

# PWM - Servo

## Task 0: Init

1. Download FRDM K66-F SDK
2. Create new project with FTM driver

# Task 1: Pin setup

1. Find SERVO pin in [schematics](#).
2. Initialize SERVO pin to FTM in Pin config tool
3. Setup SERVO pin as output

## Task 2: Specs

1. Find servo specs on the internet.
2. What is PWM signal period?
3. What is PWM duty cycle duration?

## Task 3: Pheripheral setup

1. Setup FTM to correct period.
2. Setup FTM to dutycycle corresponding to neutral state.
3. Check if your code work on car.

## Task 4: Update PWM

1. Find how to update PWM (function).
2. Extract logic and program high precision PWM update.
3. Check if your code work on car.

## Bonus

1. Use SCANF and PRINTF via UART to communicate board.
2. Read number from user - angle (0 - 180).
3. Update servo based on the given angle.

