

Dear All,

Some thing wrong with DMA operation please advice

```
/* Includes -----*/
#include "stm32f0xx.h"
#include "stm32f0xx_usart.h"
#include "stm32f0xx_adc.h"
#include "stm32f0xx_dma.h"
char name[27] = "USART2 PA9TX -PA10RX dd- ";
int i, j;
__IO uint16_t ADC1ConvertedValue = 0, ADC1ConvertedVoltage = 0;
__IO uint16_t ADC1ConvertedDMAValue = 0, ADC1ConvertedDMAVoltage = 0;
int dem;
float volt;
char Result[32];

void RCC_Configuration(){
    RCC_AHBPeriphClockCmd(RCC_AHBPeriph_GPIOA, ENABLE);
    RCC_APB2PeriphClockCmd(RCC_APB2Periph_USART1, ENABLE);
    RCC_AHBPeriphClockCmd(RCC_AHBPeriph_GPIOC, ENABLE); /* GPIOC Periph clock enable
*/
    RCC_APB2PeriphClockCmd(RCC_APB2Periph_ADC1, ENABLE); /* ADC1 Periph clock enable
*/
    RCC_AHBPeriphClockCmd(RCC_AHBPeriph_DMA1, ENABLE);

}

void GPIO_Configuration()/* Configure USART1 GPIO pins: Rx and Tx -----
*/
{
    GPIO_InitTypeDef GPIO_InitStructure;
    GPIO_DeInit(GPIOA);
    GPIO_PinAFConfig(GPIOA, GPIO_PinSource9, GPIO_AF_1);
    GPIO_PinAFConfig(GPIOA, GPIO_PinSource10, GPIO_AF_1);
    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_9 | GPIO_Pin_10;
    GPIO_InitStructure.GPIO_Speed = GPIO_Speed_50MHz;
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_AF;
    GPIO_InitStructure.GPIO_OType = GPIO_OType_PP;
    GPIO_InitStructure.GPIO_PuPd = GPIO_PuPd_UP;
    GPIO_Init(GPIOA, &GPIO_InitStructure);

        /* Configure ADC GPIO Channel_10 as analog input */
    GPIO_DeInit(GPIOC);
    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_0 ;
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_AN;
    GPIO_InitStructure.GPIO_PuPd = GPIO_PuPd_NOPULL ;
    GPIO_Init(GPIOC, &GPIO_InitStructure);

    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_9|GPIO_Pin_8;
    GPIO_InitStructure.GPIO_Speed = GPIO_Speed_50MHz;
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_OUT;
    GPIO_InitStructure.GPIO_OType = GPIO_OType_PP;
    GPIO_InitStructure.GPIO_PuPd = GPIO_PuPd_NOPULL;
    GPIO_Init(GPIOC, &GPIO_InitStructure);

}
void delay(void){
    int time;
    for(time=0;time<1000000;time++); // tre khoang 1000000 lenh
}

void DMA_Configuration(){
    DMA_InitTypeDef DMA_InitStructure;
    __IO uint16_t ADCConveretedValue;
    /* DMA1 channel1 configuration -----
*/
    DMA_DeInit(DMA1_Channel1);
```

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DMA_InitStructure.DMA_PeripheralBaseAddr=0X40012440;//ADC_DR_DATA;
DMA_InitStructure.DMA_MemoryBaseAddr=(uint32_t)&ADC1ConvertedDMAValue;
DMA_InitStructure.DMA_DIR=DMA_DIR_PeripheralSRC;
DMA_InitStructure.DMA_BufferSize=1;
DMA_InitStructure.DMA_PeripheralInc=DMA_PeripheralInc_Disable;
DMA_InitStructure.DMA_MemoryInc=DMA_MemoryInc_Disable;
DMA_InitStructure.DMA_PeripheralDataSize=DMA_PeripheralDataSize_HalfWord;
DMA_InitStructure.DMA_MemoryDataSize=DMA_MemoryDataSize_HalfWord;
DMA_InitStructure.DMA_Mode=DMA_Mode_Circular;
DMA_InitStructure.DMA_Priority=DMA_Priority_High;
DMA_InitStructure.DMA_M2M=DMA_M2M_Disable;
DMA_Init(DMA1_Channel1,&DMA_InitStructure);
/* Enable DMA1 channel1 */
DMA_Cmd(DMA1_Channel1,ENABLE);
}

void ADC_Configuration(void){
    ADC_InitTypeDef  ADC_InitStructure;
    ADC_DeInit(ADC1); /* ADCs DeInit */
    ADC_StructInit(&ADC_InitStructure); /* Initialize ADC structure */
    ADC_InitStructure.ADC_Resolution = ADC_Resolution_12b; /* Configure the ADC1 in
continuous mode with a resolution equal to 12 bits */
    ADC_InitStructure.ADC_ContinuousConvMode = ENABLE;
    ADC_InitStructure.ADC_ExternalTrigConvEdge = ADC_ExternalTrigConvEdge_None;
    ADC_InitStructure.ADC_DataAlign = ADC_DataAlign_Right;
    ADC_InitStructure.ADC_ScanDirection = ADC_ScanDirection_Upward;
    ADC_Init(ADC1, &ADC_InitStructure);
    ADC_ChannelConfig(ADC1, ADC_Channel_10 , ADC_SampleTime_239_5Cycles); /* Convert
the ADC1 Channel 10 with 239.5 Cycles as sampling time */
    ADC_GetCalibrationFactor(ADC1);
/* ADC Calibration */
    ADC_DMACmd(ADC1, ENABLE);
    ADC_Cmd(ADC1,
ENABLE); /* Enable
ADCPeripheral[PerIdx] */
        while(!ADC_GetFlagStatus(ADC1, ADC_FLAG_ADRDY)); /* Wait the
ADRDY flag */
        ADC_StartOfConversion(ADC1);
/* ADC1 regular Software Start Conv */
}
void read_adc(){
    while(ADC_GetFlagStatus(ADC1, ADC_FLAG_EOC) == RESET); /* Test EOC flag */
    ADC1ConvertedValue =ADC_GetConversionValue(ADC1); /* Get
ADC1 converted data */
    //ADC1ConvertedVoltage = (ADC1ConvertedValue *3300)/0xFFFF; /* Compute
the voltage */
}
void USART_Configuration(void){
    USART_InitTypeDef USART_InitStructure;
    USART_DeInit(USART1);
    USART_InitStructureUSART_BaudRate = 9600;
    USART_InitStructureUSART_WordLength = USART_WordLength_8b;
    USART_InitStructureUSART_StopBits = USART_StopBits_1;
    USART_InitStructureUSART_Parity = USART_Parity_No;
    USART_InitStructureUSART_HardwareFlowControl = USART_HardwareFlowControl_None;
    USART_InitStructureUSART_Mode = USART_Mode_Rx | USART_Mode_Tx;
    USART_Init(USART1, &USART_InitStructure);
    USART_Cmd(USART1,ENABLE);
}

void truyen(unsigned char uData){
    while(USART_GetFlagStatus(USART1, USART_FLAG_TXE)==RESET);
    USART_SendData(USART1,uData);
}

void Print(const char *s){
    int i,j;
    j=strlen(s);
    for(i=0;i<j;i++)

```

```
{  
    truyen(s[i]);  
}  
}  
int main(void){  
    RCC_Configuration();  
    GPIO_Configuration();  
    ADC_Configuration();  
    USART_Configuration();  
    //DMA_Configuration();  
    sprintf(&Result[0],"    ADC OUT \r\n");  
    Print(Result);  
while(1){  
    read_adc();// doc ADC  
    //DMA_Configuration();  
    volt=(float)(ADC1ConvertedDMAValue*3.3)/0x0fff;  
    sprintf(&Result[0],"\rVolt= %1.3f"      ,volt);  
    Print(Result);  
    delay();  
}  
}  
  
Result is zero
```

