

Greetings,

I'm using Atollic True Studio compiler, cubemx code with STM32L476RGx MCU. I'm trying to send and receive data to Memory FRAM MB85RS64V using SPI. Code below tries to send {0x06, 0x02, 0x00, 0x04, 0x01, 0x02, 0x03, 0x04, 0x04}, but the logic analyzer shows random garbage data everytime. (Screenshot Included)

```

int main(void)
{
    /* USER CODE BEGIN 1 */
    uint8_t writedata[] = {0x01, 0x02, 0x03, 0x04};
    uint8_t readata[4];
    GPIO_InitTypeDef gpioConfig;

    /* USER CODE END 1 */

    /* MCU Configuration-----*/
    /* Reset of all peripherals, Initializes the Flash interface and the Systick. */
    HAL_Init();

    /* USER CODE BEGIN Init */

    /* USER CODE END Init */

    /* Configure the system clock */
    SystemClock_Config();

    /* USER CODE BEGIN SysInit */

    /* USER CODE END SysInit */

    /* Initialize all configured peripherals */
    MX_GPIO_Init();
    MX_SPI2_Init();
    /* USER CODE BEGIN 2 */
    gpioConfig.Pin= 12;
    gpioConfig.Mode = GPIO_MODE_AF_PP;
    gpioConfig.Pull = GPIO_NOPULL;
    gpioConfig.Speed = GPIO_SPEED_FREQ_MEDIUM ;
    gpioConfig.Alternate = 0;
    HAL_GPIO_Init(GPIOB, &gpioConfig);
    //for(int i=0;i<4;i++)
    HAL_SPI_TransmitReceive_IT(&hspi2, writedata, readata, sizeof(writedata)/sizeof(uint8_t));
    //HAL_SPI_Receive_IT(&hspi2, readata, sizeof(readata)/sizeof(uint8_t));
    //for(int i=0; i<50000; i++);
    //HAL_SPI_Receive_IT(&hspi2, read data, 1);
    //HAL_SPI_TransmitReceive(&hspi2, write data, read data, 1, HAL_MAX_DELAY);
    // FRAM Implementation

    uint8_t addr[]={0, 0x04};
    uint8_t opcodewrite[] = {0x02};
    uint8_t opcodewriteenable[] = {0x06};
    uint8_t opcodewritereset[] = {0x04};
    uint8_t opcoderead[] = {0x03};

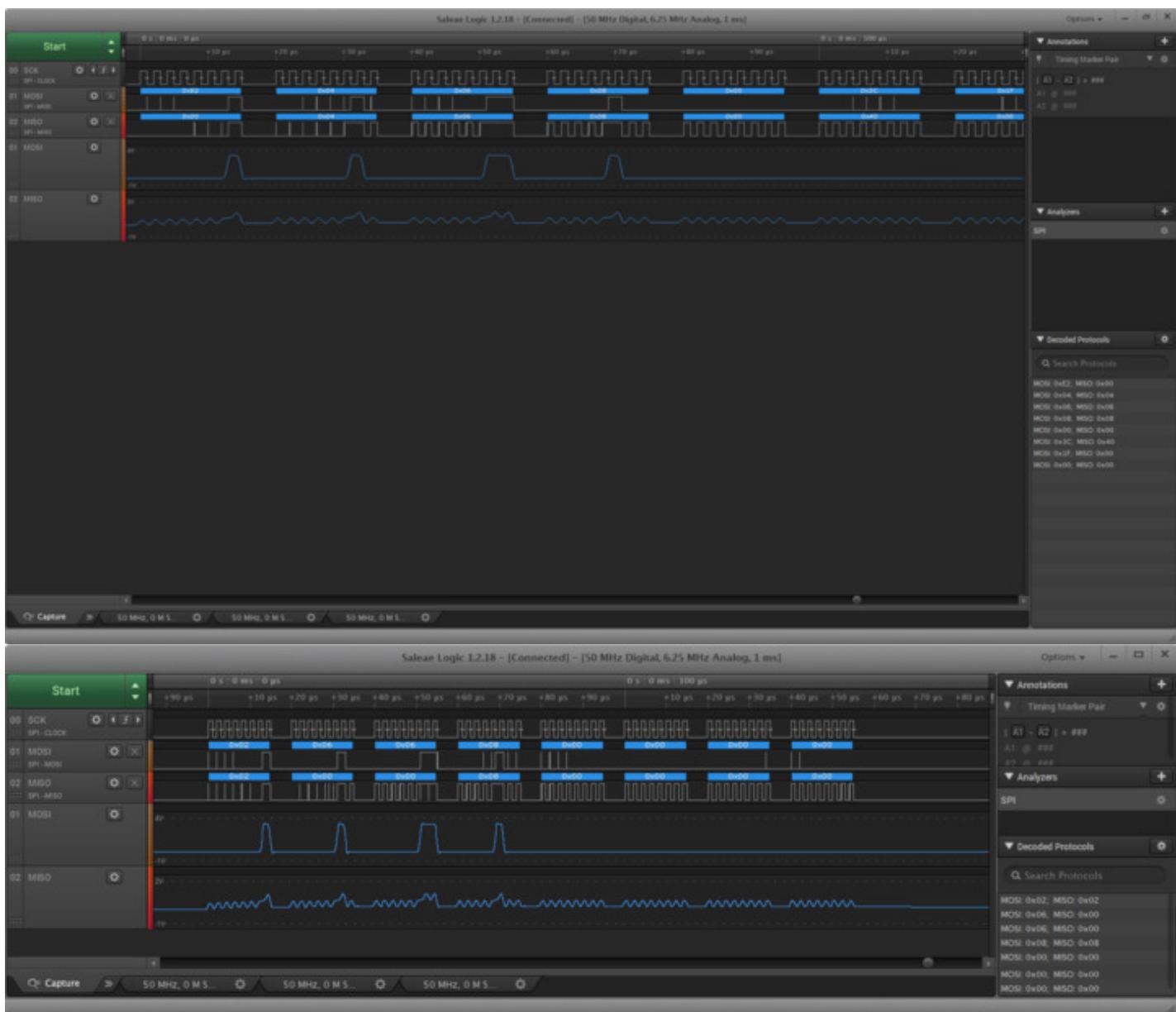
    HAL_GPIO_WritePin(GPIOB, 12, 0);
    HAL_SPI_Transmit_IT(&hspi2, opcodewriteenable, sizeof(opcodewriteenable));
    HAL_SPI_Transmit_IT(&hspi2, opcodewrite, sizeof(opcodewrite));
    HAL_SPI_Transmit_IT(&hspi2, addr, 2);
    HAL_SPI_Transmit_IT(&hspi2, writedata, 4);
    HAL_SPI_Transmit_IT(&hspi2, opcodewritereset, sizeof(opcodewritereset));
    HAL_GPIO_WritePin(GPIOB, 12, 1);

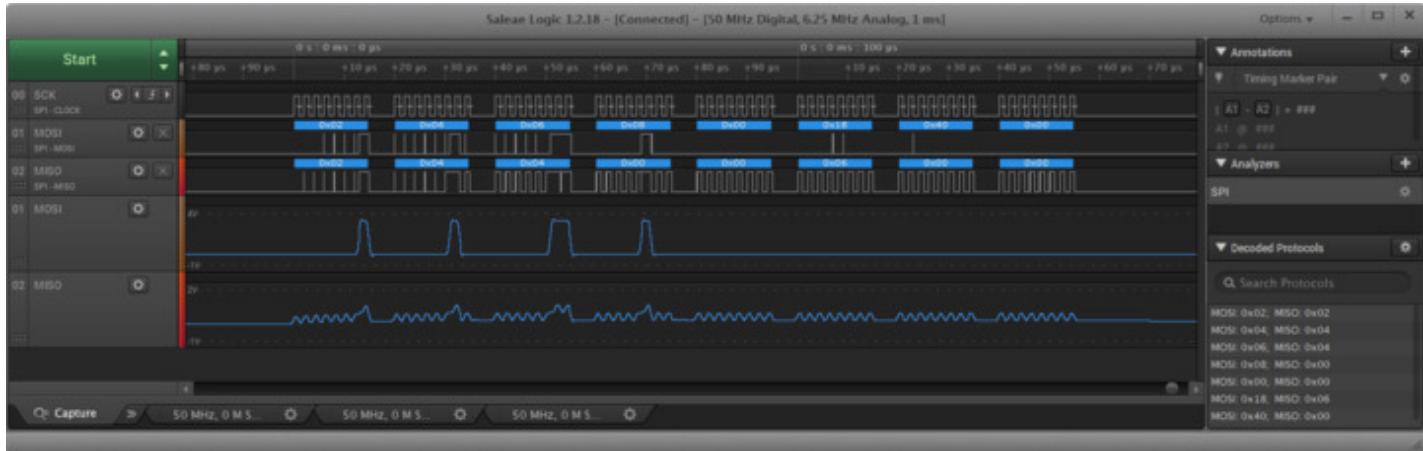
    HAL_GPIO_WritePin(GPIOB, 12, 0);
    HAL_SPI_Transmit_IT(&hspi2, opcoderead, sizeof(opcoderead));
    HAL_SPI_Transmit_IT(&hspi2, addr, 2);

```

```
HAL_SPI_Receive_IT(&hspi2, readata, 4  
HAL_GPIO_WritePin(GPIOB, 12, 1);  
  
/* USER CODE END 2 */  
  
/* Infinite loop */  
/* USER CODE BEGIN WHILE */  
while (1)  
{  
  
/* USER CODE END WHILE */  
  
/* USER CODE BEGIN 3 */  
  
}  
/* USER CODE END 3 */
```

?





I'm missing a small factor, which I don't get a tip-off, let me know your views on it ?! Thanks for your patience and time.

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