system description:

- Microcontroller layer
- MCAL Layer:
    1. DIO Driver:
       Driver can be used to controller pins input/output. Driver can be used to initialize, read, write, toggle pins.
    2. Interrupt Driver:
       Driver can be used to enabling global interrupt, enabling external interrupt 0 with rising edge, enabling Timer0 overflow interrupt.
    3. Timer Driver:
       Driver can be used to initialize, set initial value, start, stop, reset, delay Timer0.
- ECUAL Layer:
    1. BTN Driver:
       Driver can initialize, read pin.
    2. LED Driver:
       Driver can initialize, set Haigh, low, toggle pin.
- Application Layer:
    1. Driver can initialize registers and running app.

Application

Start App

ECUAL

button driver   LED driver

MCAL

DIO driver   Timer driver   interrupt driver

Utilities

Registers   Macros

Microcontroller