

# **Requirements on ADC Driver**

**Team X**

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## Scope of document:

This document specifies requirements on the module ADC Driver.

## Functional overview:

The ADC Driver provides readings from different types of sensors that sends analog values.

The following expressions are used within the ADC driver

Expression	Explanation
Channel_number	Represents multiple ADC channels that are grouped by hardware and accessible synchronously.  Example: CH0

## Functional Requirements:

### Configuration and initialization:

- 1- [SRS\_ADC\_900] The configuration and initialization of the port structure in the ADC driver.

Type:	Valid
Description:	The DIO driver shall allow the static configuration of the following symbolic names: <ul style="list-style-type: none"><li>• Channel Number</li></ul>
Rationale:	--
Use cases	--
Dependencies	--
Supporting material	--

**Normal operation:**

- 1- [SRS\_ADC\_901] The ADC Driver shall provide a service that reads a data word from the assigned channel.

<b>Type:</b>	<b>Valid</b>
<b>Description:</b>	The ADC Driver shall provide a service that reads a data word from the assigned channel.
<b>Rationale:</b>	Basic functionality
<b>Use cases</b>	Read access to the selected ADC channel
<b>Dependencies</b>	General read behaviour
<b>Supporting material</b>	--