Installing MounRiver Studio for the WCH CH32V307V Development Board

Last updated: 9/12/2022

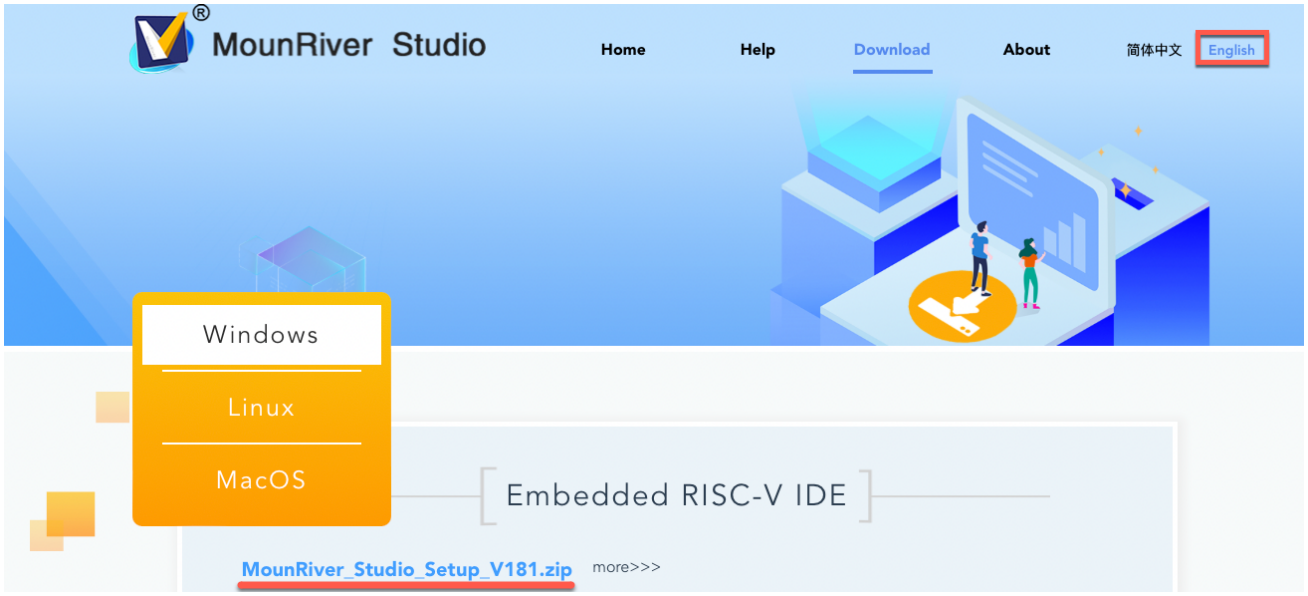
Software: Windows 10 Home (21H2)
MounRiver Studio 1.81

1) Navigate to the MounRiver **website**.

http://www.mounriver.com/download

If needed, click on the **English** language page.

2) Click on the "**MounRiver_Studio_Setup_V181.zip**" download link.



3) Wait for the download to finish.

4) If needed, click on the **drop-down** menu and select "**Keep**".

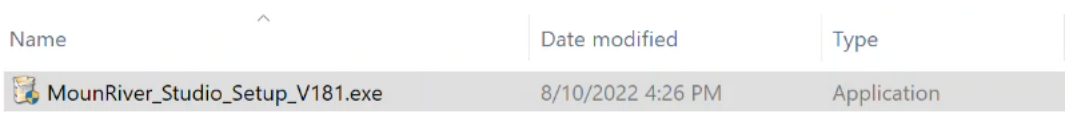
5) If needed, click on "**Show more**", then click "**Keep Anyway**".

6) Open the **Downloads** folder.

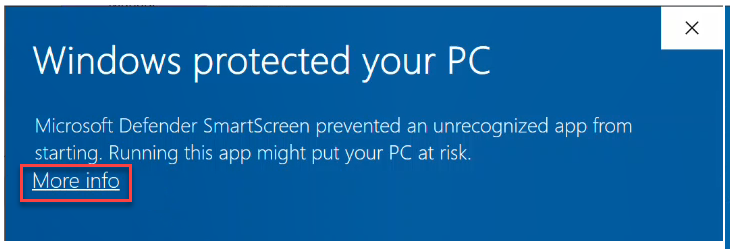
7) **Right click** on the downloaded zip file and select "**Extract All…**".

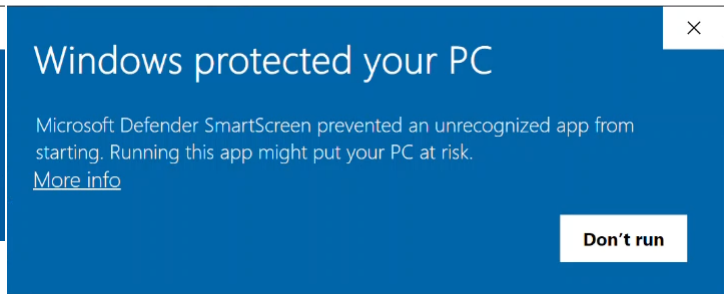
8) Open the extracted **MounRiver_Studio_Setup_V181** folder.

9) **Double click** on the installer file "**MounRiver_Studio_Setup_V181.exe**".

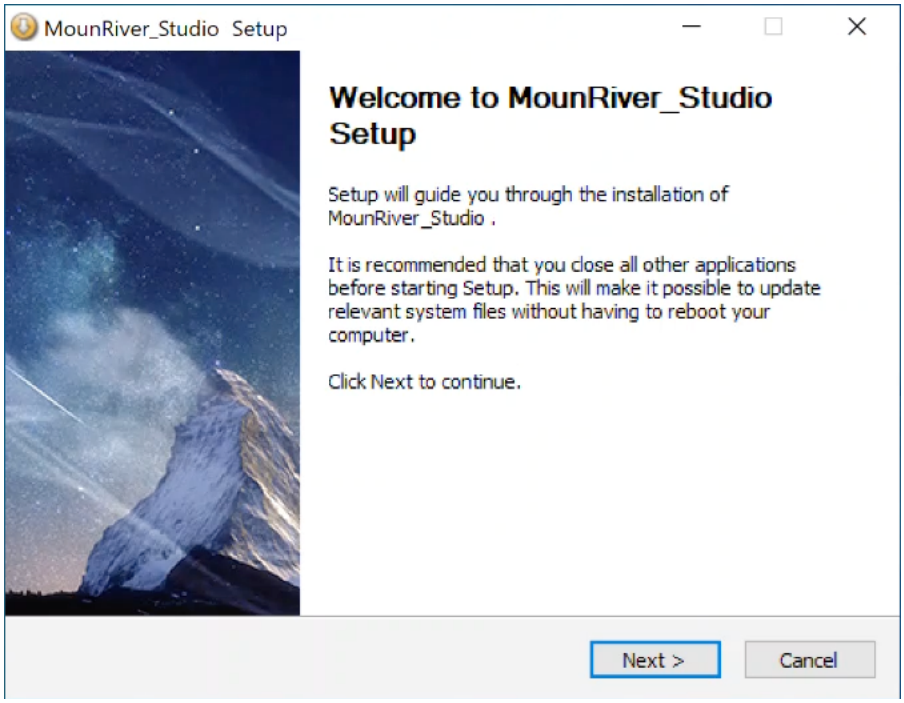


10) If prompted, click on "**More info**", and then "**Run anyway**".

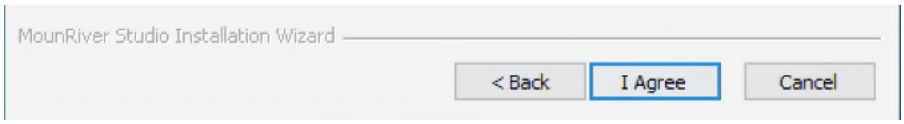




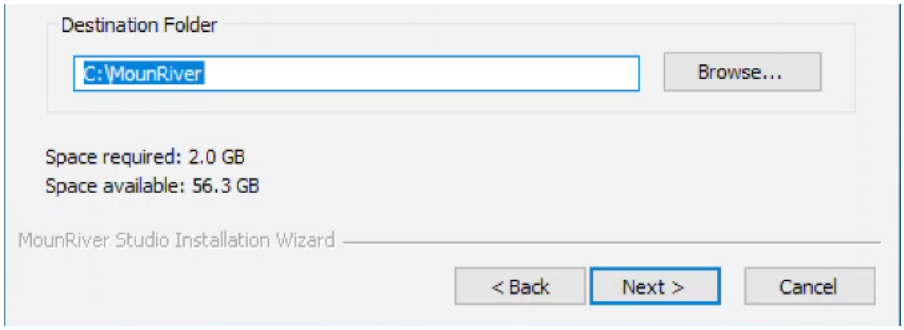
11) Click on "**Next**".



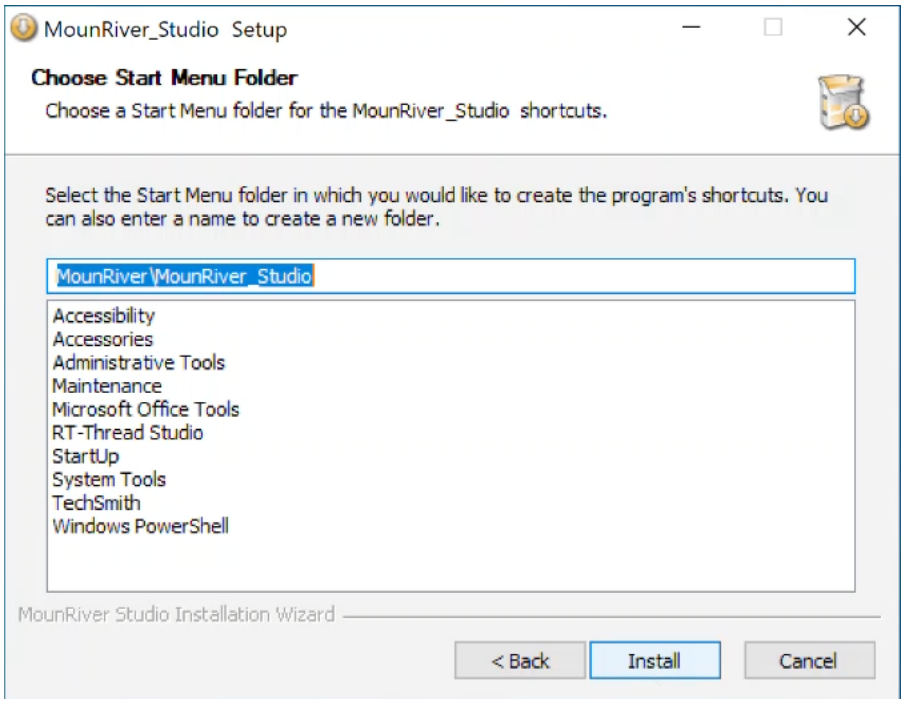
12) Accept the license agreement and click "**I Agree**".



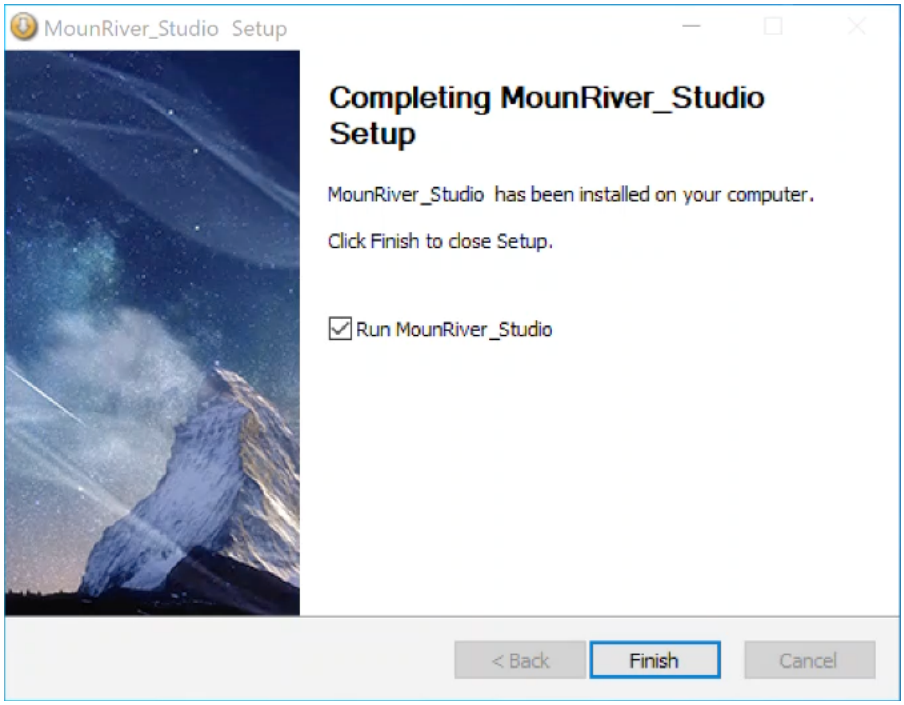
13) Confirm the **Destination Folder** and then click **Next**.



14) Confirm the **Start Menu** folder and then click **Install**.

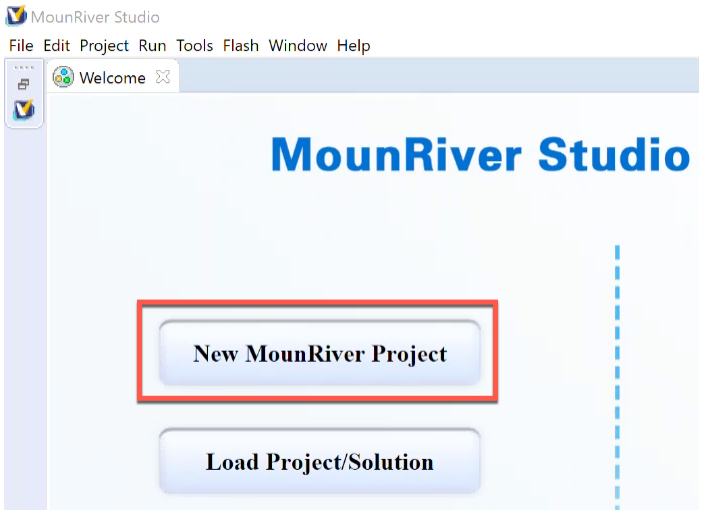


15) **Wait** for the program to install. Then click “**Finish**”.

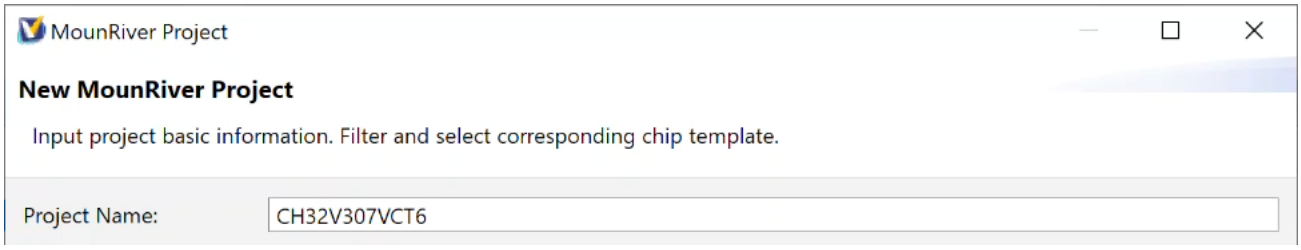


16) If “**Run MounRiver_Studio**” was selected. The application will open. It might take a while to load the first time.

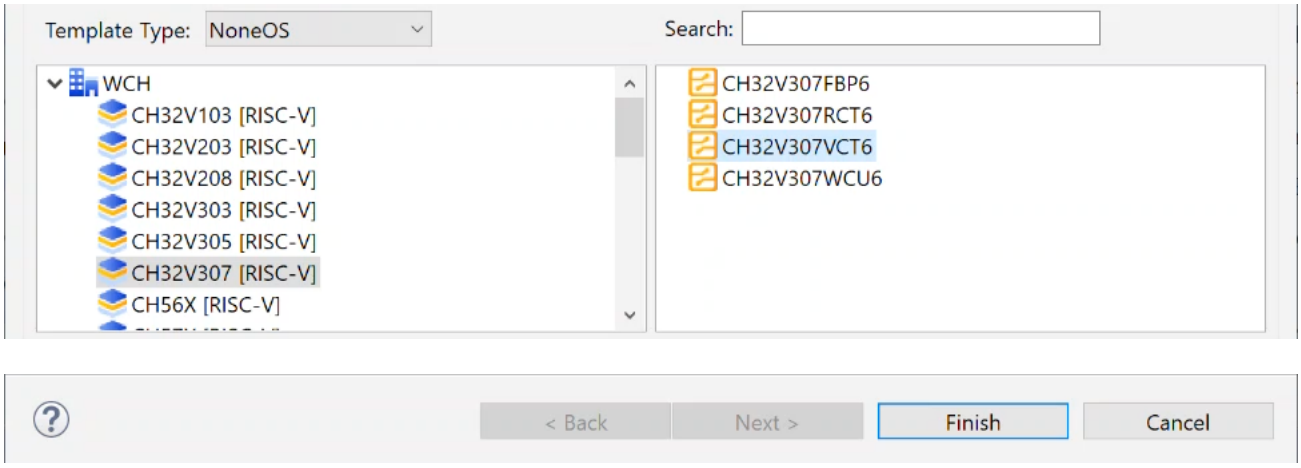
17) On the Welcome page, click on the “**New MounRiver Project**” button.



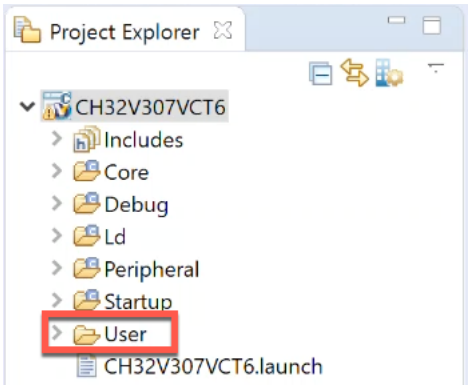
18) Enter a **project name**.



19) Select the **WCH** > **CH32V307** > **CH32V307VCT6** and then click **Finish**.



20) Expand the project folder in the **Project Explorer**, and then expand the **User** folder.

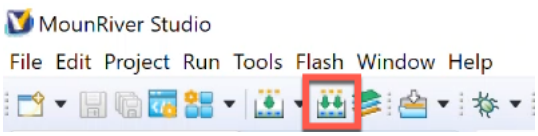


21) Open the **main.c** file.

22) Copy and paste the **Blink** code into **main.c**.

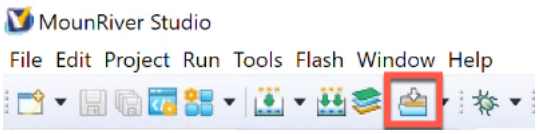
```
#include "debug.h"

/*********************************************************************
 * @fn      GPIO_Toggle_INIT
 *
 * @brief   Initializes GPIOA.2
 *
 * @return  none
 */

void GPIO_Toggle_INIT(void)
{
    GPIO_InitTypeDef GPIO_InitStructure = {0};

    RCC_APB2PeriphClockCmd(RCC_APB2Periph_GPIOA, ENABLE);
    GPIO_InitStructure.GPIO_Pin = GPIO_Pin_2;
    GPIO_InitStructure.GPIO_Mode = GPIO_Mode_Out_PP;
    GPIO_InitStructure.GPIO_Speed = GPIO_Speed_50MHz;
    GPIO_Init(GPIOA, &GPIO_InitStructure);
}

/*********************************************************************
 * @fn      main
 *
 * @brief   Main program.
 *
 * @return  none
 */

int main(void)
{
    u8 i = 0;

    NVIC_PriorityGroupConfig(NVIC_PriorityGroup_2);
    Delay_Init();
    USART_Printf_Init(115200);
    printf("SystemClk:%d\r\n", SystemCoreClock);

    printf("GPIO Toggle TEST\r\n");
    GPIO_Toggle_INIT();

    while(1)
    {
        Delay_Ms(500);
        GPIO_WriteBit(GPIOA, GPIO_Pin_2, (i == 0) ? (i = Bit_SET) : (i = Bit_RESET));
    }
}
```

23) Click on the “**Rebuild All**” button.



24) Connect the development board using a USB-C cable.

25) Click on the “**Download**” button.



26) If everything went well the LED on the board should be blinking on and off