SPI Drivers

For

AVR Microcontrollers

LOW LEVEL DESGIN Document

Version: 1st **Date: 26/10/2023**

1. API specification

1.1 Type definitions

Name:	**STD_TYPE**
Type:	struct

Element:	`uint8 SPI_InterruptEnable ;`
	`uint8 SPI_SPIEnable ;`
	`uint8 SPI_DataOrder ;`
	`uint8 SPI_MasterSlaveSelect ;`
	`uint8 SPI_ClockPolarity ;`
	`uint8 SPI_ClockPhase ;`
	`uint8 SPI_ClockRate ;`

Description:	To make SPI configration

2. Function definitions

Service name:	**SPI_InitConfig**
Syntax:	uint8 SPI_InitConfig (SPI_CONFIG * spi);
Parameters (in):	SPI_CONFIG
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	Local_Error
Description:	The function make the initialization of SPI
NUM:	

Service name:	**SPI_Tranceive_Receive**
Syntax:	`uint8 SPI_Tranceive_Receive (uint8 Copy_TData ,` `uint8 * Copy_RData);`
Parameters (in):	`Copy_TData,` `* Copy_RData`
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	Local_Error

Description:	This function used to send and receive data
NUM:	

Service name:	**SPI_SendByte**
Syntax:	void SPI_SendByte(uint8 data);
Parameters (in):	data
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	NONE
Description:	This function used to send one byte
NUM:	

Service name:	**SPI_ReceiveByte**
Syntax:	uint8 SPI_ReceiveByte();
Parameters (in):	NONE
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	Value Of SPDR
Description:	This function used to receive one byte
NUM:	

Service name:	**SPI_SendString**
Syntax:	void SPI_SendString (uint8 *str);
Parameters (in):	*str
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	NONE
Description:	This function used to send string

NUM:	

Service name:	**SPI_ReceiveString**
Syntax:	void SPI_ReceiveString(uint8 *str);
Parameters (in):	*str
Parameters (in/out):	NONE
Parameters (out):	NONE
Return value:	NONE
Description:	This function used to receive string
NUM:	