PWM_module

API DESIGN TABLE

FUNCTION NAME	PWM_deInit			
ARGUMENTS	INPUT	Name	PWM_config	
		Type	Ptr to PWM_initTypeDef	
		Description	Pointer to the configuration structure	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	Disable a PWM channel			

FUNCTION NAME	PWM_init			
ARGUMENTS	INPUT	Name	PWM_config	
		Type	Ptr to PWM_initTypeDef	
		Description	Pointer to the configuration structure	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	Initialize the PWM channel			

FUNCTION NAME	PWM_start			
ARGUMENTS	INPUT	Name		PWM_config
		Type		Ptr to PWM_initTypeDef
		description		Use the channel number, duty and frequency to start PWM generation on a pin
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	Starts PWM generation.			

FUNCTION NAME	PWM_STOP			
ARGUMENTS	INPUT	Name		PWM_config
		Type		Ptr to PWM_initTypeDef
		description		Use the channel number to stop the motor.
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	Stops a PWM channel			

Data type table

Name	PWM_channelTypeDef	
Type	Enumeration	
Elements	PWM_CHANNEL_ONE	1
	PWM_CHANNEL_TWO	2
description	Select which PWM channel to use	

Name	PWM_portPin		
Type	Structure		
Elements	Name	PIN	
	Type	DIO _pinTypeDef	
	Description	SPECIFIES THE GPIO PIN TO BE CONFIGURED	
	Name	PORT	
	Type	DIO_portTypeDef	
	Description	Select if the pin is output or input	
Description	Selects a specified pin for the MOTOR		

Name	PWM_modeTypeDef	
Type	Enumeration	
Elements	FAST_PWM	1
	PHASE_CORRECT_PWM	2
	FREQ_PHASE_PWM	3
description	Mode of operation data type	

Name	PWM_initTypeDef			
Type	Structure			
Elements		Name	PWM_channel	
		Type	PWM_channelTypeDef	
		Description	Selects the PWM channel to use	
		Name	PWM_pin	
		Type	Array of PWM_portPin	
		Description	Select the connected pins to MOTOR. This array contains 2 pins For every set to interface with H-BRIDGE	
		Name	PWM_duty	
		Type	U8 (0:100)	
		Description	Selects pwm duty	
		Name	PWM_freq	
		Type	U32	
		Description	Selects the pwm requency in hz	
		Name	PWM_mode	
		Type	PWM_modeTypeDef	
		Description	Selects the PWM mode of operation	
Description	Configuration structure			