## TIMER\_module

## **API DESIGN TABLE**

FUNCTION NAME	TIM_deInit		
ARGUMENTS	INPUT	Name	TIM_channel
		Туре	TIM_channelTypeDef
		Description	Selects a certain timer channel
	OUTPUT	NONE	
	INPUT/OUTPUT		
RETURN	E_OK	0	
	E_NOK	1	
DESCRIPTION	Disable a timer channel		

FUNCTION NAME	TIM_init		
ARGUMENTS	INPUT	Name	TIM_config
		Туре	Ptr to TIM_initTypeDef
		Description	Pointer to the configuration structure
	OUTPUT	NONE	
	INPUT/OUTPUT	NONE	
RETURN	E_OK	0	
	E_NOK	1	
DESCRIPTION	Initialize a timer peripheral		

FUNCTION NAME	TIM_start			
ARGUMENTS	INPUT		Name Type Description Name Type	TIM_channel TIM_channelTypeDef Selects the TIM_period U16(hardware dependent)
	ОИТРИТ		Description NONE	The number of ticks the timer takes to overflow/underflow
	INPUT/OUTPUT		NONE	
RETURN	E_OK E_NOK	0 1		
DESCRIPTION	The selected time	r st	arts counting for a specifi	ed period.

FUNCTION	TIM_STOP			
NAME				
ARGUMENTS	INPUT	Name	TIM_channel	
		Туре	TIM_channelTypeDef	
		description	Selects a certain timer	
			channel.	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK (	_OK 0		
	E_NOK	L		
DESCRIPTION	Stops the specified timer channel			

## Data type table

Name	TIM_channelTypeDef		
Туре	Enumeration		
Elements	TIMER_ONE 1		
	TIMER_TWO 2		
	TIMER_THREE 3		
description	This enumeration represents the timers of	This enumeration represents the timers of the	
	target		

Name	TIM_irqEnableTypeDef
Туре	Enumeration
Elements	TIM_IRQ_ENABLE 1
	TIM_IRQ_DISABLE 2
description	DISABLE/ENABLE timers interrupt

Name	TIM_initTypeDef		
Type	Structure		
Elements	Name	TIM_channel	
	Туре	TIM_channelTypeDef	
	Description	Selects a certain timer channel	
	Name	TIM_prescaler	
	Туре	U16(target dependent)	
	Description	Select certain prescaler to slow down	
		the target clock	
	Name	TIM_irqEnable	
	Туре	TIM_irqEnableTypeDef	
	description	Disable or enable interrupts	
Description	Configuration structure		