

DRIVERS TEST CASES

Driver	Driver Function	Testing Steps	Expected Results
<i>DIO Driver</i>	DIO_INIT	1- Check wether providing vaild inputs returns DIO_OK 2- Check wether providing invaild port_number returns WRONG_DIO_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_DIO_PIN_NUMBER 4- Check wether providing invaild pin_direction returns WRONG_DIO_DIRECTION	if all checks pass then test_DIO_init = 1
	DIO_write	1- Check wether providing vaild inputs returns DIO_OK 2- Check wether providing invaild port_number returns WRONG_DIO_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_DIO_PIN_NUMBER 4- Check wether providing invaild pin_value returns WRONG_DIO_PIN_VALUE	if all checks pass then test_DIO_write = 1
	DIO_toggle	1- Check wether providing vaild inputs returns DIO_OK 2- Check wether providing invaild port_number returns WRONG_DIO_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_DIO_PIN_NUMBER	if all checks pass then test_DIO_toggle = 1
	DIO_read	1- Check wether providing vaild inputs returns DIO_OK 2- Check wether providing invaild port_number returns WRONG_DIO_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_DIO_PIN_NUMBER	if all checks pass then test_DIO_read = 1
<i>Interrupt Driver</i>	INT0_init	1- Check wether providing vaild inputs returns INTERRUPT_OK 2- Check wether providing invaild trigger value returns WRONG_INTERRUPT_TRIGGER	if all checks pass then test_Interrupt_init = 1
<i>Timers Driver</i>	TIMER_init	1- Check wether providing vaild inputs returns TIMER_OK 2- Check wether providing invaild Timer name returns WRONG_TIMER_NAME 3- Check wether providing invaild Timer mode returns WRONG_TIMER_MODE	if all checks pass then test_Timer_init = 1
	delay	1- Check wether providing vaild inputs returns TIMER_OK 2- Check wether providing invaild Timer name returns WRONG_TIMER_NAME	if all checks pass then test_Timer_delay = 1
<i>LED Driver</i>	LED_init	1- Check wether providing vaild inputs returns LED_OK 2- Check wether providing invaild port_number returns WRONG_LED_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_LED_PIN_NUMBER	if all checks pass then test_LED_init = 1
	LED_on	1- Check wether providing vaild inputs returns LED_OK 2- Check wether providing invaild port_number returns WRONG_LED_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_LED_PIN_NUMBER	if all checks pass then test_LED_on = 1
	LED_off	1- Check wether providing vaild inputs returns LED_OK 2- Check wether providing invaild port_number returns WRONG_LED_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_LED_PIN_NUMBER	if all checks pass then test_LED_off = 1
	LED_toggle	1- Check wether providing vaild inputs returns LED_OK 2- Check wether providing invaild port_number returns WRONG_LED_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_LED_PIN_NUMBER	if all checks pass then test_LED_toggle = 1
<i>Button Driver</i>	BUTTON_init	1- Check wether providing vaild inputs returns BUTTON_OK 2- Check wether providing invaild port_number returns WRONG_BUTTON_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_BUTTON_PIN_NUMBER	if all checks pass then test_BUTTON_init = 1
	BUTTON_read	1- Check wether providing vaild inputs returns BUTTON_OK 2- Check wether providing invaild port_number returns WRONG_BUTTON_PORT_NUMBER 3- Check wether providing invaild pin_number returns WRONG_BUTTON_PIN_NUMBER	if all checks pass then test_BUTTON_read = 1