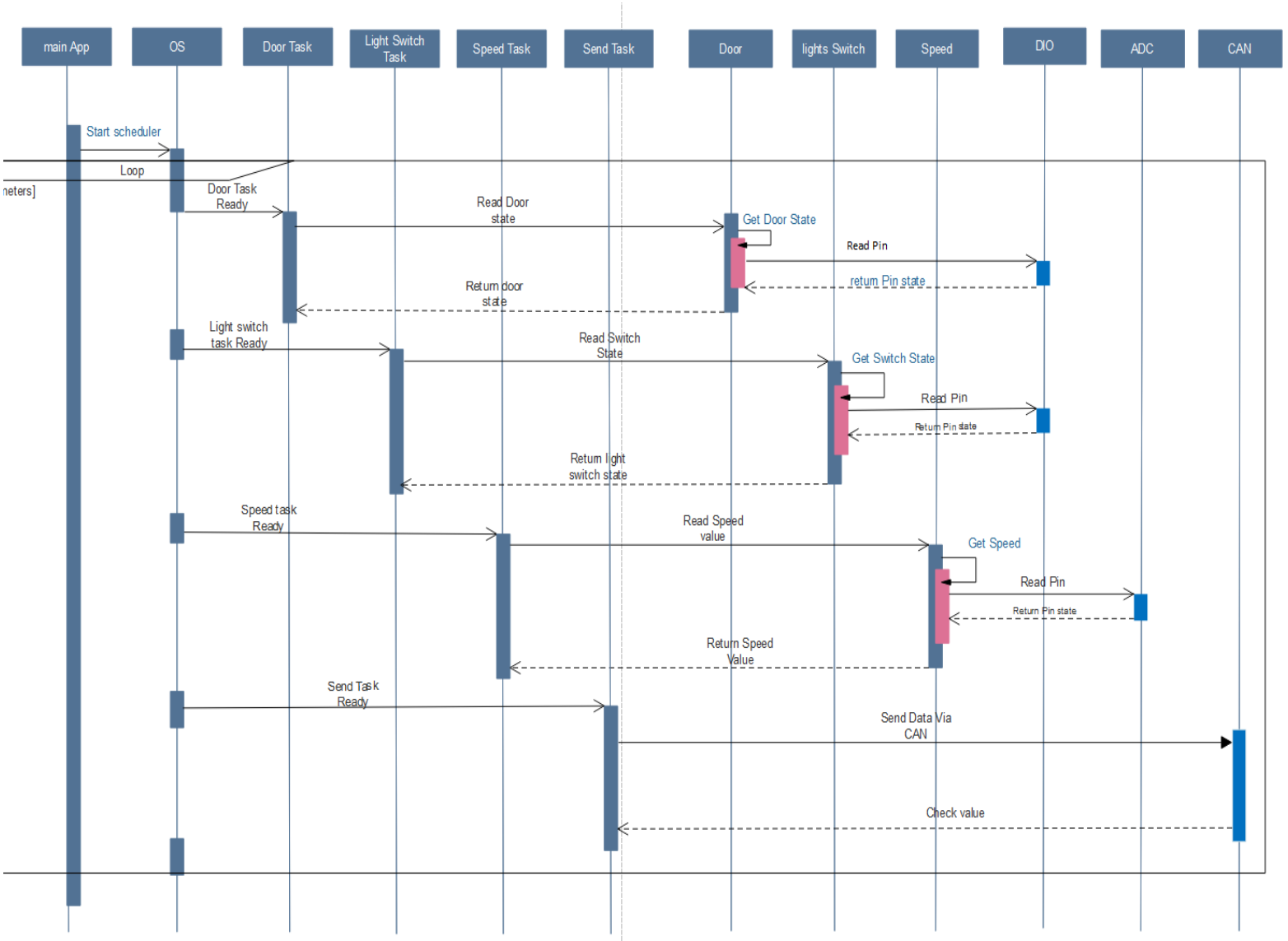
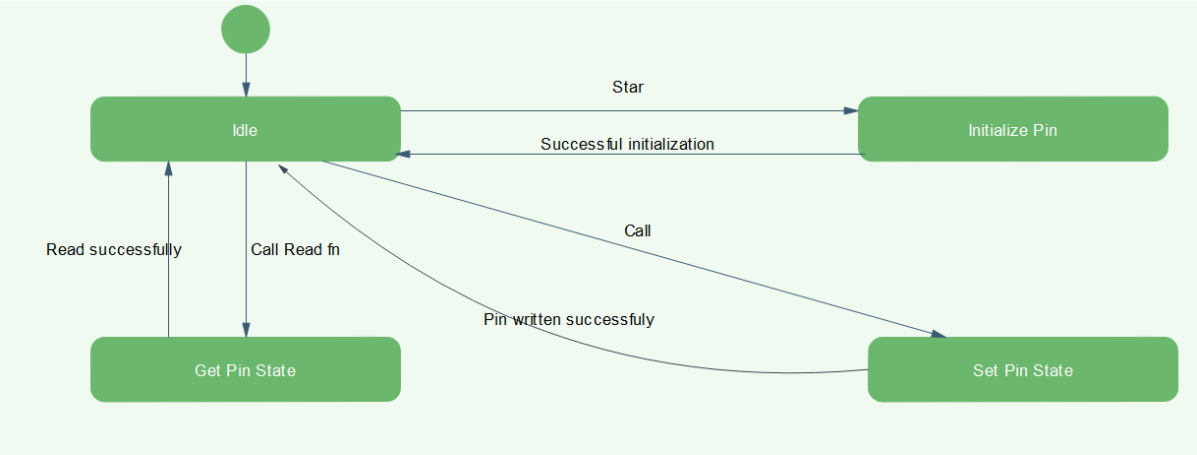
ECU 1

Sequence Diagram

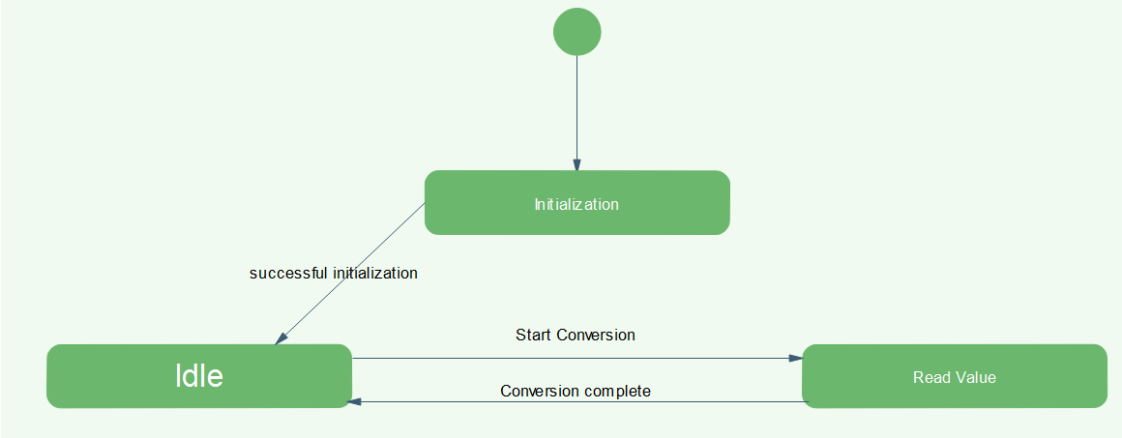


State machine Diagram for Components

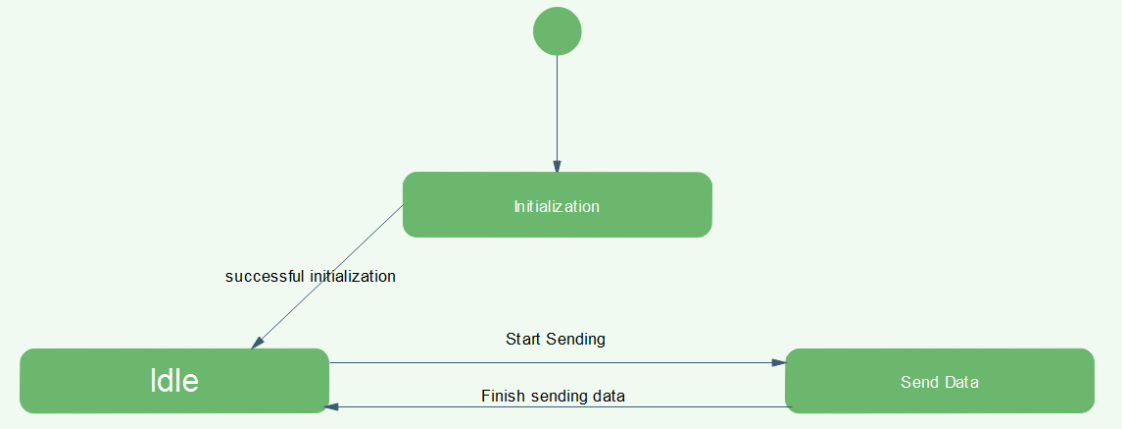
DIO



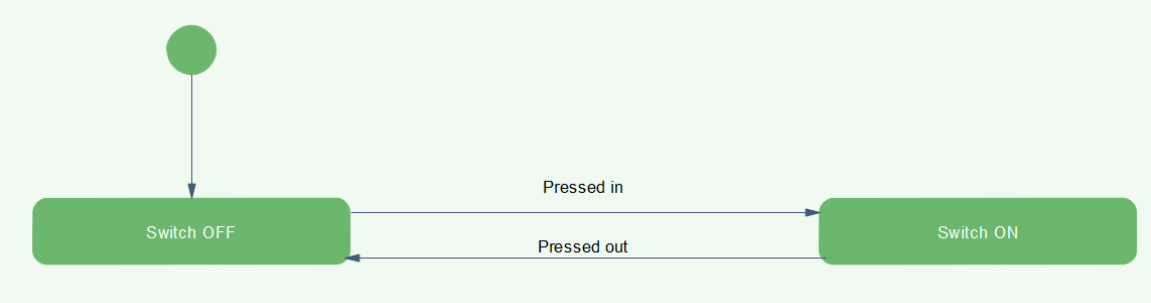
ADC



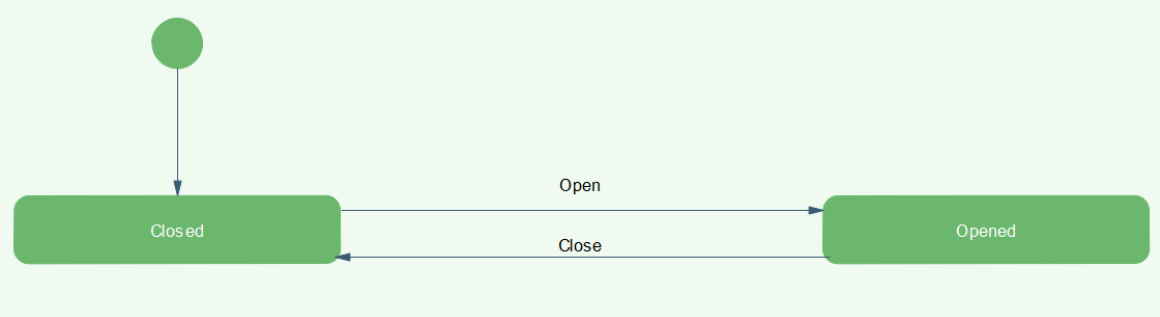
CAN



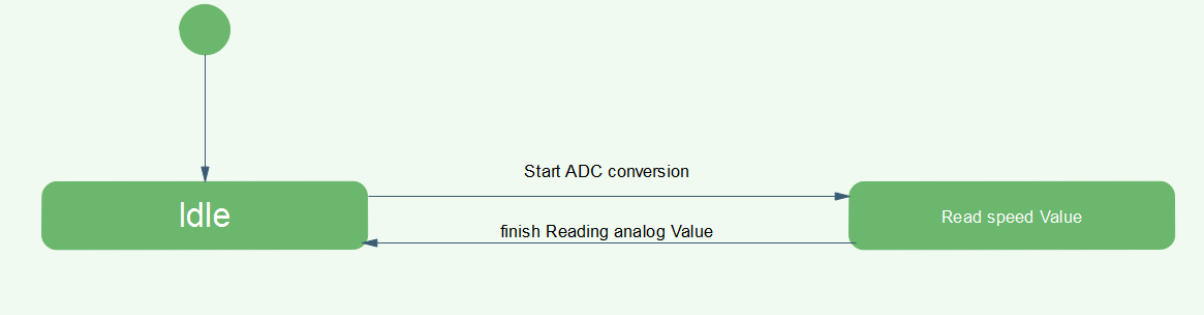
Light Switch



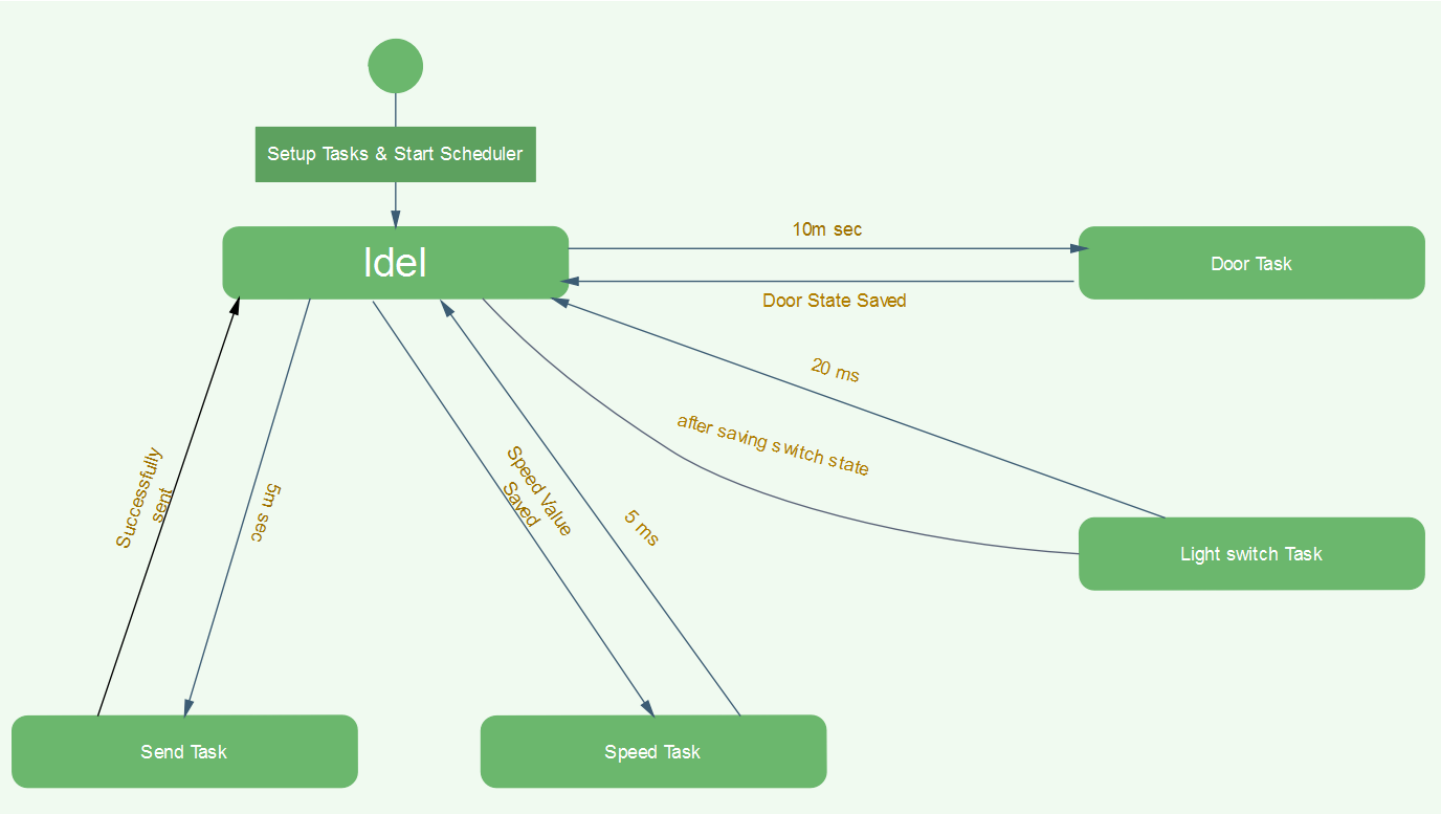
Door sensor



Speed Sensor



State machine Diagram for ECU 1

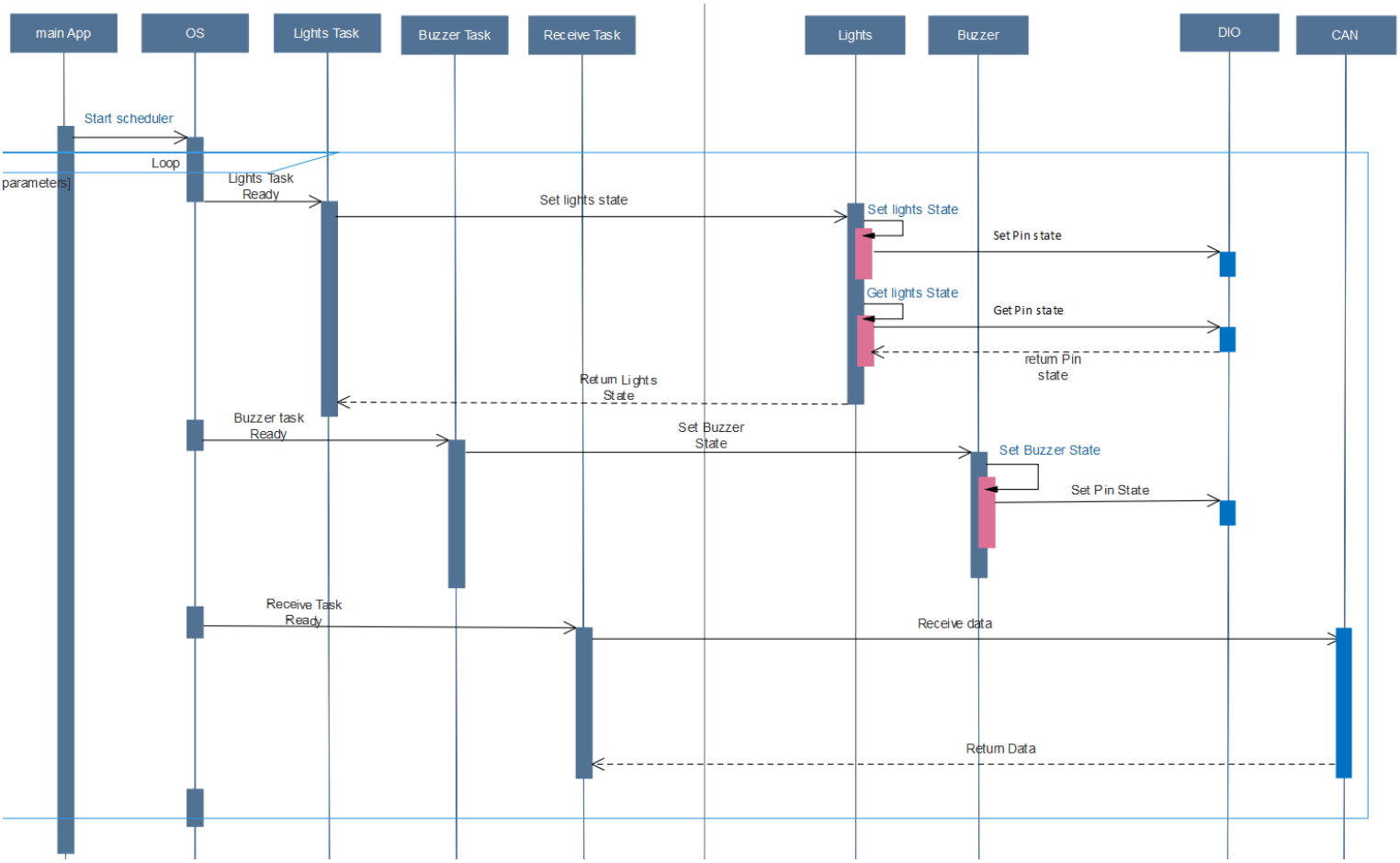


Hyperperiod = 20m sec

$$CPU\ load = \frac{(Door\ Task) * 2 + (Light\ switch\ Task) * 1 + (Speed\ Task) * 4 + (Send) * 4}{20m}$$

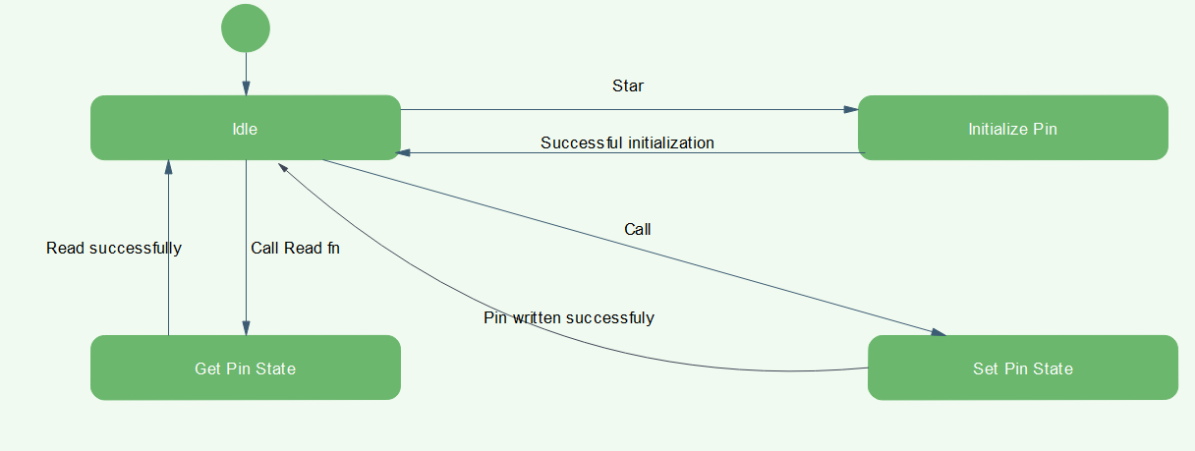
ECU 2

Sequence Diagram

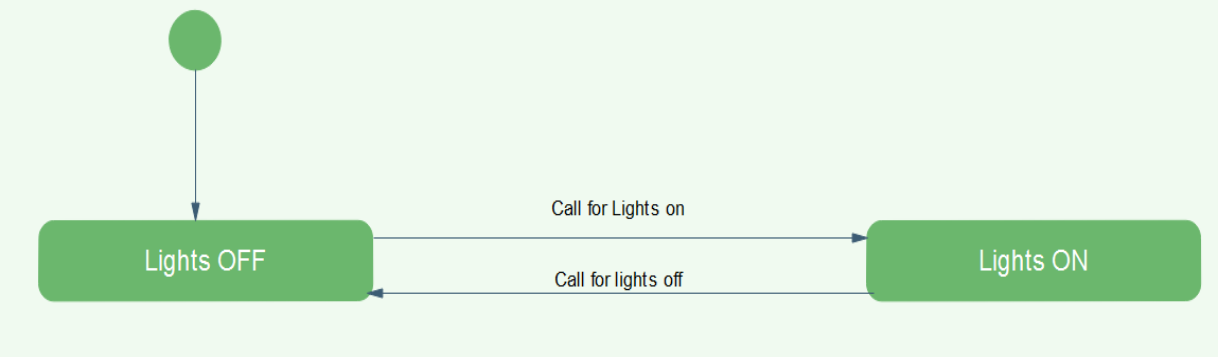


State machine Diagram for Components

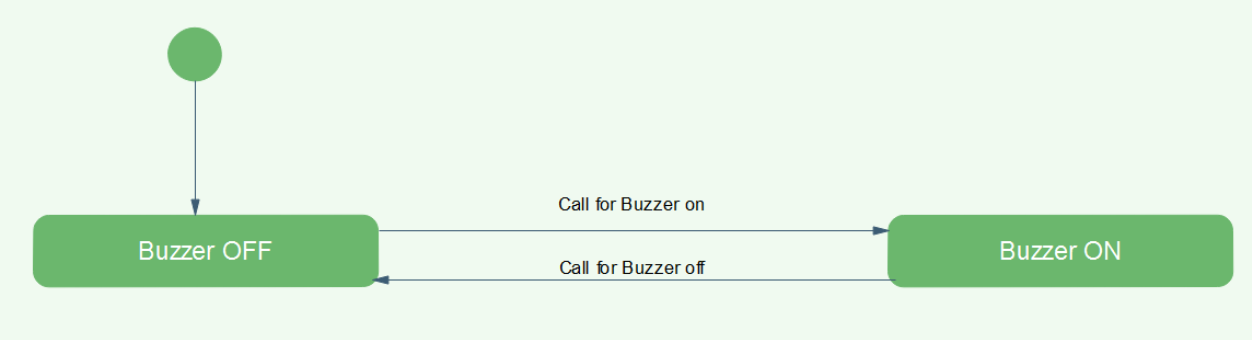
DIO



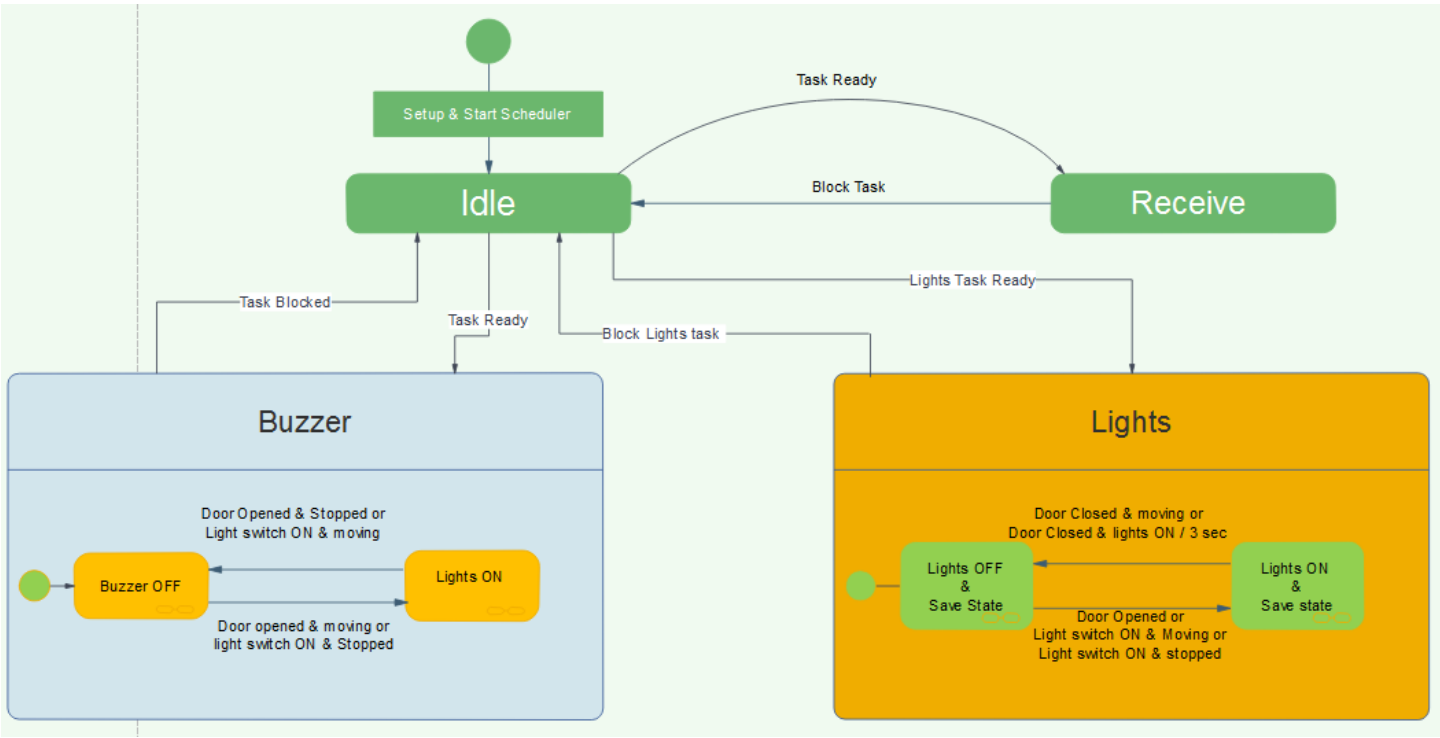
Lights



Buzzer



State machine for ECU 2



Hyperperiod = 20m sec

$$CPU\ load = \frac{(Lights\ Task) * 4 + (Buzzer\ Task) * 4 + (Receive\ Task) * 4}{20m}$$