# APP Layer

# OS service

Sensor Manager

Comm Manager (BCM)

Switch driver

Speed sensor driver

Door Sensor driver

Comm Handler

CAN controller driver

MCAL

## Modules:

- Sensor Manager
- Comm Manager (BCM)
- Switch driver
- Speed sensor driver
- Door Sensor driver
- Comm Handler
- CAN controller driver
- DIO
- OS service

### Sensor Manager

Name	Arguments	Return	Туре	Re- enterrunt	Asynchrono us
InitSensor ()	Sensor_type sensor	Status_type(OK or Er)	Init	Υ	N
Get_digitalSensor_st()	Sensor_type sensor	DigitalStatus_type (On/Off)	Getter	Υ	N
Get_AnlgSensor_st ()	Sensor_type sensor	AngStatus_type (uint16)	Getter	Y	N

### Comm Manager

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

#### **Door Sensor**

Name	Arguments	Return	Туре	Re-enterrunt	Asynchronous
Get_Door_st()	void	DigitalStatus_type (On/Off)	Getter	Υ	N

## **Speed Sensor**

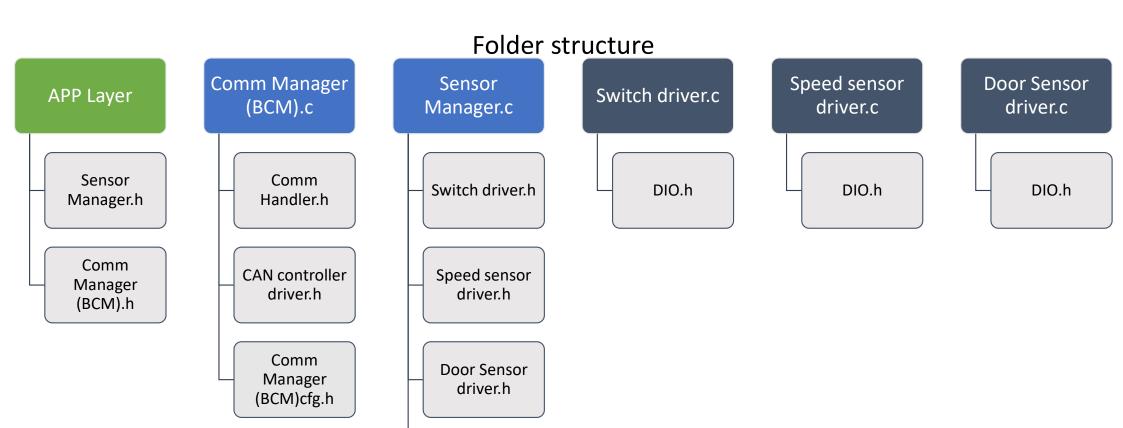
Name	Arguments	Return	Туре	Re-enterrunt	Asynchronous
Get_Speed ()	void	AngStatus_type (uint16)	Getter	Υ	N

#### Comm Handler

Name	Arguments	Return	Туре	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	Υ
Rx_msg()	commProtocol_typetype (enum), CommType ext_intr, char * RxBuffer	Status_type	Getter	Υ	Υ

### DIO

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



Sensor Manager\_cfg.h