

I communicate stm32f4dis with hc sr04 but always distance\_mm=0,  
 PB1-Trig  
 PB0-Echo

```
#include "stm32f4xx.h"

GPIO_InitTypeDef  GPIO_InitStructure;
void GPIO_Configuration(void);
void Delay(__IO uint32_t nCount);

volatile float distance_mm;
int main(void)
{
  GPIO_Configuration();
  GPIO_ResetBits(GPIOB,GPIO_Pin_1);
  while (1)
  {
    float time;
    int i=0;
    GPIO_SetBits(GPIOB,GPIO_Pin_1);
    Delay(120);
    GPIO_ResetBits(GPIOB,GPIO_Pin_1);
    while(GPIO_ReadInputDataBit(GPIOB,GPIO_Pin_0)==0);
    while(GPIO_ReadInputDataBit(GPIOB,GPIO_Pin_0)) i++;
    time = (float)i/9500000;
    distance_mm = (time*344)*1000/2;
    Delay(1440000);
  }
}

void GPIO_Configuration(void)
{
  RCC_AHB1PeriphClockCmd(RCC_AHB1Periph_GPIOB, ENABLE);

  /* Configure PB1-Trigger in output pushpull mode */
  GPIO_InitStructure.GPIO_Pin = GPIO_Pin_1;
  GPIO_InitStructure.GPIO_Mode = GPIO_Mode_OUT;
  GPIO_InitStructure.GPIO_OType = GPIO_OType_PP;
  GPIO_InitStructure.GPIO_Speed = GPIO_Speed_100MHz;
  GPIO_InitStructure.GPIO_PuPd = GPIO_PuPd_NOPULL;
  GPIO_Init(GPIOB, &GPIO_InitStructure);
  /* Configure PB0-Echo in input mode */
  GPIO_InitStructure.GPIO_Pin = GPIO_Pin_0;
  GPIO_InitStructure.GPIO_Mode = GPIO_Mode_IN;
  GPIO_InitStructure.GPIO_PuPd = GPIO_PuPd_UP;
  GPIO_Init(GPIOB, &GPIO_InitStructure);
}

void Delay(__IO uint32_t nCount)
{
  while(nCount--)
  {
  }
}

#ifdef USE_FULL_ASSERT
void assert_failed(uint8_t* file, uint32_t line)
{
  /* User can add his own implementation to report the file name and line number,
   ex: printf("Wrong parameters value: file %s on line %d\r\n", file, line) */

  /* Infinite loop */
  while (1)
  {

```

```
}  
}  
#endif
```