

### Install Keil MDK Version 5

- Download and install the **MDK Core** [www.keil.com/mdk5/install](http://www.keil.com/mdk5/install)

### Add Software Pack using the Pack Installer

- **Keil::SAM-E\_DFP** – Atmel SAME70 Series Device Support
- **Keil::SAM-ESV7\_SFP** – Atmel SAM V71, V70, E70, S70 Software Foundation (HAL, Driver, BSP)

### Power up the board

- Connect the board's **Debug & Power** port to your computer using a Micro USB cable
- Windows will recognize the USB device and install the required drivers automatically

**Verify Installation** using example projects provided in the Software Packs or download examples that apply to this board [www.keil.com/dd2/atmel/atsame70n21](http://www.keil.com/dd2/atmel/atsame70n21)

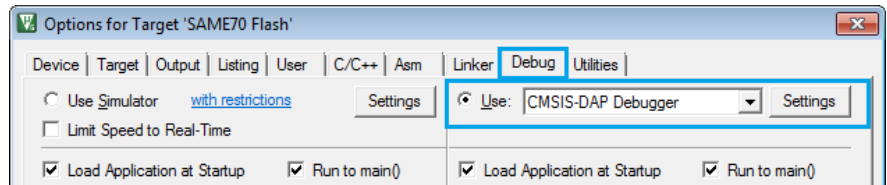
- Copy an example using the Pack Installer. Compile, download to Flash, and debug the application. The provided examples are ready to run.

### Related Products

- MDK Version 5 [www.keil.com/mdk5](http://www.keil.com/mdk5)
- Getting Started User's Guide [www.keil.com/gsg](http://www.keil.com/gsg)
- ARM Cortex-M7 Support [www.keil.com/mdk5/cortex-m7](http://www.keil.com/mdk5/cortex-m7)
- MDK-Professional Middleware [www.keil.com/middleware](http://www.keil.com/middleware)
- Learning Platform [www.keil.com/learn](http://www.keil.com/learn)

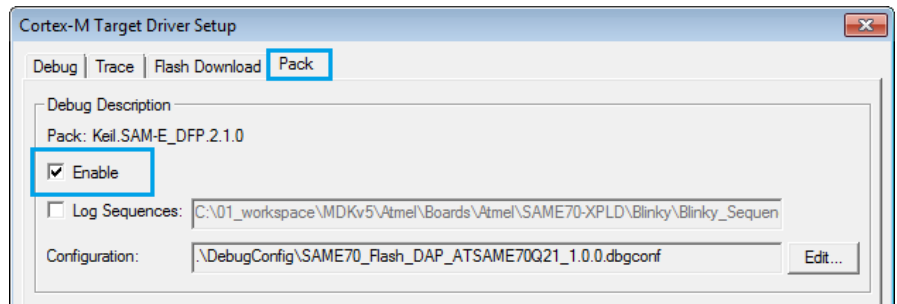
### Run/Stop Debugging

The on-board CMSIS-DAP debug adapter suites for run/stop debugging. In the dialog **Options for Target – Debug** select **CMSIS-DAP Debugger**.



Click **Setting** and ensure to set **Port** to SW.

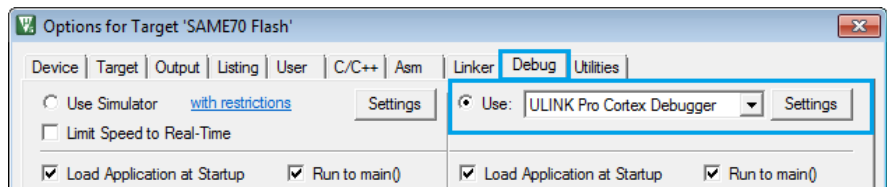
Click on the **Pack** tab and check **Enable** to activate the Pack Description.



Download your application to Flash and start debugging.

### Trace with ULINKPro

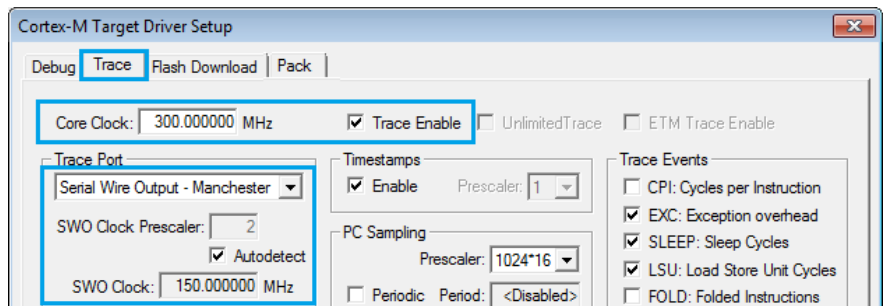
The board may have a 20-pin Cortex Debug+ETM connector soldered on the back side of the board. Connect the ULINKpro debug adapter to it, power the board and then power ULINKPro.



In the dialog **Options for Target – Debug**, select **ULINK Pro Cortex Debugger**.

Click **Settings** and the **Trace** tab. Set **Core Clock** to match the CPU Core Clock and check **Trace Enable**.

For ITM trace with the Serial Wire Viewer, set **Trace Port** to **Serial Wire Output – Manchester**.



Ensure you have activated the Pack Description as explained in **Run/Stop Debugging**.