

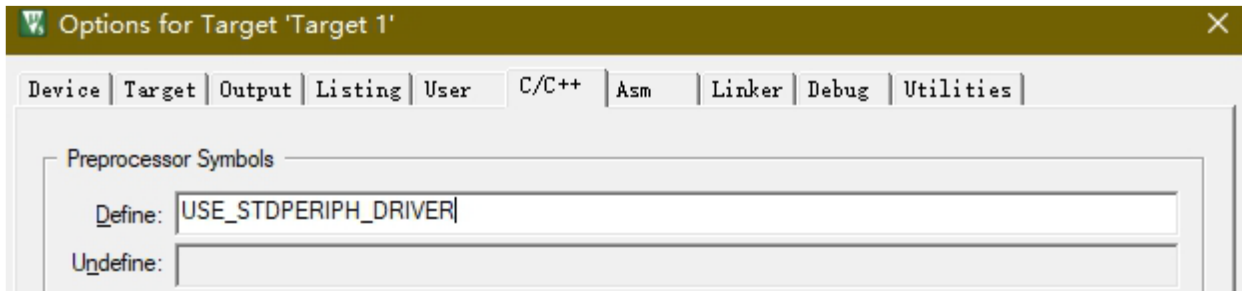
MG32F10x Use MHSI As MainCLK USB

index

1 Keil configuration.....	3
2 Peripheral requirement.....	3
3 Using course.....	3

1 Keil configuration

1. This configuration is only valid while using USB Function.
2. The following figure shows the KEIL project configuration.



2 Peripheral requirement

This method need to use SysTick or TIM4.

3 Using course

1. Insert MHSI Trim code.



jmntTrim.c



jmntTrim.h

Insert jmntTrim.c and jmntTrim.h file into project.

2. Configure USB

- a) Enable USB SOF interrupt.

```
/**
 * @brief Connects the device to the USB host.
 * @return None
 */
void USBD_User_Connect(void)
{
    /* Enable BMX1, GPIOA clock */
    RCC_APB1PeriphClockCmd(RCC_APB1Periph_BMX1 | RCC_APB1Periph_GPIOA, ENABLE);
    /* Configure the drive current of PA11 and PA12 */
    GPIO_DriveCurrentConfig(GPIOA, GPIO_Pin_11 | GPIO_Pin_12, 0x03);
    /* Configure PA11 and PA12 as Alternate function mode */
    GPIO_Init(GPIOA, GPIO_Pin_11 | GPIO_Pin_12, GPIO_MODE_AF | GPIO_AF3);

    USB->INTRUSBE = USB_INTRUSBE_RSTIE | USB_INTRUSBE_RSUIE | USB_INTRUSBE_SOFIE;
}
```

- b) Include JmntTrim.h head file in usbd_user.c

```
#include "jmntTrim.h"
```

- c) Call CheckTune function in USBD_User_SOF function.

```
void USBD_User_SOF(void)
{
    ..CheckTune();
}
```

- d) The interrupt priority of USB should be configured to highest priority.
e) Other configurations can be configured based on user definition.

3. Call jmntTrimInit function in main function.

```
int main(void)
{
    ..MAINCLKConfig_MHSI_48MHz();
    ..jmntTrimInit();
}
```

Please note that jmntTrim.h head file must be included.

4. Configure Trim parameter refer to different system clock.

The default main frequency is 48 MHz. If the user's main frequency is 48 MHz, do not change the parameter.

If the user's main frequency is not 48 MHz, user can modify the value.

```
/* The range of sof frame interval TIMER counts. */
#define INR_HEAD 44500
#define INR_TAIL 51500
```