Dynamic Design Analysis

For ECU1 and ECU2

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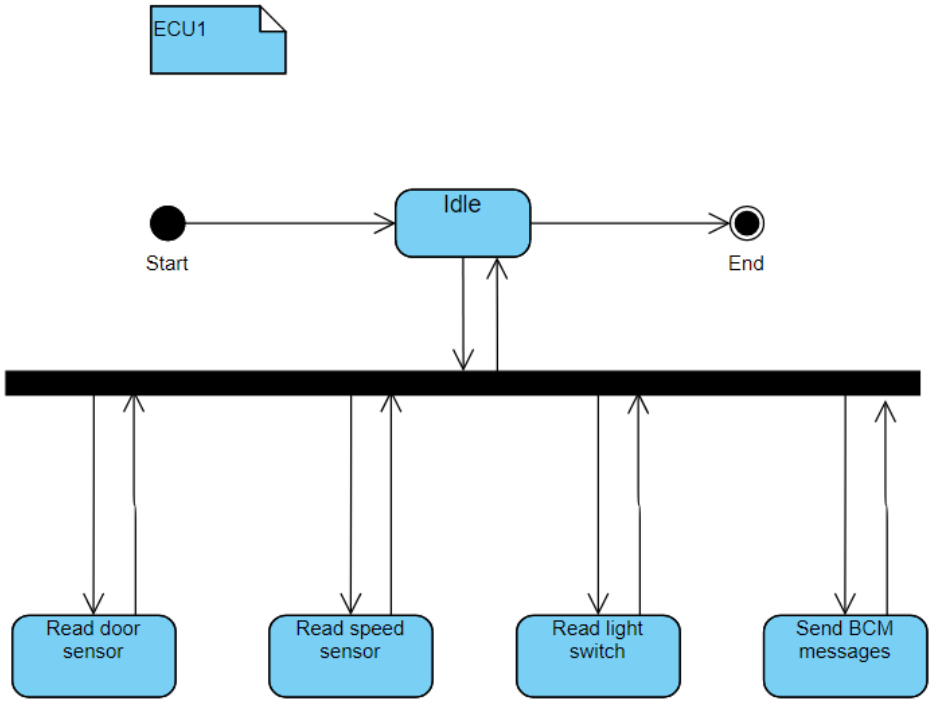
Sprints Embedded software design

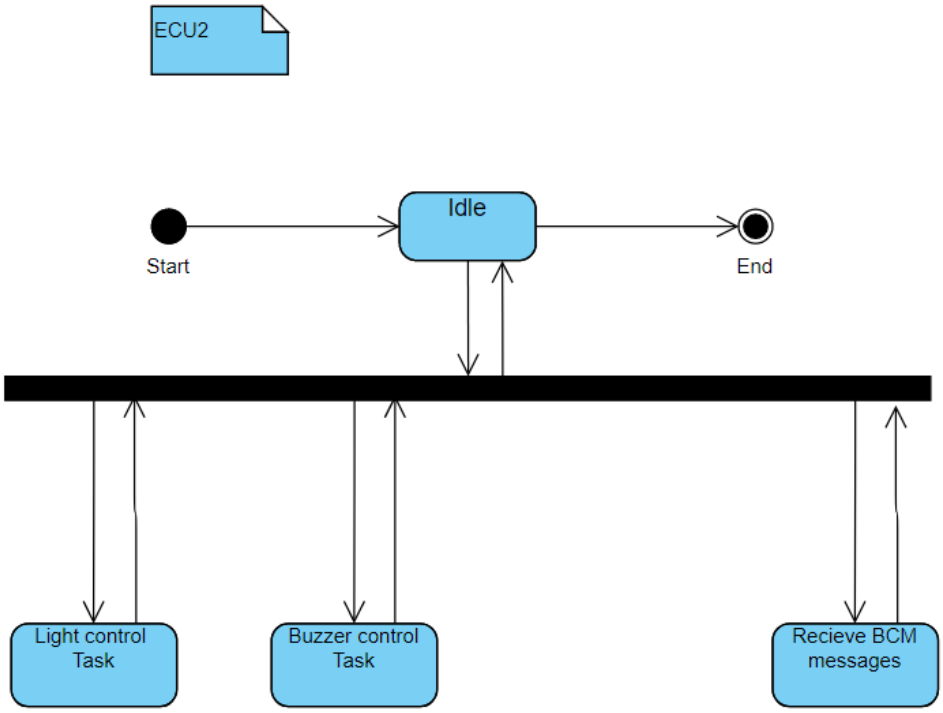
FWD July cohort

State diagrams

ECU1:

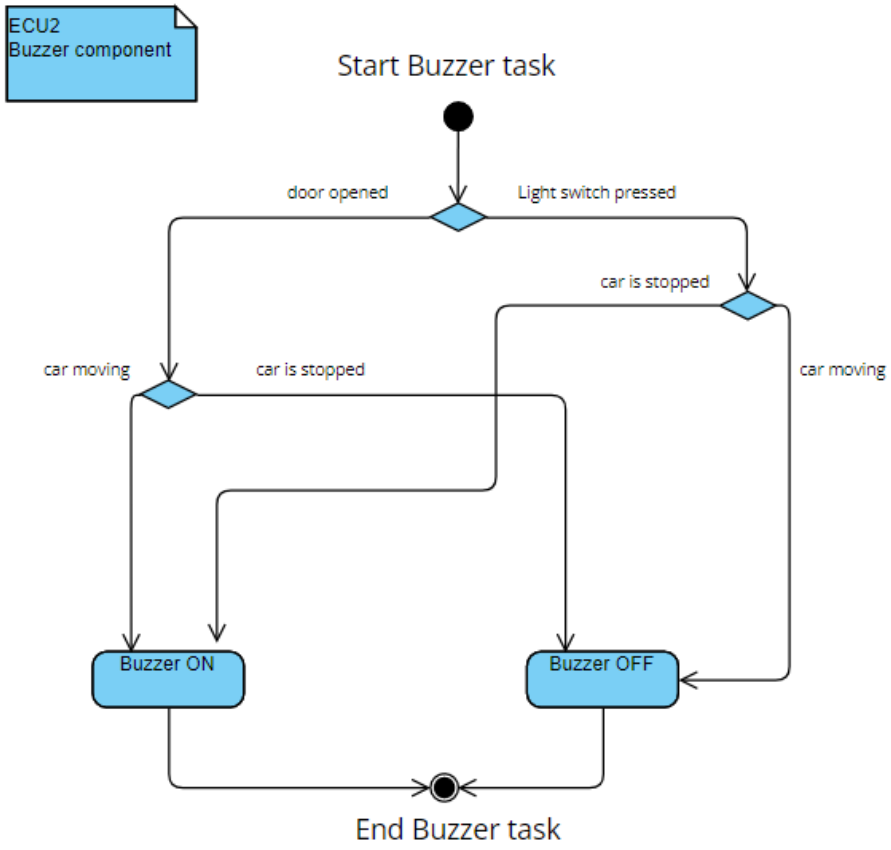


ECU2:

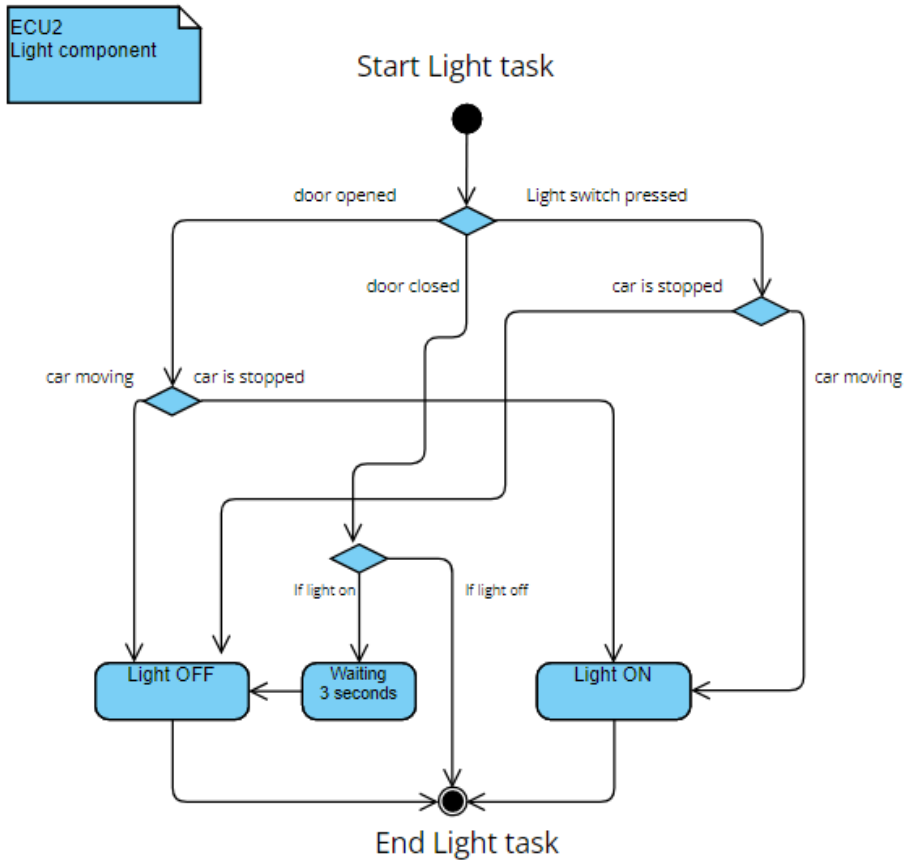

ECU2
Idle
Start
End
Light control Task
Buzzer control Task
Recieve BCM messages

ECU 2 components:

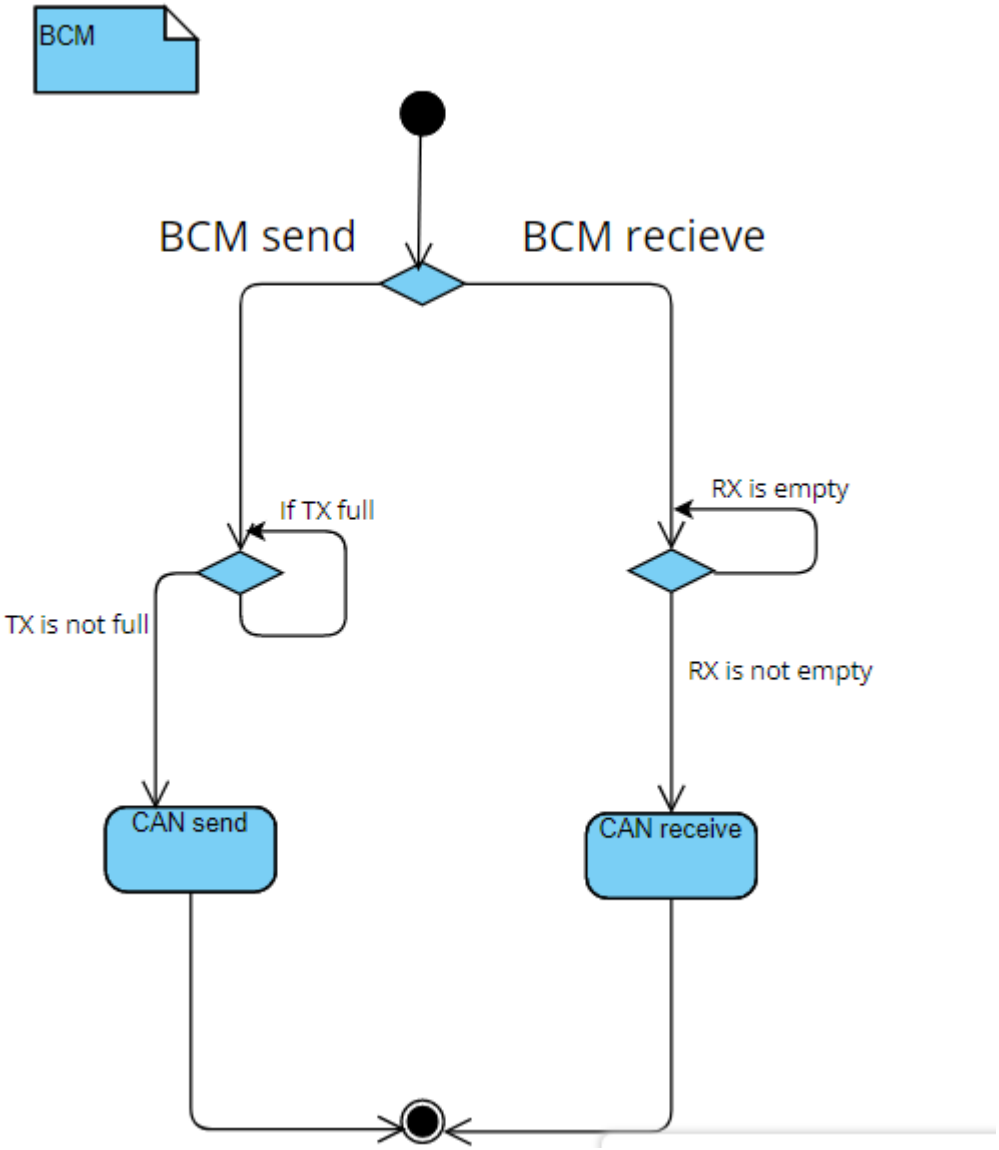
Buzzer component



Light component

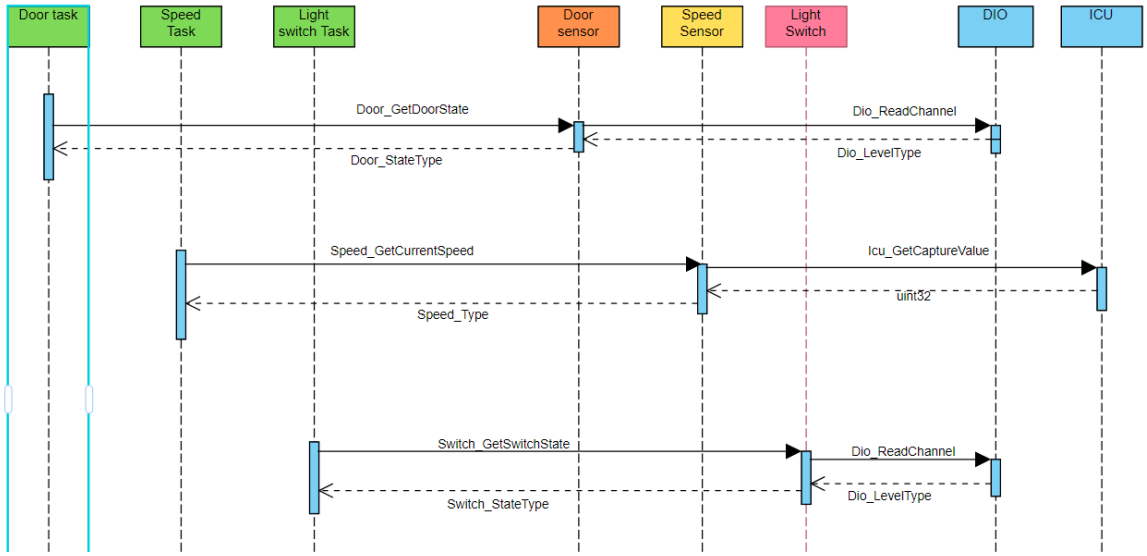


BCM component for both ECU1 and ECU2

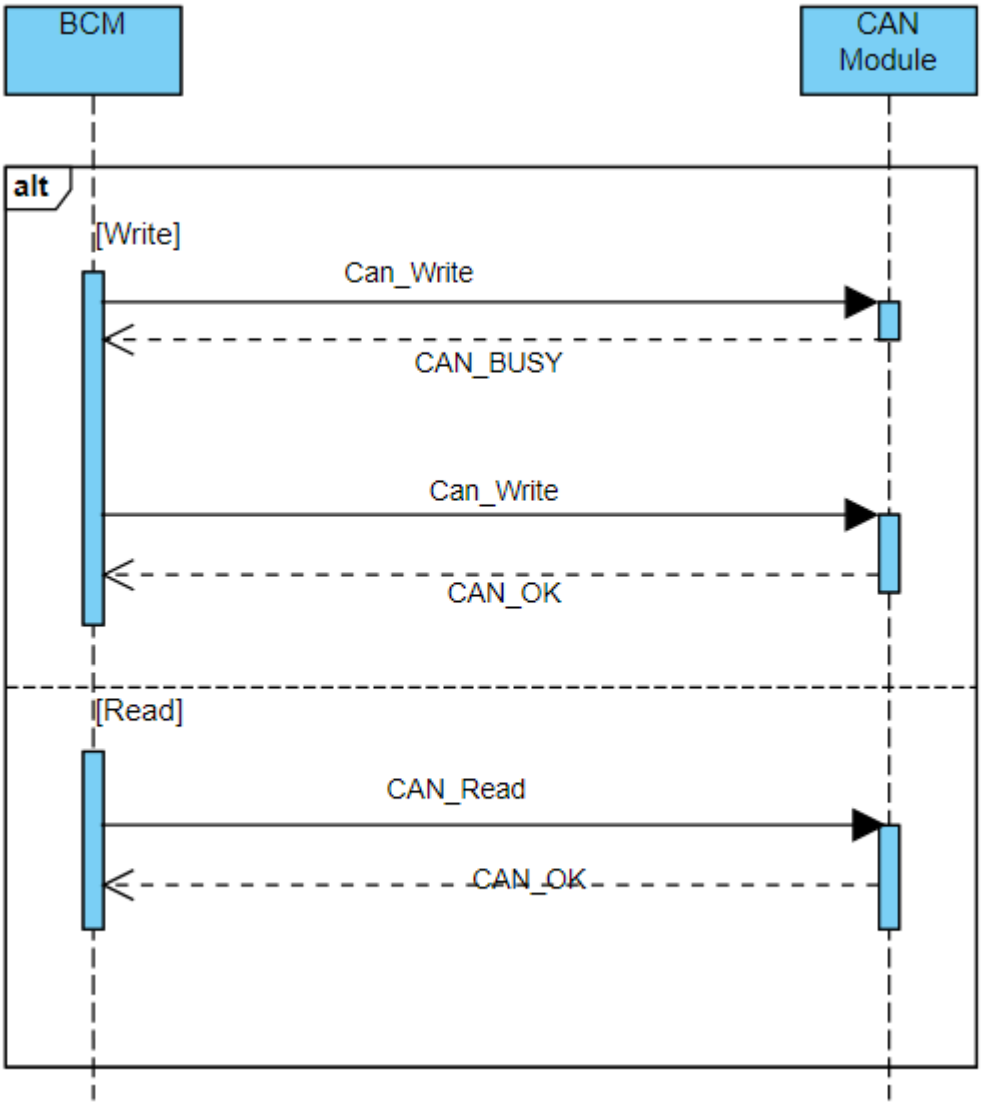


Sequence diagrams

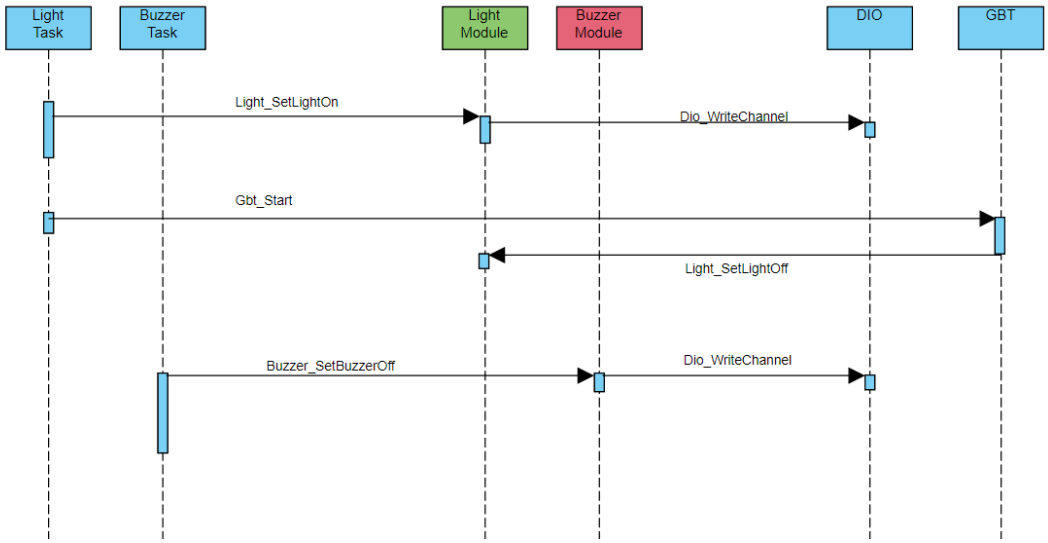
ECU 1 Tasks



BCM module


BCM
CAN Module
alt
[Write]
Can_Write
CAN_BUSY
Can_Write
CAN_OK
[Read]
CAN_Read
CAN_OK

ECU 2 Tasks


Light Task
Buzzer Task
Light Module
Buzzer Module
DIO
GBT
Light_SetLightOn
Dio_WriteChannel
Gbt_Start
Light_SetLightOff
Buzzer_SetBuzzerOff
Dio_WriteChannel