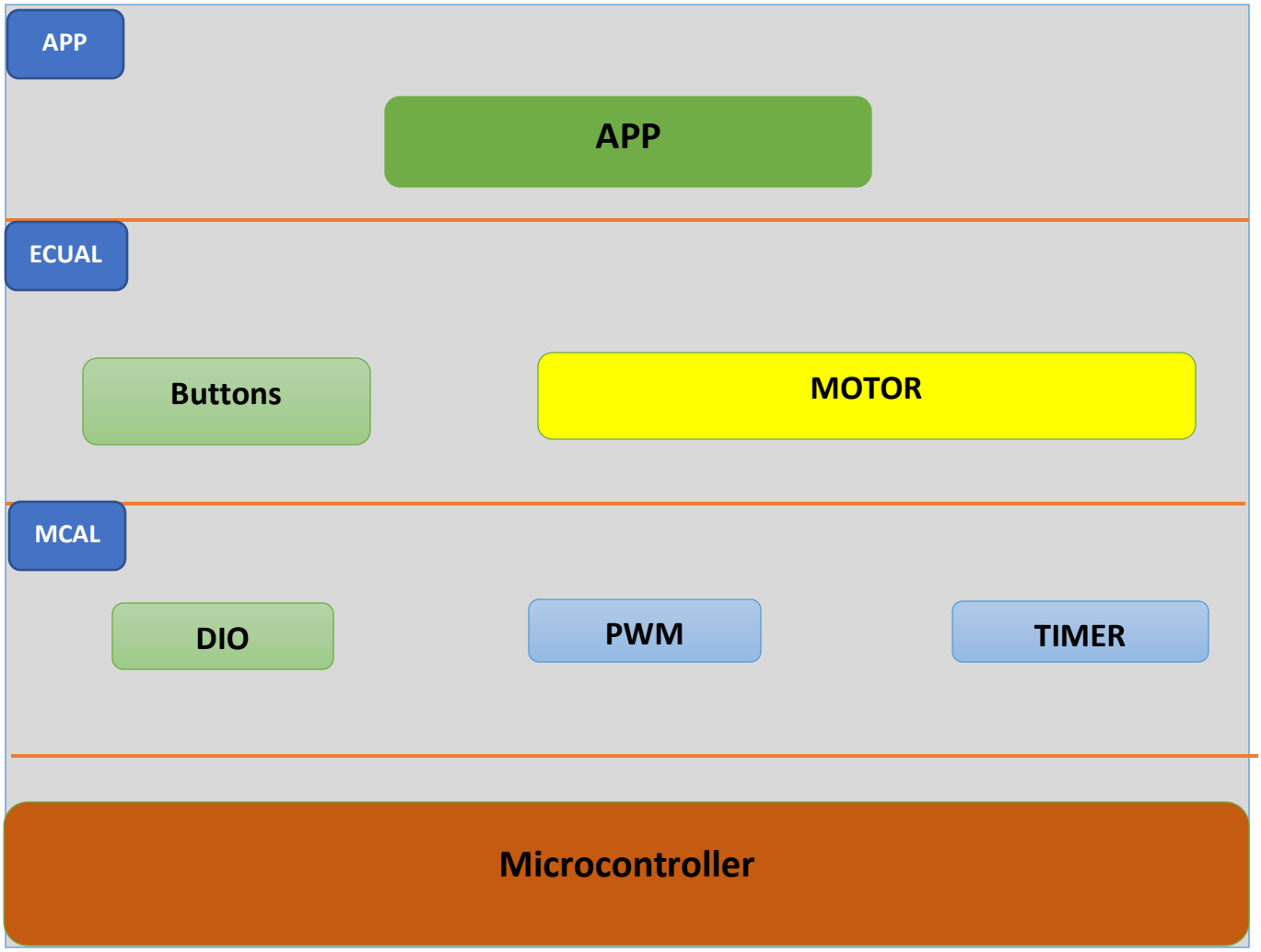
Static Design for car Control System



MCAL APIs

- DIO APIs

```
EN_DIOERRORSTATE_t DIO_voidSetPinValue(EN_port_num EN_Port, EN_pin_num EN_Pin, EN_value_type EN_Value);
EN_DIOERRORSTATE_t DIO_voidSetPinDirection(EN_port_num EN_port, EN_pin_num EN_Pin, EN_direction_type EN_Direction);
EN_value_type DIO_u8GetPinValue(EN_port_num EN_Port, EN_pin_num EN_Pin);

EN_DIOERRORSTATE_t DIO_voidTogPin(EN_port_num EN_Port, EN_pin_num EN_Pin);

EN_DIOERRORSTATE_t DIO_voidSetPortDirection(EN_port_num EN_Port, EN_direction_type EN_Direction);
EN_DIOERRORSTATE_t DIO_voidSetPortValue(EN_port_num EN_Port, EN_value_type EN_Value);
EN_DIOERRORSTATE_t DIO_voidInpullUp(EN_port_num EN_Port, EN_pin_num EN_Pin);
```

- TIMER APIs

```
EN_ERRORSTATE_t Timer0_Init(EN_Timer0Mode_t mode,EN_Timer0Scaler_t scaler ,EN_OC0Mode_t oc_mode);
void Timer0_OV_InterruptEnable(void);
void Timer0_OV_InterruptDisable(void);
void Timer0_OC_InterruptEnable(void);
void Timer0_OC_InterruptDisable(void);
EN_ERRORSTATE_t Timer0_delayUs(uint32_t Time);
```

- PWM APIs

```
void TIMER0_voidPhaseCorrect(uint8_t DutyCycle,EN_OC0Mode_t ocomode);
void TIMER0_voidFastPWM(uint8_t DutyCycle, EN_OC0Mode_t ocomode);

void Timer0_SetCallBack(void(*local_pf)(void));
```

ECUAL APIs

- Buttons APIs

```
uint8_t SWITCH_u8GetState(uint8_t switch_num);
```

- MOTOR APIs

```
void DC_voidInitialize(void);
void DC_voidRotate(dc_direction direction);
void DC_voidSetSpeed(u8 Copy_DutyCycle);
```

APP APIs

```
void Car_init(void);
void Car_Control(void);
```