

# **Requirements on Solenoid Driver**

**Team X**

## Contents

Scope of document:.....	2
Functional overview: .....	2
Requirement specifications:.....	2
Functional Requirements: .....	2
Configuration and initialization: .....	2
Normal operation: .....	3

## Scope of document:

This document specifies requirements on the module Solenoid Driver.

## Functional overview:

The Solenoid driver initializes the Solenoid, Opens the solenoids and closes the solenoids.

## Requirement specifications:

### Functional Requirements:

#### Configuration and initialization:

- 1- [SRS\_Solenoid\_4301] The Solenoid Driver shall support symbolic names for Solenoid pin.

Type:	Valid
Description:	The Solenoid driver shall allow the static configuration of the following symbolic names: <ul style="list-style-type: none"><li>• Solenoid port</li><li>• Solenoid pin</li></ul>
Rationale:	Provide human readable symbolic names for Solenoid channels
Use cases	--
Dependencies	--
Supporting material	--

- 2- [SRS\_Solenoid4302] The Solenoid driver shall provide a service that initializes the solenoid.

Type:	Valid
Description:	The Solenoid driver shall provide a service that initializes solenoid pin.
Rationale:	Basic functionality
Use cases	Initialize the solenoid
Dependencies	[SRS_Solenoid_4301], [SRS_Solenoid_4302]
Supporting material	--

**Normal operation:**

- 1- [SRS\_Solenoid\_4303] The Solenoid driver shall provide a service that opens the solenoid.

<b>Type:</b>	<b>Valid</b>
<b>Description:</b>	The solenoid driver shall provide a service that opens the solenoid.
<b>Rationale:</b>	Basic functionality
<b>Use cases</b>	Write high on the solenoid pin.
<b>Dependencies</b>	[SRS_Solenoid_4301], [SRS_Solenoid_4302]
<b>Supporting material</b>	--

- 2- [SRS\_Solenoid\_4304] The Solenoid driver shall provide a service that closes the solenoid.

<b>Type:</b>	<b>Valid</b>
<b>Description:</b>	The Solenoid driver shall provide a service that closes the solenoid
<b>Rationale:</b>	Basic functionality
<b>Use cases</b>	Write Low on the solenoid pin
<b>Dependencies</b>	[SRS_Solenoid_4301], [SRS_Solenoid_4302]
<b>Supporting material</b>	--