

## **Debug ADuC702x with mIDAS-Link and Keil uVision3**

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### Revision History

Date	Revision History	Reviser
2009-11-20	Rev. V1.0	Neil Zhao

## **Abbreviation**

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# Debug ADuC702x with mIDAS-Link and Keil uVision3

## Goal

Many customers have puzzles about how to use our mIDAS-Link with Keil for ADuC702x debugging. The key problem is the RDI Driver DLL file since the DLL file which is integrated in the installation path of C:\ADuC702x\code\midaslinkrdi\_v268g can not be used sometimes with some version Keil such as the Keil uVision3 which is integrated in our CD of ADuC70xx. Then we need to download a new one for ADuC702x debugging. This document introduces the steps about how to debug ADuC702x with mIDAS-Link and Keil uVision3. (The document is used for ADuC7019/20/21/22/24/25/26/27/28 debugging)

## Instrument

Hardware: EVAL-ADuC7026, mIDAS-Link JTAG

Software: Keil uVision3 V3.22

## Step

1. Install ADuC702x and Keil uVision3.
2. Install J-Link driver and it can be downloaded from the address blow: [http://www.segger.com/download\\_jlink.html](http://www.segger.com/download_jlink.html). Please download J-Link ARM software and document pack.
3. Connect the JTAG interface of mIDAS-Link with the EVB of ADuC7026. Then, power on the EVB and power on the mIDAS-Link through USB cable. Normally, the driver would be installed automatically. If not, please assign to the driver folder of the J-Link driver software.
4. Set up the project. Run Keil firstly, and choose New Project as figure 1 shows.

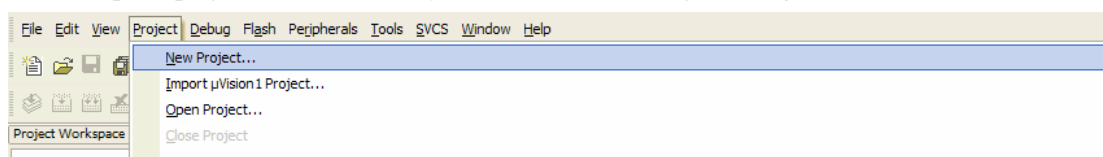


Figure 1

Input the project name and then save it. After that, choose the device as figure 2 shows.

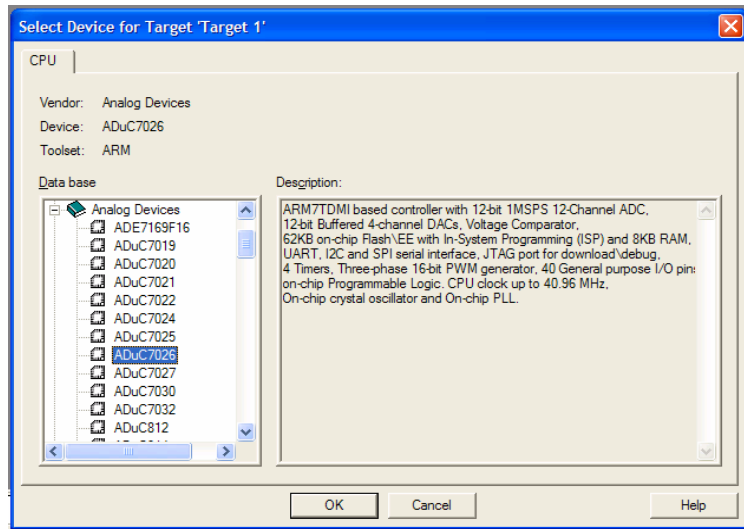


Figure 2

Create a new file as figure 3 shows and save it as .c file.

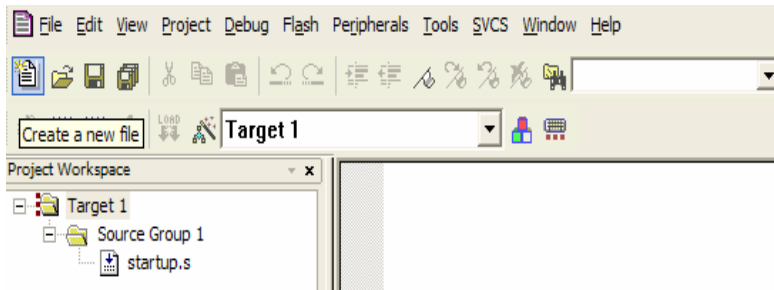


Figure 3

Program it and add the file to “Source Group 1” by clicking right key on “Source Group 1” as figure 4 shows.

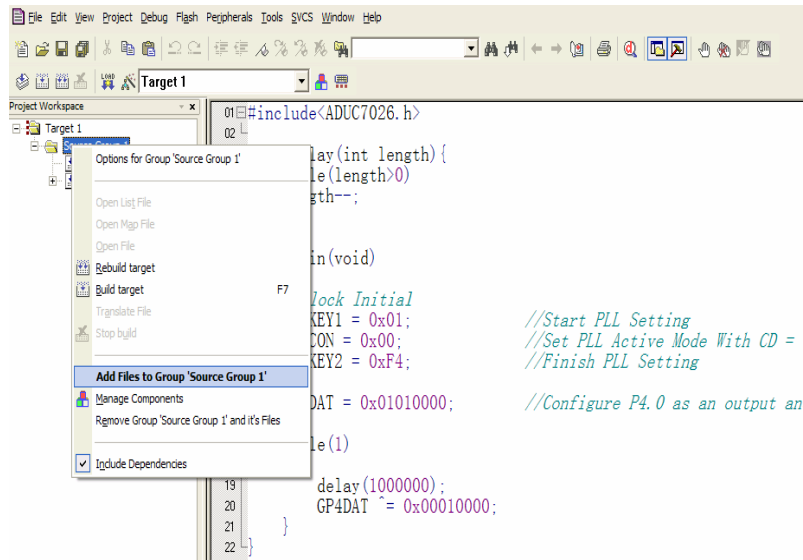


Figure 4

Now, the simple project is finished.

5. Configure Keil.

(1) Choose the “Options of Target” as figure 5.

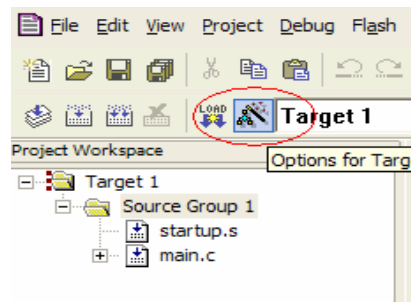


Figure 5

(2) Choose “Create HEX File” under Output tab so that you can get .hex file to download as figure 6.

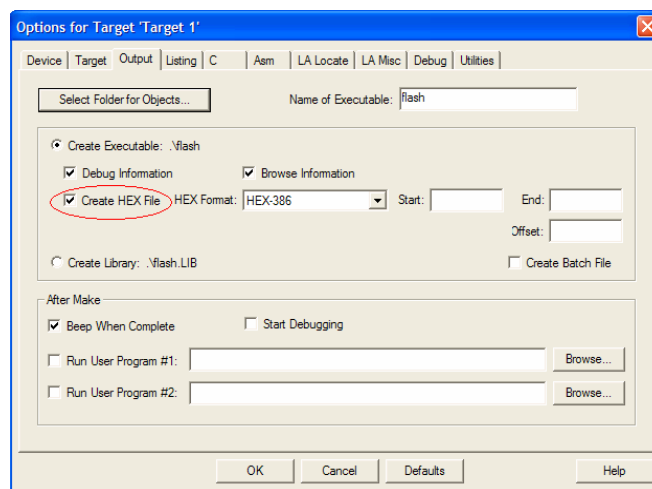


Figure 6

(3) Configure the Debug tab as figure 7 shows.

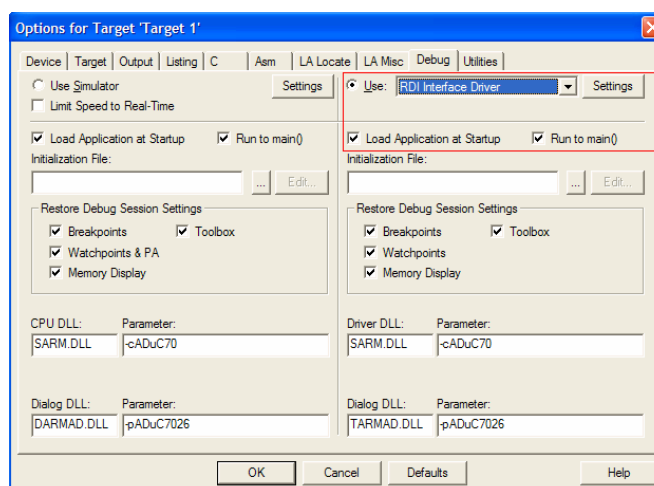


Figure 7

- (4) Click the “Settings” button in figure 7 and then choose the JLINKRDI.dll file as figure 8 shows.

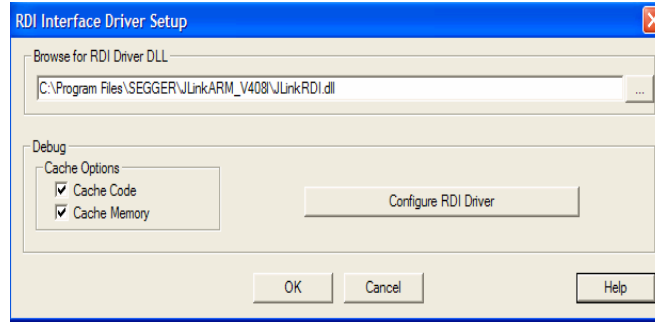


Figure 8

- (5) Click the “Configure RDI Driver” button in figure 8 and then choose the device as figure 9 shows. We can use the default option for the other tab.

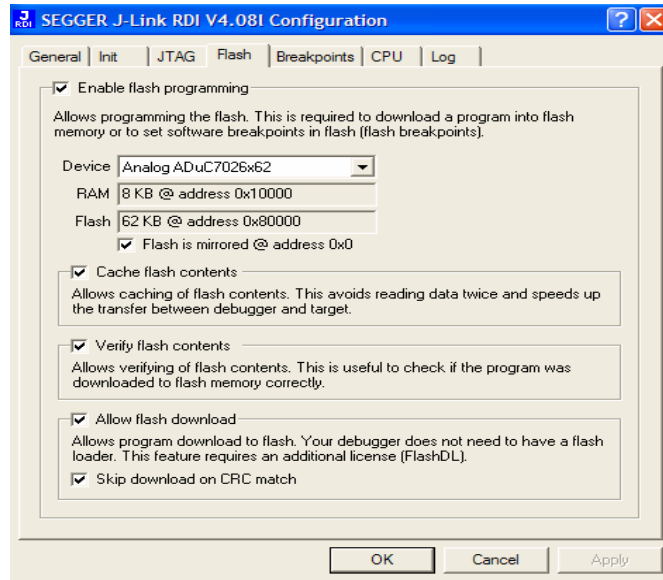


Figure 9

- (6) Configure the last tab of Utilities as figure 10 shows.



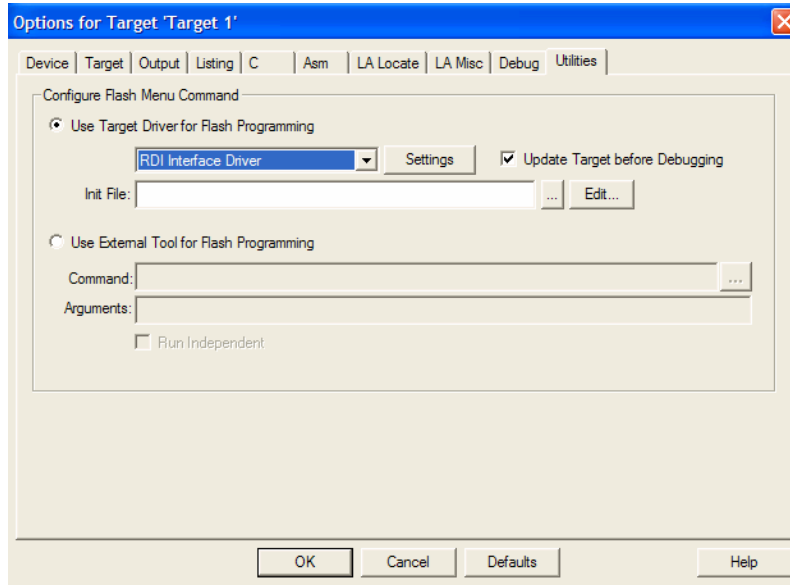


Figure 10

6. After rebuilt all target files, click debug button as figure 11 shows to start debug.

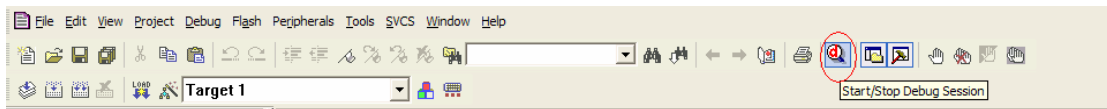


Figure 11

The final debug interface is as figure 12 shows.

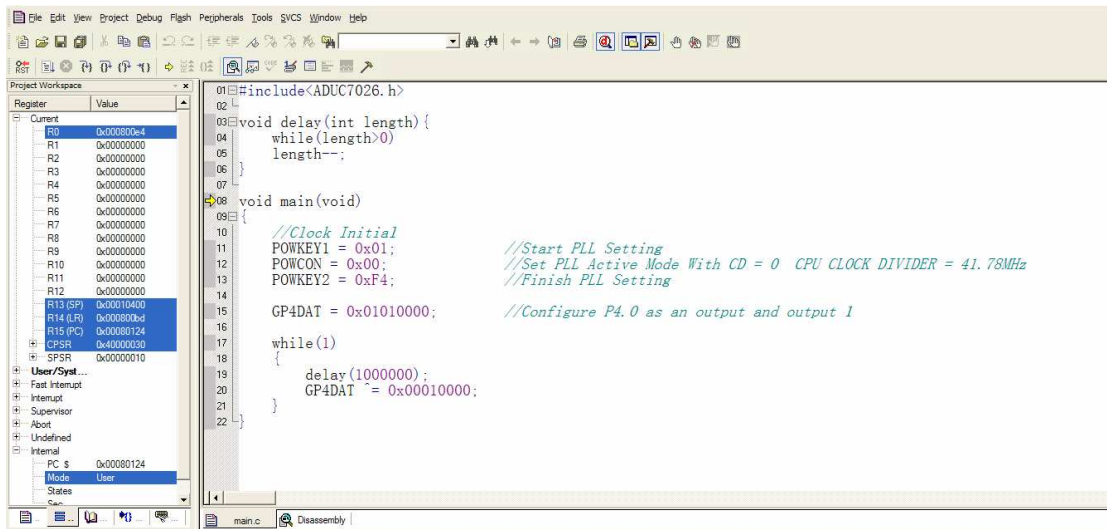


Figure 12