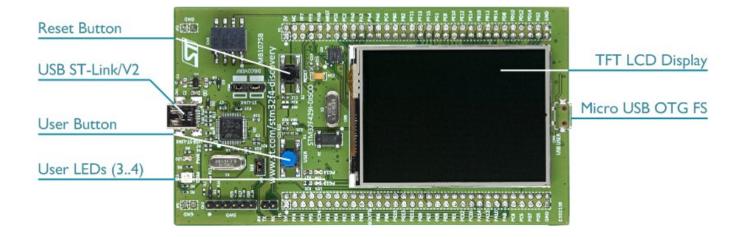
# Quick Start Guide STMicroelectronics 32F429I Discovery Board





### Install Keil MDK Version 5

Download and install the MDK Core from <u>www.keil.com/mdk5/install</u>

Add Software Pack using the Pack Installer

• Keil::STM32F4xx\_DFP – STMicroelectronics STM32F4 Series Device 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
- Board Information
- STM32F4 Discovery User's Guide

### **Related Products**

- MDK Version 5
- MDK-Professional Middleware

www.keil.com/gsg www.keil.com/boards2/st/stm32f429i\_discovery www.st.com/stm32f4-discovery

www.keil.com/mdk5 www.keil.com/mdk5/middleware

# **Debug and Trace Configuration**

### STMicroelectronics 32F429I Discovery Board

### 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.

Cortex-M Target Driver Setup

Debug Trace Flash Download

## Configure Trace using Serial Wire Viewer

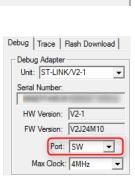
Go to the **Trace** tab and enter the correct CPU **Core Clock** speed as specified in your project. Check the **Trace Enable** box.

### Note:

To use trace, you have to close the solder bridge **SB9** on the board. Refer to the documentation on the STMicroelectronics webpage for further instructions.

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

Core Clock: 168.000000 MHz	: 🔽 Trace Enable
Trace Port Serial Wire Output - UART/NRZ SWO Clock Prescaler: 84 Autod SWO Clock: 2.000000 M	PC Sampling EXC: Exception overhead PC Sampling SLEEP: Sleep Cycles Prescaler: 1024*16  LSU: Load Store Unit Cycles
Privilege: 0x0000008 Advanced settings	Port 3124         Port 2316         Port 158         Port 70           th no SYNC
Overwrite CYCCN	T OK Cancel Apply





Settings

×

Linker Debug Utilities

Use: ST-Link Debugger