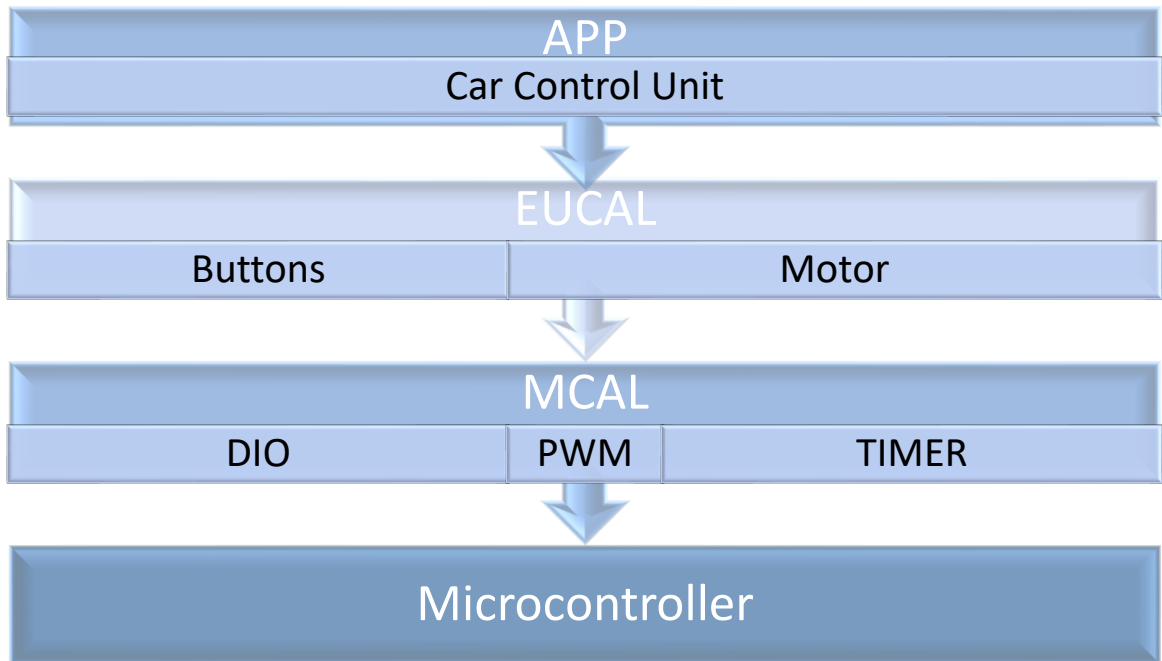


# Car Control Unit



## MCAL APIs

- DIO APIs

```
E_STATUS DIO_Init(ST_DIO_config* configurations);  
E_STATUS DIO_Read(uint8_t port, EN_pins pin, uint8_t *data);  
E_STATUS DIO_Write(uint8_t port, EN_pins pin, uint8_t data);  
E_STATUS DIO_Toggle(uint8_t port, EN_pins pin);
```

- PWM APIs

```
E_STATUS PWM_Init(ST_PWM_config_t* configurations);  
E_STATUS PWM_Start(EN_frequency_t frequency, EN_duty_t dutyCycle);  
E_STATUS PWM_Steering(EN_sterring_t steering);  
E_STATUS PWM_Stop(void);
```

- TIMER APIs

```
E_STATUS TIMER_Init(ST_TIMER_config_t* configurations);  
E_STATUS TIMER_Start(uint64_t ticks);  
E_STATUS TIMER_Read(uint8_t *value);  
E_STATUS TIMER_Set(uint8_t value);  
E_STATUS TIMER_CheckStatus(uint8_t *status);
```

## ECUAL APIs

- Buttons APIs

```
E_STATUS Button_Init(EN_BTN_config_t configurations);  
E_STATUS Button_GetState(uint8_t* status);
```

- MOTOR APIs

```
E_STATUS MOTOR_Init(void);  
E_STATUS MOTOR_SetDirection(EN_DIR_t direction);  
E_STATUS MOTOR_SetSpeed(EN_Speed_t dutyCycle);  
E_STATUS MOTOR_Stop(void);
```

## APP APIs

```
E_STATUS CAR_Init(void);  
E_STATUS CAR_Update(void);
```