Layers

Application

ECUAL

buttons   Motors

MCAL

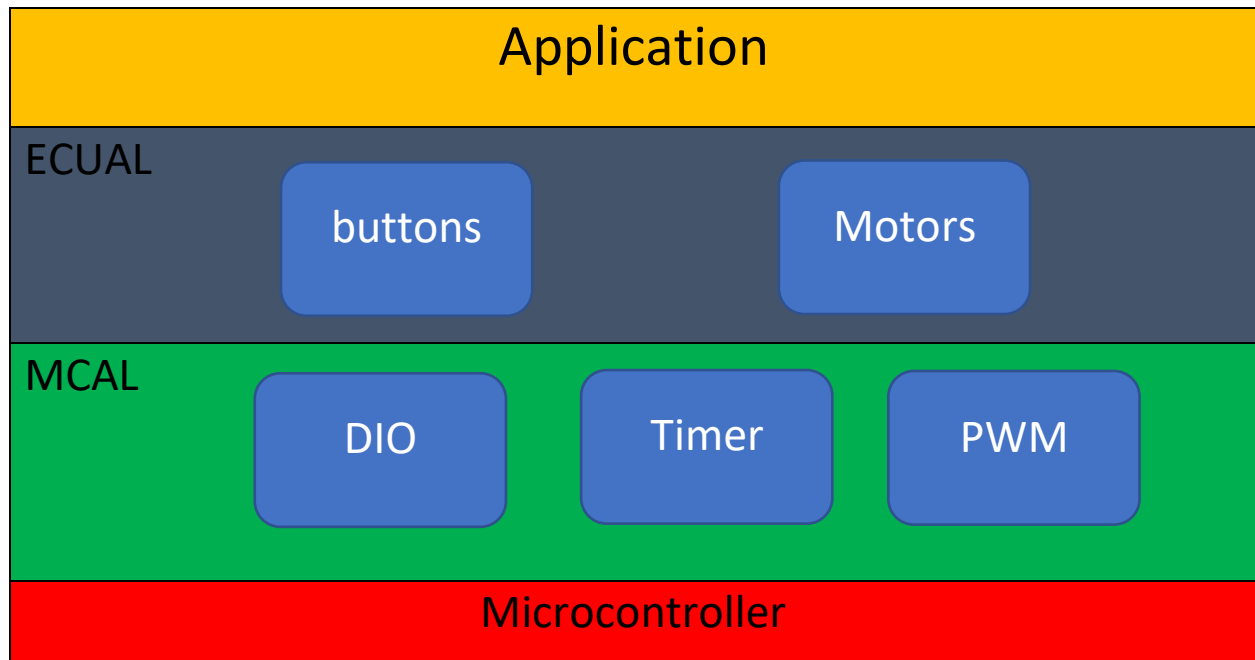DIO   Timer   PWM

Microcontroller

App

```
void App_init(void);
void App_update(void);
```

Motors

```
-   void Motor_init(void);
-   Motor_state_t Motor_update(uint8_t motor_num, uint8_t motor_dir ,
    uint8_t motor_Speed) ;
```

Buttons

- void Button_init(void);
- Button_state_t Button_GetState(uint8_t u8_buttonNum);

DIO

- void DIO_init(void);
- void DIO_SetPin(uint8_t Port , uint8_t Pin_num , uint8_t value);
- void DIO_TogglePin(uint8_t Port , uint8_t Pin_num);
- uint8_t DIO_ReadPin(uint8_t Port , uint8_t Pin_num);

Timer

- void Timer_init(tim_config_t config);
- void Timer_Start(uint32_t counts);
- void Timer_Stop(void);
- uint32_t Timer_GetStatus(void);

PWM

- void PWM_Init(PWM_config_t config);
- void PWM_Start(uint8_t dutyCycle);
- void PWM_Stop(void);