

Requirements on UART Driver

Team X

Contents

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

Scope of document:

This document specifies requirements on the module UART Driver.

Functional overview:

The UART driver initializes, sends character, number or string and Receive character, number or string.

Requirement specifications:

Functional Requirements:

Configuration and initialization:

- 1- [SRS_UART_3301] The UART driver shall provide a service that that initializes the UART.

Type:	Valid
Description:	The UART driver shall provide a service that initializes UART.
Rationale:	Basic functionality
Use cases	Initialize the UART
Dependencies	--
Supporting material	--

Normal operation:

- 1- [SRS_UART_3302] The UART driver shall provide a service that transmit character or number to another MCU

Type:	Valid
Description:	The UART driver shall provide a service that transmit character or number to another MCU.
Rationale:	Basic functionality
Use cases	transmit character or number to another MCU.
Dependencies	[SRS_UART_3301]
Supporting material	--

- 2- [SRS_UART_3303] The UART driver shall provide a service that send a string to another MCU.

Type:	Valid
Description:	The UART driver shall provide a service that displays a string on the UART.
Rationale:	Basic functionality
Use cases	Displays a string on the UART
Dependencies	[SRS_UART_3301]
Supporting material	--

- 3- [SRS_UART_3304] The UART driver shall provide a service that receive character, number or string from another MCU.

Type:	Valid
Description:	The UART driver shall provide a service that receive character, number or string from another MCU.
Rationale:	Basic functionality
Use cases	Receive character, number or string from another MCU.
Dependencies	[SRS_UART_3301]
Supporting material	--

- 4- [SRS_UART_3305] The UART driver shall provide a service that set call back function

Type:	Valid
Description:	The UART driver shall provide a service that set call ISR function.
Rationale:	Basic functionality
Use cases	Take the address of a function
Dependencies	[SRS_UART_3301]
Supporting material	--

- 5- [SRS_UART_3306] The UART driver shall provide a service that enable transmit complete interrupt.

Type:	Valid
Description:	The UART driver shall provide a service that enable transmit complete interrupt.
Rationale:	Basic functionality
Use cases	Enable TXIC
Dependencies	[SRS_UART_3305]
Supporting material	--

6- [SRS_UART_3307] The UART driver shall provide a service that enable Enable USART data register empty

Type:	Valid
Description:	The UART driver shall provide a service that enable Enable USART data register empty
Rationale:	Basic functionality
Use cases	Enable UDRIE
Dependencies	[SRS_UART_3301]
Supporting material	--

7- [SRS_UART_3308] The UART driver shall provide a service that enable receive complete

Type:	Valid
Description:	The UART driver shall provide a service that enable receive complete
Rationale:	Basic functionality
Use cases	Enable RXIE
Dependencies	[SRS_UART_3301]
Supporting material	--