

NP Internship

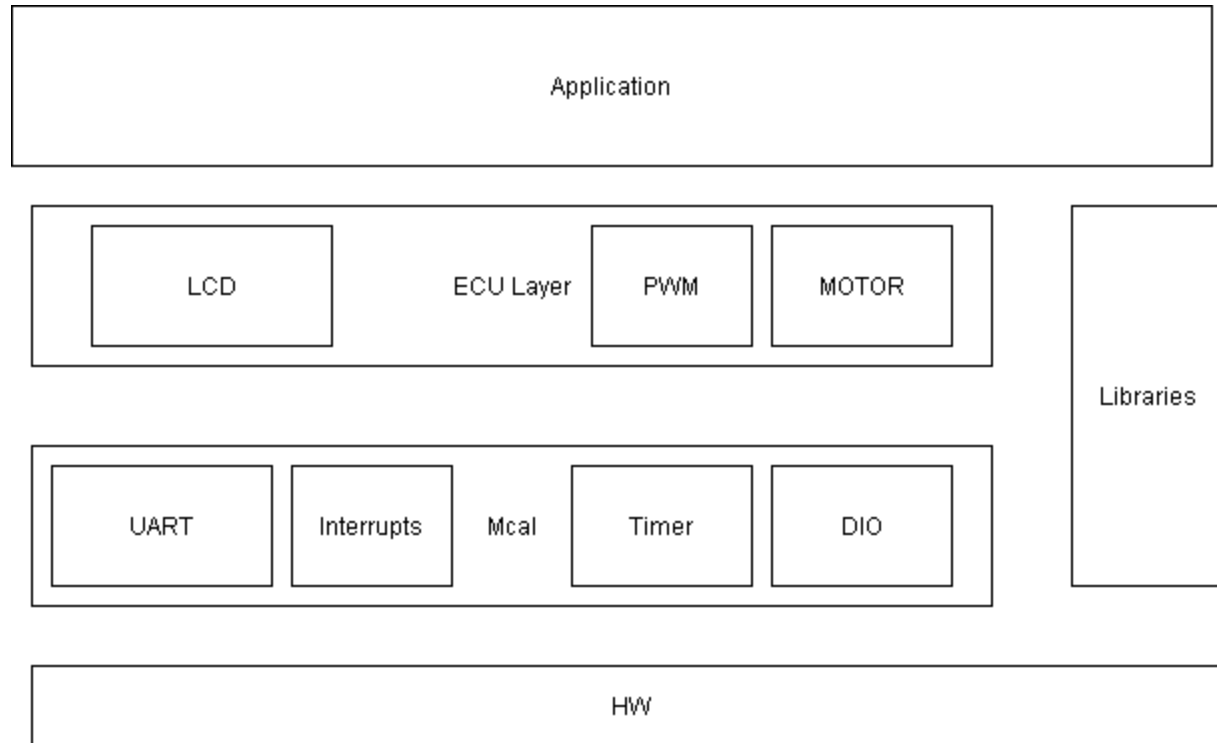
Final Project

Description

In this project we supposed to control the speed of a DC motor by using PWM module and Timer, we send the speed by UART from another ECU that take the speed by External interrupts and on the receiver ECU we Display the speed.

Static Design

1.Layered Architecture



BSW Components

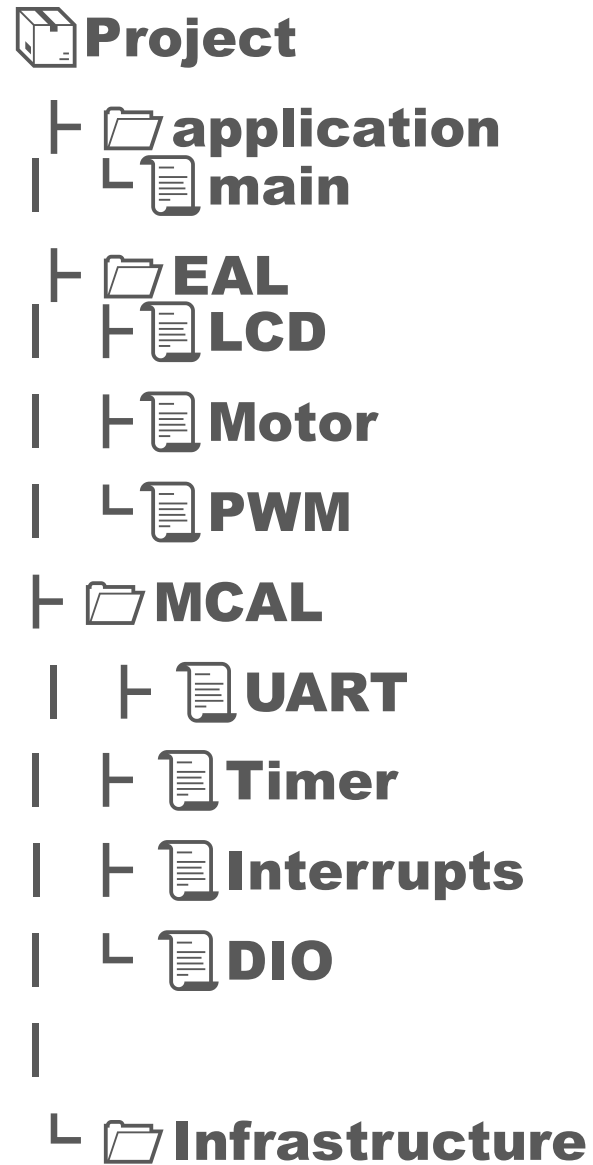
❖ ECUAL:

- Motor
- PWM
- LCD

❖ MCAL

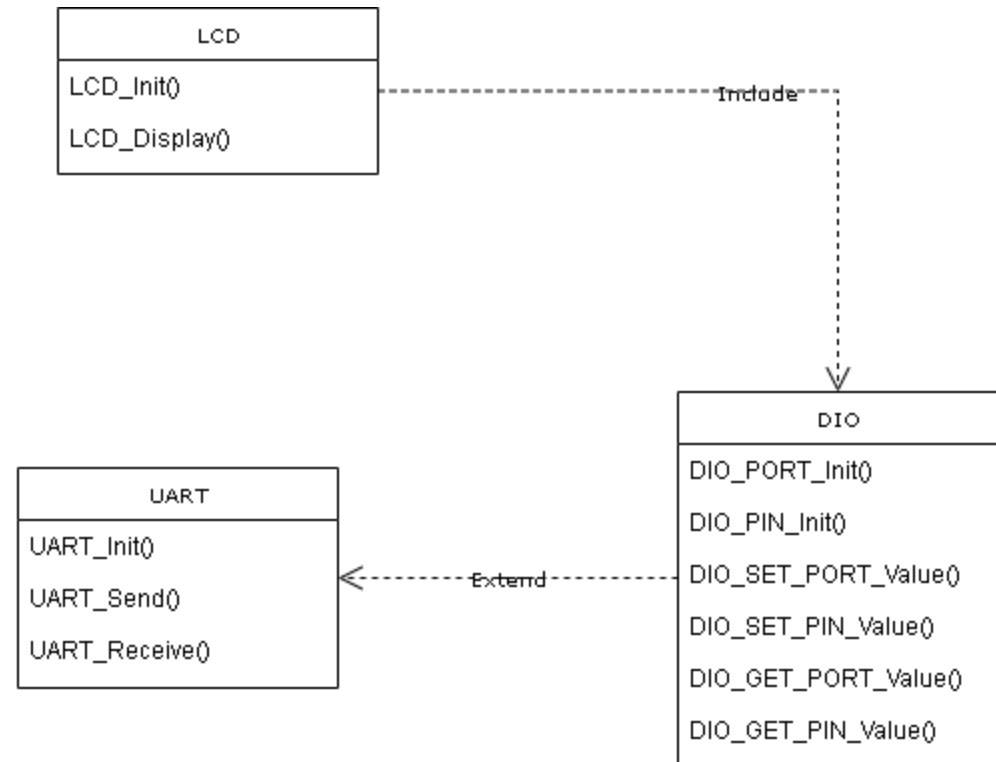
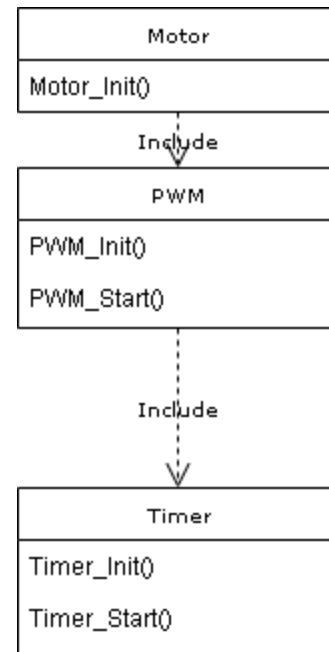
- DIO
- Timer
- UART
- Interrupts

Folder Structure

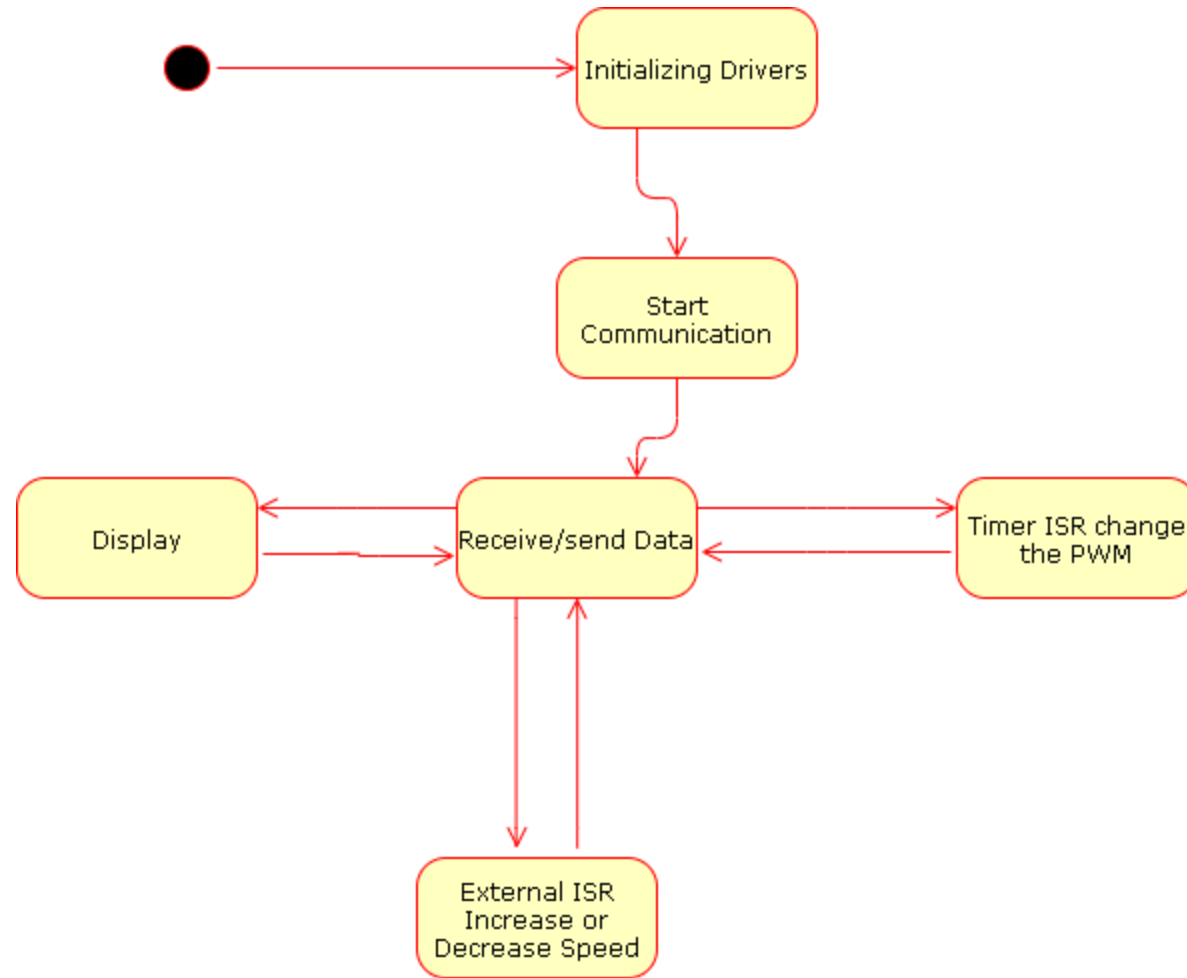


Dynamic Design

Class Diagram



State Machine



Sequence Diagram :

