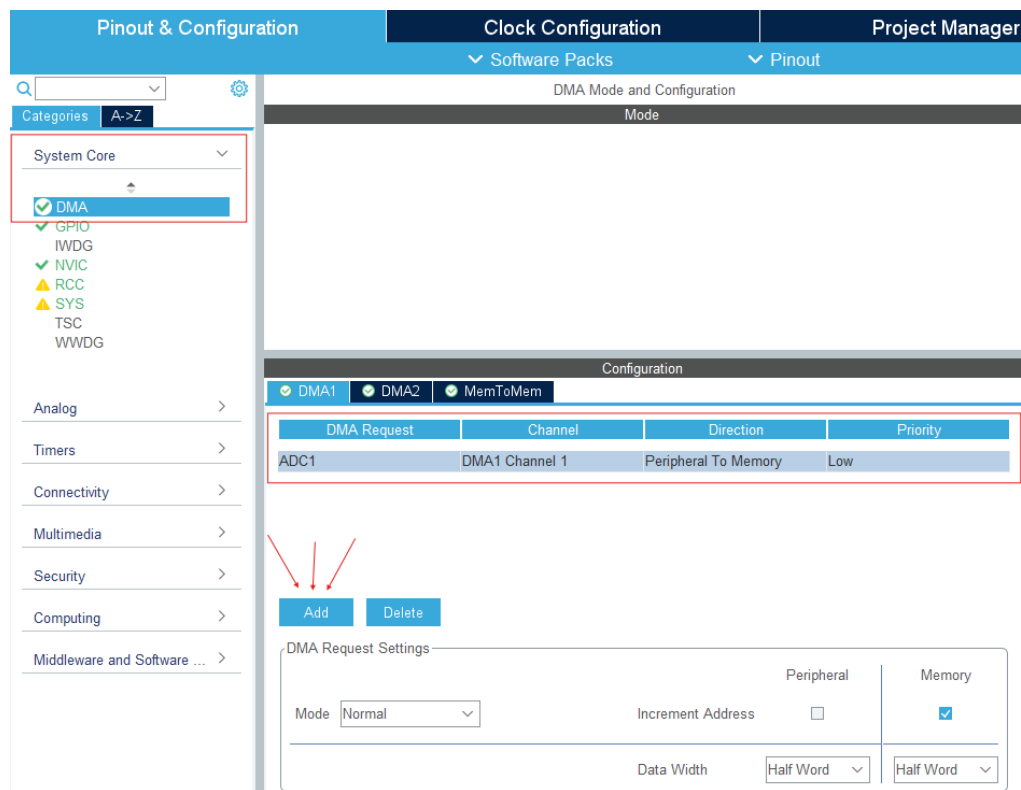
- In the same window, ensure “Scan Conversion Mode” is enabled.



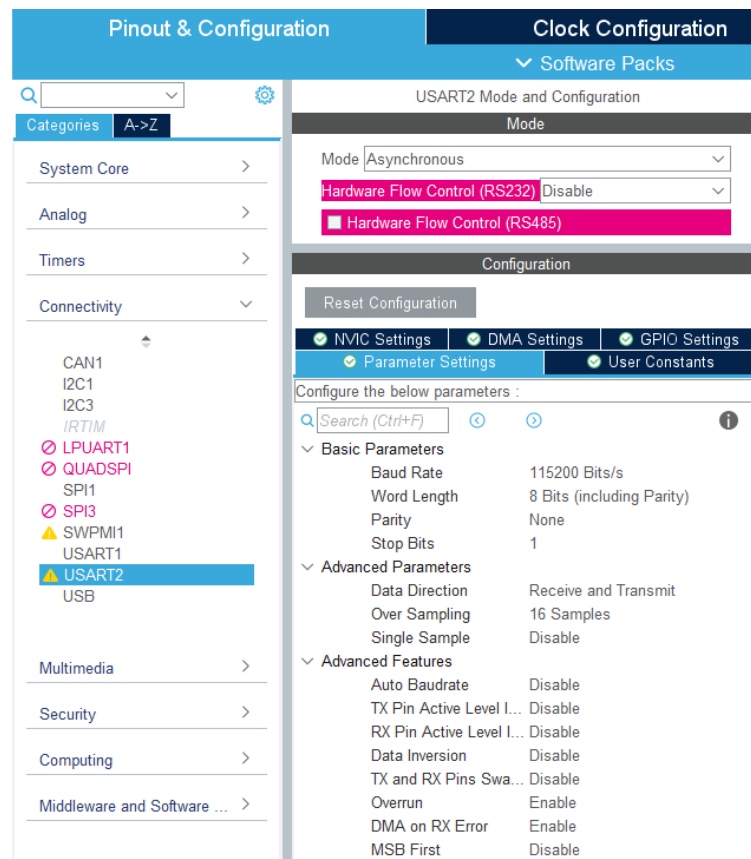
- In the same window, ensure “Rank” settings follow these.



6. Now go to System Core -> DMA and add these.



7. Go to Connectivity -> USART2 and follow all these settings



- Go to “Clock Configuration” tab and follow these settings

