**Requirements on Button Driver**

**Team X**

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# Scope of document:

This document specifies requirements on the module Button Driver.

# Functional overview:

The Button driver initializes the Button, reads the value on the button's pin, and sets the state pull-up for the button.

# Requirement specifications:

## Functional Requirements:

### Configuration and initialization:

#### [SRS\_Button\_211] The Button Driver shall support symbolic names for the Button.

| Type: | Valid |
| --- | --- |
| Description: | The Button driver shall allow the static configuration of the following symbolic names:   * Button port * Button pin |
| Rationale: | Provide human-readable symbolic names for Button |
| Use cases | -- |
| Dependencies | -- |
| Supporting material | -- |

#### pins.[SRS\_Button\_212] The Button driver shall provide a service that initializes the Button.

#### 

| Type: | Valid |
| --- | --- |
| Description: | The Button driver shall provide a service that initializes Button pin as input |
| Rationale: | Basic functionality |
| Use cases | Initialize the Button |
| Dependencies | [SRS\_Button\_211] |
| Supporting material | -- |

### Normal operation:

#### [SRS\_Button\_213] The Button driver shall provide a service read button pin

| Type: | Valid |
| --- | --- |
| Description: | The Button driver shall provide a service that reads the value of the button pin. This value may be high or low. |
| Rationale: | Basic functionality |
| Use cases | Read the value of button pin |
| Dependencies | [SRS\_Button\_211] , [SRS\_Button\_212] |
| Supporting material | -- |

#### [SRS\_Button\_214] The Button driver shall provide a service that make button state as pull up.

| Type: | Valid |
| --- | --- |
| Description: | The Button driver shall provide a service that makes the button pull up which button’s pin will be input and high. |
| Rationale: | Basic functionality |
| Use cases | makes button’s pin as pull up. |
| Dependencies | [SRS\_Button\_211] , [SRS\_Button\_212] |
| Supporting material | -- |

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