

SWS_02: ADC_Driver

1. Imported Types:

Header file	Imported type
standardTypes.h	Uint8
standardTypes.h	Uint16
standardTypes.h	E_OK
standardTypes.h	E_NOK

2. Type definitions:

[ADC_01]

Name	ADC_initConfigurations	
Kind	Structure	
Elements	Hardware Dependent Structure	
	Type	-
	Comment	The contents of the initialization data structure are specific to the Microcontroller.
Description	Type of the external data structure containing the initialization data for this module.	
Available via	adc.h	

3. Function definition:

[ADC_02]

Service Name	Adc_init	
Syntax	STATUS Adc_init(ADC_initConfigurations * ConfigPtr)	
Parameters (in)	ConfigPtr	Pointer to configuration set
Parameters (inout)	None	

Parameters (out)	None
Return value	STATUS
Description	Initializes the ADC driver module
Available via	adc.h

[ADC_03]

Service Name	Adc_readChannelPolling	
Syntax	STATUS Adc_readChannelPolling (uint8 channelNum , uint16 * read_buffer)	
Parameters (in)	channelNum	uint8
Parameters (inout)	read_buffer	Pointer to Uint16
Parameters (out)	None	
Return value	STATUS	
Description	Reads the ADC channel using the polling technique	
Available via	adc.h	

[ADC_04]

Service Name	Adc_readChannelInterrupt	
Syntax	STATUS Adc_readChannelInterrupt (uint8 channelNum , uint16 * read_buffer)	
Parameters (in)	channelNum	uint8
Parameters (inout)	read_buffer	Pointer to Uint16
Parameters (out)	None	
Return value	STATUS	
Description	Reads the ADC channel using the interrupt technique	
Available via	adc.h	