

**Input Hardware Tasks**

**ESP32  
CPU Core0**

**Scheduler**

**Task Input  
PIR Sensor**

**Task Input  
Level Sensor -  
Dispenser**

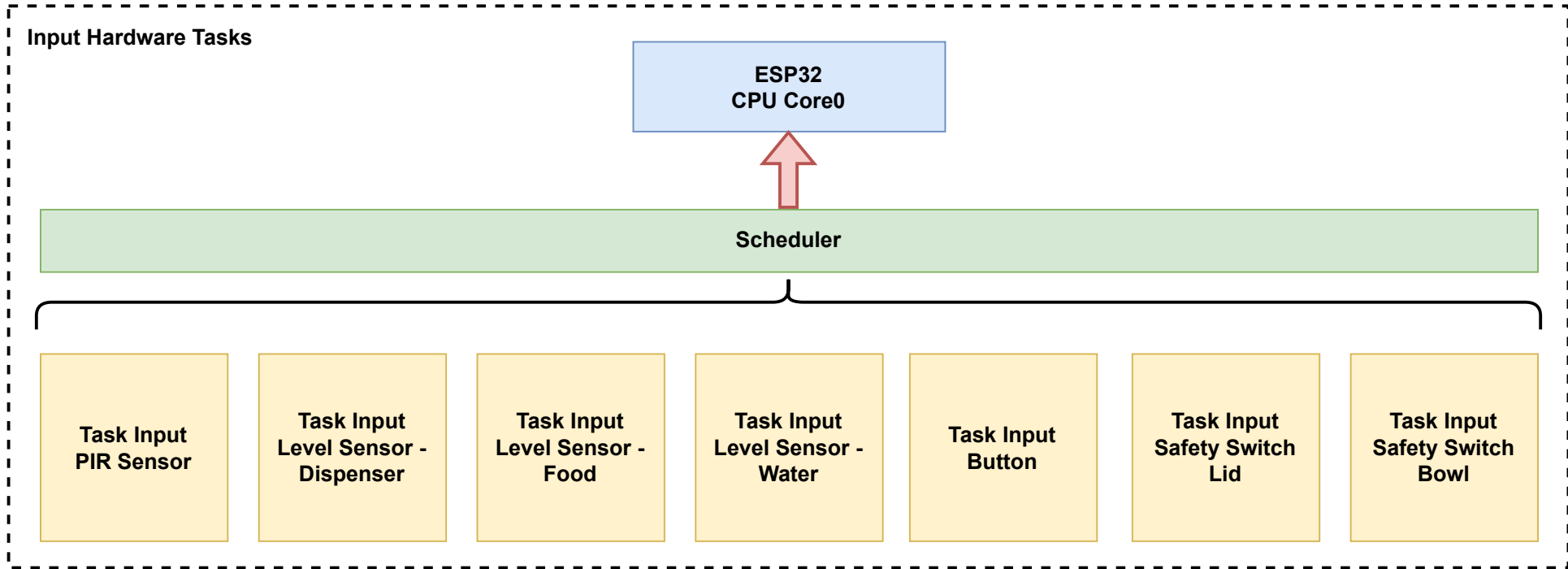
**Task Input  
Level Sensor -  
Food**

**Task Input  
Level Sensor -  
Water**

**Task Input  
Button**

**Task Input  
Safety Switch  
Lid**

**Task Input  
Safety Switch  
Bowl**



**Output Hardware Tasks**

**ESP32  
CPU Core0**

**Scheduler**

**Task Output  
Solenoid Valve**

**Task Output  
LED Notification**

**Task Output  
LED Level**

**Task Output  
LED State**

**Task Output  
Stepper Motor**



## MQTT Communication Tasks

ESP32  
CPU Core1



Scheduler

Communication  
Task  
Connect

Communication  
Task  
Publish

Communication  
Task  
Subscribe

