

OS
service

APP Layer

Alarm
Manager

Light Manager

Comm Manager
(BCM)

Buzzer driver

Right Lights
driver

Left Lights
driver

Comm
Handler

CAN
controller
driver

MCAL

Modules :

- Alarm Manager
- Comm Manager (BCM)
- Light Manager
- Buzzer driver
- Right Lights driver
- Left Lights driver
- Comm Handler
- CAN controller driver
- DIO
- OS service

Alarm Manager

Name	Arguments	Return	Type	Re-enterrunt	Asynchnous
InitAlarm ()	Alarm_type(enum) Alarm	Status_type(enum)	Init	Y	N
SetAlarm_st()	Alarm_type(enum) Alarm	AlarmState_type(enum)	Setter	Y	N
GetAlarm_st ()	Alarm_type(enum) Alarm	Status_type(enum)	Getter	Y	N

Comm Manager

Name	Arguments	Return	Type	Re-enterrun t	Asynchnous
InitComm ()	commProtocol_type(enum) type	Status_type	Init	Y	N
Tx_msg()	commProtocol_type type(enum) , char* TxBuffer	Status_type	Setter	Y	Y
Rx_msg()	commProtocol_typetype(enum) , char * RxBuffer	Status_type	Getter	Y	Y

Light Manager

Name	Arguments	Return	Type	Re-enterrunt	Asynchronous
LightUp ()	Light_type(enum) Light	Status_type(enum)	Setter	Y	N
GetLight_st ()	Light_type(enum) Light	LightState_type(enum)	Getter	Y	N

Buzzer driver

Name	Arguments	Return	Type	Re-enterrunt	Asynchronous
SetBuzzer_State ()	BuzzerState_type(enum) BuzzerState	Status_type(enum)	Sett er	Y	N
GetBuzzer_st ()	BuzzerState_type(enum) BuzzerState	BuzzerState_type (enum)	Gett er	Y	N

Comm Handler

Name	Arguments	Return	Type	Re-enterrunt	Asynchronous
InitComm ()	commProtocol_type type(enum), CommType ext_intr (enum)	Status_type	Init	Y	N
Tx_msg()	commProtocol_type type(enum), CommType ext_intr, char* TxBuffer	Status_type	Setter	Y	Y
Rx_msg()	commProtocol_typetype (enum), CommType ext_intr, char * RxBuffer	Status_type	Getter	Y	Y

DIO

Name	Arguments	Return	Type	Re-enterrunt	Asynchronous
InitModule ()	void	Status_type (enum)	Init	Y	N
Set_Pin ()	Port_type port (enum), Pin_type pin(enum)	Status_type (enum)	Setter	Y	N
Clr_Pin ()	Port_type port (enum), Pin_type pin(enum)	Status_type (enum)	Setter	Y	N
MaskPort ()	Port_type port(enum) , uint8 mask	Status_type (enum)	Setter	Y	N
GetPin ()	Port_type port(enum) , Pin_type pin(enum)	PinStatus(enum)	Getter	Y	N
GetPort ()	Port_type port(enum)	PortStatus(enum)	Getter	Y	N

