Lcd_module

API DESIGN TABLE

FUNCTION NAME	LCD_init			
ARGUMENTS	INPUT	Name	LCD_config	
		Type	Ptr to LCD_initTypeDef	
		Description	Selects lcd mode and pins	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	Initialize lcd and choose the specified modes			

FUNCTION NAME	LCD_sendData			
ARGUMENTS	INPUT	Name	LCD_DATA	
		Type	U8	
		Description	Character to be sent one	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		
DESCRIPTION	This function sends one character to the LCD			

FUNCTION NAME	LCD_sendCommand			
ARGUMENTS	INPUT	Name	LCD_COMMAND	
		Type	LCD_commandsTypeDef	
		Description	COMMAND TO BE SEND TO LCD	
	OUTPUT	NONE		
	INPUT/OUTPUT	NONE		
RETURN	E_OK	0		
	E_NOK	1		

DESCRIPTION	This function to send different commands to lcd

Data type table

Name	LCD_initTypeDef	
Type	Structure	
Elements	Name	LCD_MODE
	Type	DIO_pinTypeDef
	Description	SPECIFIES THE GPIO PIN TO BE CONFIGURED
	Name	LCD_pins
	Type	Array of LCD_portPin
	Description	Select the connected pins to lcd. This array contains pins from pin 8 to pin 4 or 0 depending on the mode
Description	Configuration	

Name	LCD_commandsTypeDef	
Type	Enumeration	
Elements	CLEAR	0x01
	CURSOR_OFF	0x0C
	CURSOR_ON	0x0E
	SET_CURSOR_LOC	0x80
	FOUR_BITS_ONE_LINE	0x20
	EIGHT_BITS_ONE_LINE	0x30
	FOUR_BITS_TWO_LINE	0x28
	EIGHT_BITS_TWO_LINE	0x38
description	Commands to be sent to LCD	

Name	LCD_portPin	
Type	Structure	
Elements	Name	DIO_PIN
	Type	DIO_pinTypeDef
	Description	SPECIFIES THE GPIO PIN TO BE CONFIGURED
	Name	DIO_PORT
	Type	DIO_portTypeDef

	Description	Select if the pin is output or input	
Description	Selects a specified pin for the lcd		