PWM WAVEFORM

This example explore the most of the TCC advanced features. This example generate the different types of waveform using different TCC features. PWM waveform is available on WO[0], WO[1], WO[2], W0[3], WO[4], WO[5] and WO[6] TCC waveform output PINs. This Example Generate below 9 types of waveforms using TCC advanced features

1. 1KHz PWM Waveform using TCC single slope PWM mode (**Focus on this**)
2. PWM Waveform using TCC Circular buffer feature
3. PWM Waveform using TCC dead time insertion feature
4. Swap PWM Waveforms using TCC swap feature
5. Invert PWM Waveforms using TCC output Invert feature
6. Bipolar Stepper Motor output waveform pattern generation
7. PWM Waveform using TCC RAMP2 feature
8. PWM Waveform using TCC RAMP2A feature
9. PWM Waveform using using Dual slope PWM mode

SUPPORTED EVALUATION KIT

- ATSAME54-XPRO

DRIVERS

- TCC Lite Driver
- Synchronous USART with STDIO Middleware

INTERFACE SETTINGS

- USART
  - No parity
  - 8-bit character size
  - 1 stop bit
  - 115200 baud-rate
- TCC

TCC PWM OUTPUT PINs	MCU PINs
WO[0]	PC10
WO[1]	PC11
WO[2]	PC12
WO[3]	PA23
WO[4]	PA16

TCC PWM OUTPUT PINs	MCU PINs
WO[5]	PA17
WO[6]	PA18

STEPS TO RUN THE EXAMPLE PROJECT

1. Press Download Pack and save the .atzip file
2. Import .atzip file into IDE of choice (Atmel Studio, Keil or IAR)
3. Build and flash into supported evaluation board
4. Open Debug terminal using Data Visualizer/Teraterm
5. Follow the instruction given on the terminal