Requirements on DCMOTOR Driver

Team X

Contents

Introduction:

The proposed AVR DC MOTOR Driver is a C language library designed to provide efficient and flexible control over the dc motor functionality. This SRS document outlines the specifications, functionalities, and features of the DC MOTOR Driver.

Scope of document:

The AVR DC MOTOR Driver aims to provide the following key features:

- Initialization function

- Pulse Width Modulation (PWM) configuration for low speed rotation

-high speed rotation function

Requirement specifications:

Functional Requirements:

Configuration and initialization:

1- [SRS_DCMOTOR_111] The DC MOTOR driver shall provide an initialization function to configure the MOTOR module.

Type:	Valid
Description:	The DCMOTOR driver shall provide an initialization function to configure the DC MOTOR module.
Use cases	--
Dependencies	--
Supporting material	--

2- [SRS_DCMOTOR_112] The DCMOTOR driver shall provide a service that configures the PWM mode to provide 50% duty cycle signal

Type:	Valid
Description:	The DCMOTOR driver shall support configuration for PWM mode for low speed rotation.
Use cases	--
Dependencies	[SRS_DCMOTOR_111]
Supporting material	--

3- [SRS_DCMOTOR_113] The DCMOTOR driver shall provide a service that provides the high speed rotation.

Type:	Valid

Description:	The DCMOTOR driver shall provide a service that provides high speed rotation
Use cases	--
Dependencies	[SRS_DCMOTOR_111]
Supporting material	--

Non-Functional Requirements:

1. [SRS_DCMOTOR_001] The DCMOTOR driver shall provide the efficiency feature.

Type	Valid
Description	The driver provides the necessary functionality for controlling the dc motor
Dependencies	--