**Smart Monitoring and Safety System:**

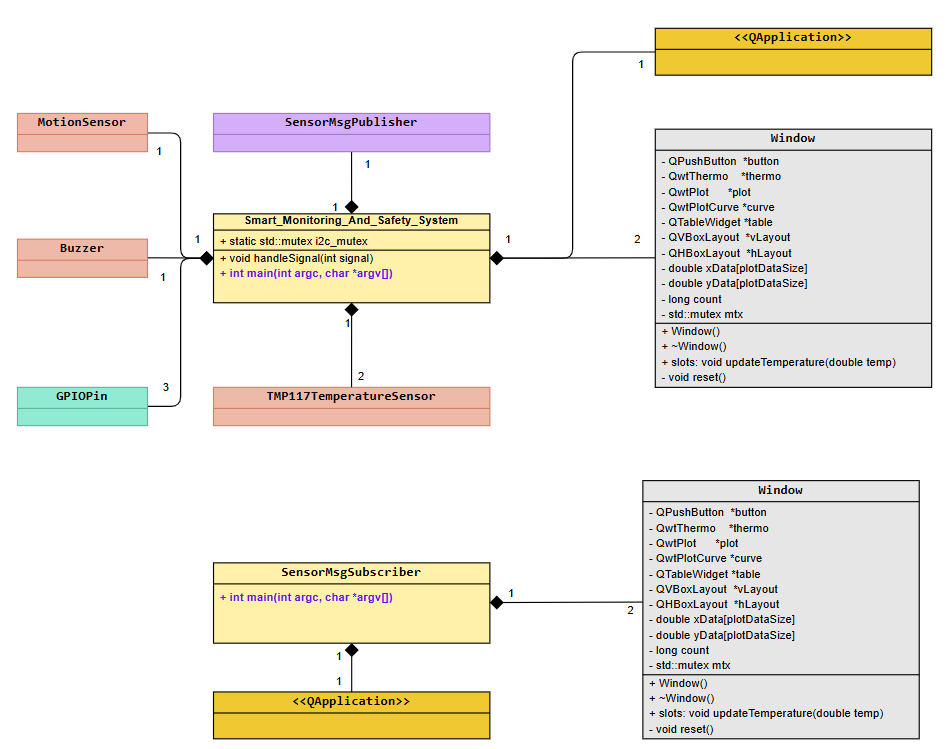


Figure 1 System/Main process – object relationship diagram.

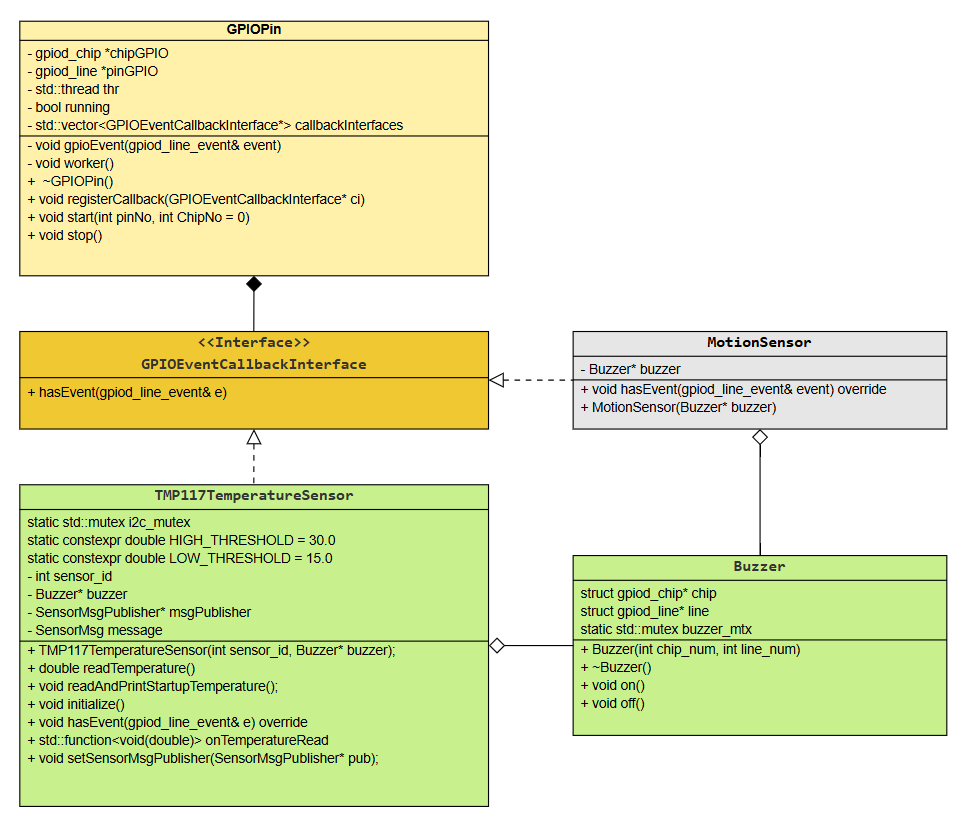


Figure 2 Class diagram for GPIO devices

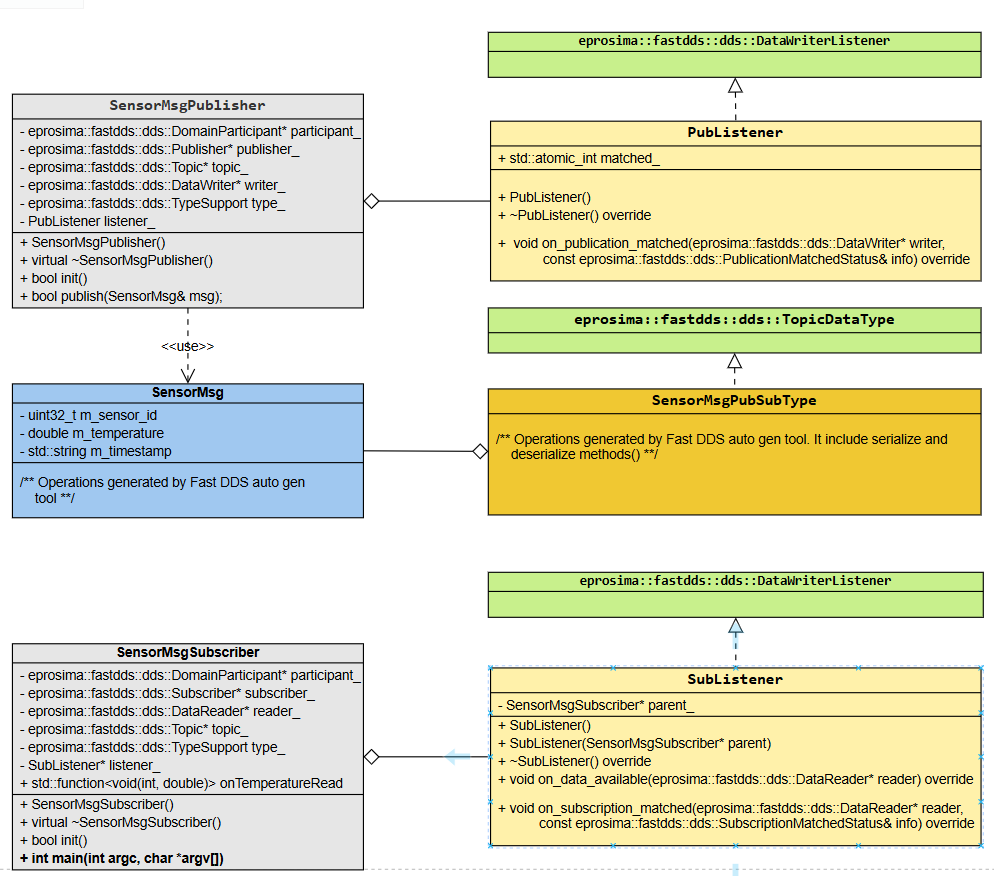


Figure 3 Class diagram of Publisher Subscriber model based on Fast DDS design model