

Hello all,

Directly, I want to talk about a problem I have encountered. I am working on 2 types of microcontroller and I use stm32f103 model to get data from the other one via rs485.

So, For transmitting data from stm32f030 to stm32f103 , I am checking data transmission and if the correct data is being sent. In this part everything seems fine, the data is sent correctly.

Then I am trying to get this data with stm32f103 microcontroller. In this part I use USART1 for communication via rs485. But unfortunately , during transmission, stm32f103 does not indicate first character of the data and it continues until the data transmission ends.

So, In this case I don't want to miss this first character and I don't want to get this same data again and again in one go.

Here is my receiving code of stm32f103 (Expressions are available near codes)

```
extern "C" {

void USART1_IRQHandler(void)
{
    if (USART_GetITStatus(USART1, USART_IT_RXNE) != RESET) //Data available in the Read
Register.
    //if(USART1->SR & USART_SR_RXNE)
    {

//        GPIO_SetBits(GPIOB,GPIO_Pin_0);
        GPIO_WriteBit(GPIOB,GPIO_Pin_0, Bit_RESET); //DE pin activation for receiving
mode(rs485)
        char ch = rs485data.serialPort.getch(); //USART1 "USART_ReceiveData(USART1);" method

//        if(ch!=50){
        if(ch!=10){ //if there is no new line in incoming data

            if(ch!=13){ //if there is no carriage return in incoming data

                rs485data.serialPort.rxTrailerbuffer[rs485data.serialPort.rxTrailerbufferReadCounter
buffer with character which comes from Usart1

            }}
        }

        if(rs485data.rs485detect== false){

            for (int i = 0; i < rs485data.serialPort.rxTrailerbufferReadCounter; i++){

                TrailerData[i]=rs485data.serialPort.rxTrailerbuffer[i]; //After
we get the data from Usart1, we set data from trailerbuffer to TrailerData
                rs485data.serialPort.rxTrailerbuffer[i]=0; //clear Trailer
buffer

            }
            TrailerData[rs485data.serialPort.rxTrailerbufferReadCounter]=0; //clear
Trailer Data

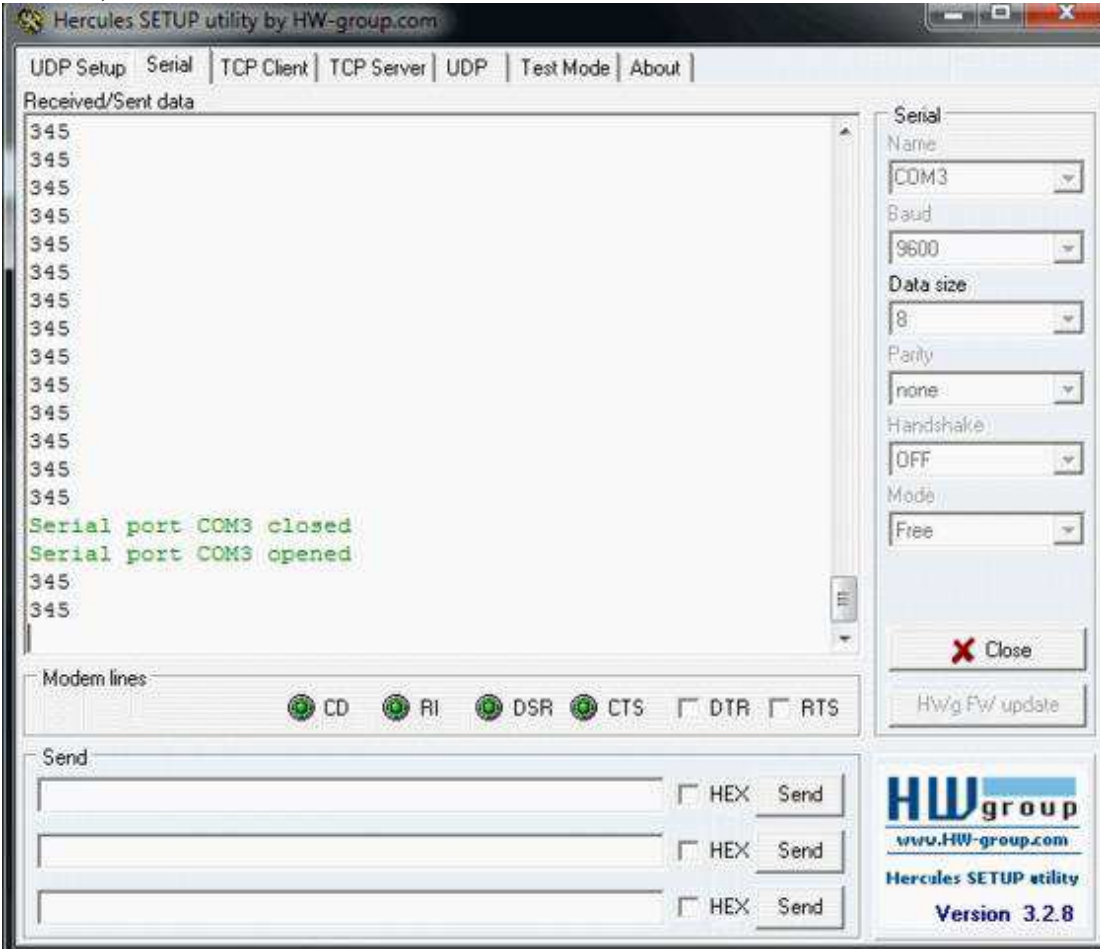
            rs485data.rs485detect=true;
            rs485data.serialPort.rxTrailerbufferReadCounter=0; //clear
Trailerbufferreadcounter
//
//        if(rs485data.serialPort.rxTrailerbufferReadCounter>6){
//            rs485data.serialPort.rxTrailerbufferReadCounter=0;
//        }

        }

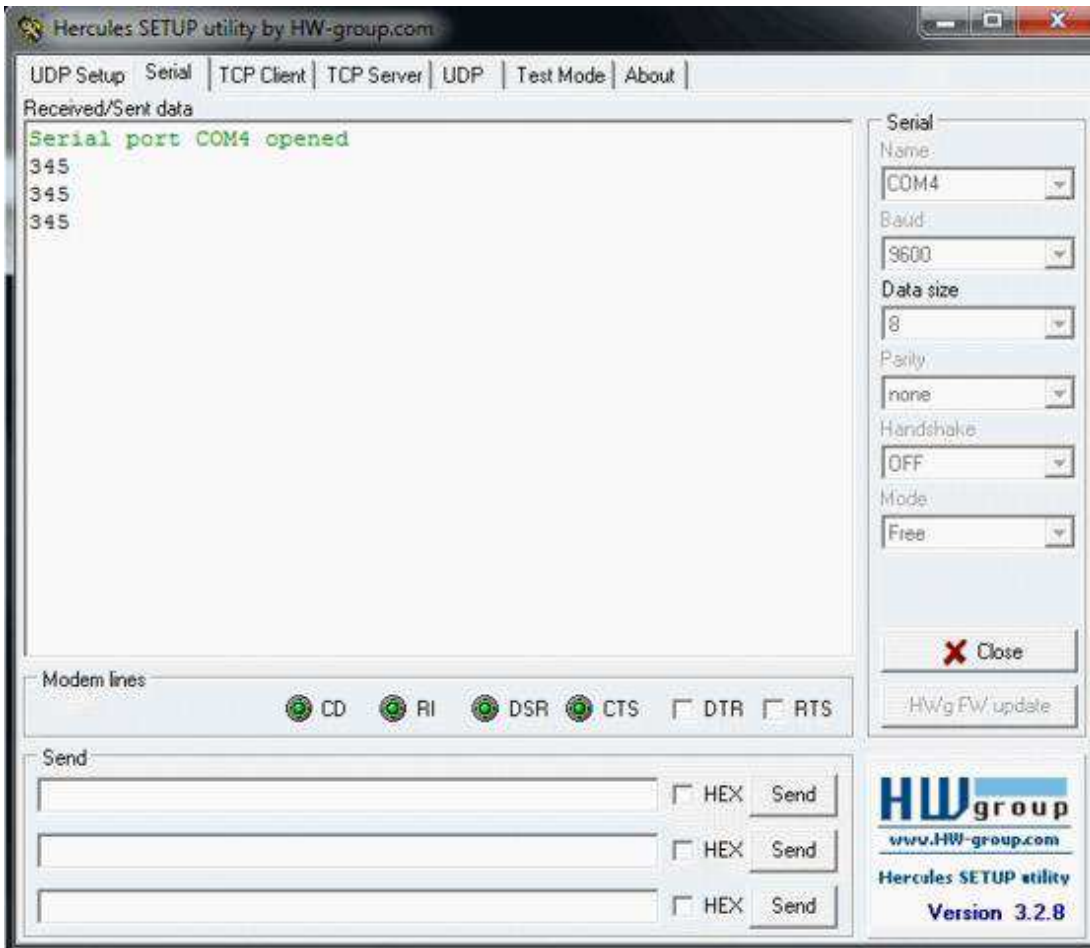
        //char ch = sp1.getch();
        USART_ClearITPendingBit(USART1, USART_IT_RXNE); //Clear pending bits for usart
    }
}
```

```
}  
}  
}
```

Here is , which data I want to send with stm32f030



Here is, What I get with stm32f103. As you see the data is coming correctly.



This image is from my server, I am trying send this data (345) to server with GSM module and as ? mentioned above it skips first character of (345) in the beginning and add it to the end of this string.

Messages

ID	Seq	Message	Device Id	Date Inserted
34023	66	\$GNRMC,,V,,,,,,,,,N*4D-SITE-	1210	11/25/2016 9:25:06 AM
34022	65	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453453453	1210	11/25/2016 9:24:27 AM
34021	64	\$GNRMC,,V,,,,,,,,,N*4D-SITE-	1210	11/25/2016 9:23:48 AM
34020	63	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:23:09 AM
34019	62	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:21:55 AM
34018	61	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:21:17 AM
34017	60	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:20:34 AM
34016	59	\$GNRMC,,V,,,,,,,,,N*4D-SITE-	1210	11/25/2016 9:19:53 AM
34015	58	\$GNRMC,,V,,,,,,,,,N*4D-IP-453	1210	11/25/2016 9:19:13 AM
34014	57	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:18:24 AM
34013	56	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:17:43 AM
34012	55	\$GNRMC,,V,,,,,,,,,N*4D-SITE-453	1210	11/25/2016 9:17:05 AM