

Hi guys,

I've implemented the code to send data from STM32f103 to PC with USART interface, but the data that I receive are wrong. This is the code that I've implemented :

```

void RCC_Configuration( void )
{
    /* RCC system reset(for debug purpose) */
    RCC_DeInit();

    /* Enable HSE */
    RCC_HSEConfig( RCC_HSE_ON );

    /* Wait till HSE is ready */
    HSEStartUpStatus = RCC_WaitForHSEStartUp();

    if ( HSEStartUpStatus == SUCCESS )
    {
        /* Enable Prefetch Buffer */
        FLASH_PrefetchBufferCmd( FLASH_PrefetchBuffer_Enable );

        /* Flash 2 wait state */
        FLASH_SetLatency( FLASH_Latency_2 );

        /* HCLK = SYSCLK */
        RCC_HCLKConfig( RCC_SYSCLK_Div1 );//Define AHB prescale @72Mhz

        /* PCLK2 = HCLK */
        RCC_PCLK2Config( RCC_HCLK_Div1 ); //Define APB2 prescale @72Mhz

        /* PCLK1 = HCLK/2 */
        RCC_PCLK1Config( RCC_HCLK_Div2 ); //Define APB1 prescale @36Mhz

        /* ADCCLK = PCLK2/4 */
        RCC_ADCCLKConfig( RCC_PCLK2_Div6 ); //Max 14 Mhz now @12Mhz

        /* PLLCLK = 8MHz*9 = 72MHz */
        RCC_PLLConfig( RCC_PLLSource_HSE_Div1, RCC_PLLMul_9 );

        /*Set USB clock @48Mhz*/
        RCC_USBCLKConfig(RCC_USBCLKSource_PLLCLK_1Div5);

        /* Enable PLL */
        RCC_PLLCmd( ENABLE );

        /* Wait till PLL is ready */
        while ( RCC_GetFlagStatus( RCC_FLAG_PLLRDY ) == RESET )
            {};

        /* Select PLL as system clock source */
        RCC_SYSCLKConfig( RCC_SYSCLKSource_PLLCLK );

        /* Wait till PLL is used as system clock source */
        while ( RCC_GetSYSCLKSource() != 0x08 )
            {};
    }

    /* Enable peripheral clocks -----*/

    /* Enable SPI1 clocks */
    RCC_APB2PeriphClockCmd( RCC_APB2Periph_SPI1 , ENABLE );

    /* Enable GPIOs clocks */
    RCC_APB2PeriphClockCmd( RCC_APB2Periph_GPIOA | RCC_APB2Periph_GPIOB, ENABLE);
}

```

```

    /* Enable USART1 clock */
    RCC_APB2PeriphClockCmd(RCC_APB2Periph_USART1 , ENABLE);
}

void USART_init(void)
{
    USART_InitTypeDef USART_InitStructure;
    GPIO_InitTypeDef GPIO_InitStructure;

    /* USARTx configured as follow:
     - BaudRate = 115200 baud
     - Word Length = 8 Bits
     - One Stop Bit
     - No parity
     - Hardware flow control disabled (RTS and CTS signals)
     - Receive and transmit enabled
    */
    USART_InitStructure.USART_BaudRate = 115200;
    USART_InitStructure.USART_WordLength = USART_WordLength_8b;
    USART_InitStructure.USART_StopBits = USART_StopBits_1;
    USART_InitStructure.USART_Parity = USART_Parity_No;
    USART_InitStructure.USART_HardwareFlowControl = USART_HardwareFlowControl_None;
    USART_InitStructure.USART_Mode = USART_Mode_Rx | USART_Mode_Tx;

    /* Configure USART Tx as alternate function push-pull */
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_AF_PP;
    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_9;
    GPIO_InitStructure.GPIO_Speed = GPIO_Speed_50MHz;
    GPIO_Init(GPIOA, &GPIO_InitStructure);

    /* Configure USART Rx as input floating */
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_IN_FLOATING;
    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_10;
    GPIO_Init(GPIOA, &GPIO_InitStructure);

    /* USART configuration */
    USART_Init(USART1, &USART_InitStructure);

    /* Enable USART */
    USART_Cmd(USART1, ENABLE);
}

void USART_putc(char c)
{
    /* e.g. write a character to the USART */
    USART_SendData(USART1, c);

    /* Loop until the end of transmission */
    while (USART_GetFlagStatus(USART1, USART_FLAG_TC) == RESET) ;
}

void USART_puts(const char *s)
{
    int i;
    for(i=0; s[i]!=0; i++)
    {
        USART_putc(s[i]);
    }
}

void printf1(const char *format, ...)
{
    va_list list;
    va_start(list, format);

    int len = vsnprintf(0, 0, format, list);

```

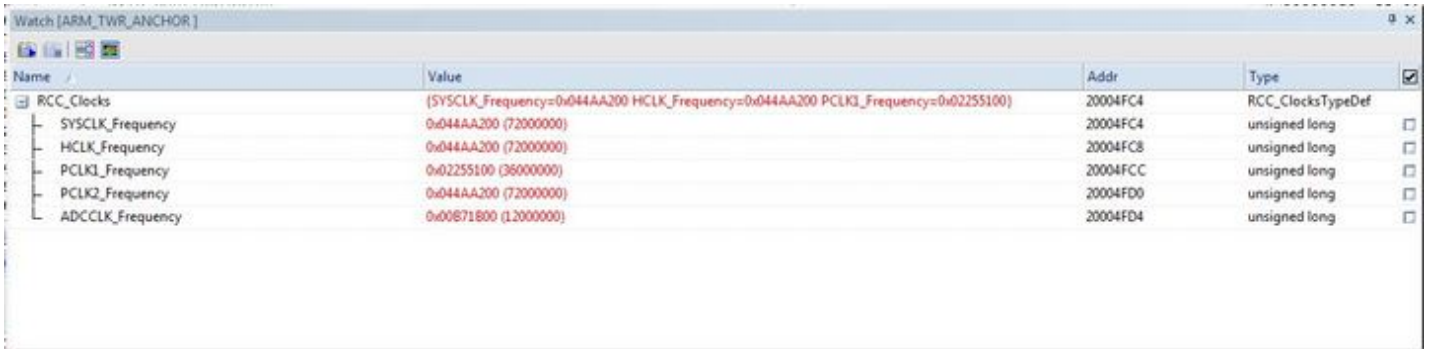
```
char *s;

s = (char *)malloc(len + 1);
vsprintf(s, format, list);

USART_puts(s);

free(s);
va_end(list);
return;
}
```

But if I try to send "Hello world\n", I receive this:



The screenshot shows the Watch window for an ARM target. The window title is "Watch [ARM_TWR_ANCHOR]". It displays a table of register values for the RCC_Clocks structure. The table has four columns: Name, Value, Addr, and Type. The values are displayed in red text.

Name	Value	Addr	Type
RCC_Clocks	{SYSCLK_Frequency=0x044AA200 HCLK_Frequency=0x044AA200 PCLK1_Frequency=0x02255100}	20004FC4	RCC_ClocksTypeDef
SYSCLK_Frequency	0x044AA200 (72000000)	20004FC4	unsigned long
HCLK_Frequency	0x044AA200 (72000000)	20004FC8	unsigned long
PCLK1_Frequency	0x02255100 (36000000)	20004FCC	unsigned long
PCLK2_Frequency	0x044AA200 (72000000)	20004FD0	unsigned long
ADCCLK_Frequency	0x00871B00 (12000000)	20004FD4	unsigned long

I use RS232USB converte with three cables for connect the STM32F103 to PC. Some suggestion?

P.S. With another code (I have only the .hex) the communication works fine.