

Software Requirements of PIR Sensor Driver

Team X

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Scope of Document

This document specifies the software requirements of PIR Sensor Driver.

Functional Overview

PIR Sensor Driver provides details about the configured port and pin which it's connected to, also it provides over view about the functions used to get info. About the sensor.

Requirement Specifications

Functional Requirements

Configuration and initialization

1- [SRS_PIR_4600] The PIR Driver shall support symbolic names for PORT&PIN

| Type: | Valid |
|---------------------|---|
| Description: | The PIR driver shall allow the static configuration of the following symbolic names: <ul style="list-style-type: none">• PIR_port_num• PIR_pin_num• Direction |
| Rationale: | Provide human readable symbolic names for PIR channels |
| Use cases | Get access to PIR sensor |
| Dependencies | -- |
| Supporting material | -- |

2- The PIR Driver shall provide a service to initialize the sensor

| Type: | Valid |
|--------------|--|
| Description: | The PIR driver shall provide a service to the sensor pin |
| Rationale: | Basic Function |
| Use cases | Initialize the PIR sensor |

| | |
|----------------------------|----------------|
| Dependencies | [SRS_PIR_4600] |
| Supporting material | -- |

3-[SRS_PIR_4603] The PIR Driver provide a service to read the status of the sensor

| | |
|----------------------------|---|
| Type: | Valid |
| Description: | The PIR driver shall provide a service to read status of the sensor pin |
| Rationale: | Basic Function |
| Use cases | Read Sensor Status |
| Dependencies | [SRS_DIO_508] |
| Supporting material | -- |