

Install Keil MDK Version 5

- Download and install the MDK Core from www.keil.com/mdk5/install

Add Software Pack using the Pack Installer

- **Keil::STM32F4xx_DFP** – STMicroelectronics STM32F4 Series Device Support
- **Keil::STM32NUCLEO_BSP** – STMicroelectronics NUCLEO Board Support

Power up the board

- Do **not** connect the board to the PC! Go to C:\Keil_v5\ARM\STLink\USBDriver and double-click **stlink_winusb_install.bat** to install the drivers for the on-board USB ST-Link/V2.
- Connect a USB power supply **USB ST-Link/V2** port to the computer using a Mini USB cable. Windows recognizes the ST-Link/V2 device and installs the drivers automatically.

Verify Installation using example projects provided in the Software Pack

- Copy an example using the Pack Installer. Compile, download to Flash, and debug the application. The provided examples are ready to run.

More Information

- Getting Started User's Guide www.keil.com/gsg
- Board Information http://www.keil.com/boards2/st/nucleo_f446re

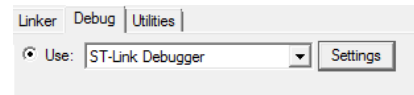
Related Products

- MDK Version 5 www.keil.com/mdk5
- MDK-Professional Middleware www.keil.com/mdk5/middleware

Enable ST-Link Debugger

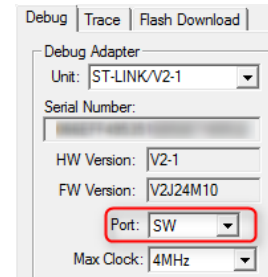
Select **Options for Target**  or press **ALT+F7**.

Go to the **Debug** tab and select the **ST-Link Debugger**.



Connect Using SWD

Click on the **Settings** button. On the **Debug** tab select the Port **SW**. This board does not support JTAG.



Configure Trace using Serial Wire Viewer

Go to the **Trace** tab and enter the correct CPU **Core Clock** speed as specified in your project. Check the **Trace Enable** box.

When debugging, the Status bar shows information about the Trace connection.

