

*SAU-XDS510-USB Lite*  
*JTAG Emulator*

*Installation Guide*

## Contents

Contents .....	2
1. Installing the SAU-XDS510-USB Lite Emulator drivers .....	4
2. Connecting a board to a PC using SAU-XDS510-USB Lite through CCS v6...	8
2.1. Creating the configuration for SAU-XDS510-USB Lite on the basis of factory boards. ....	8
2.2. Connection using self-made board. ....	10

**Dear developers!**

1. Sauris GmbH pleased to recommend you ask your technical questions on our [forum](#).

You can [find](#) answers to your questions on the forum pages and add a new topic to discuss the problem with our engineers.

2. We suggest you to read [WiKi](#), where you can find the full description of the functionality of our products. Please [register](#) and ask your question.

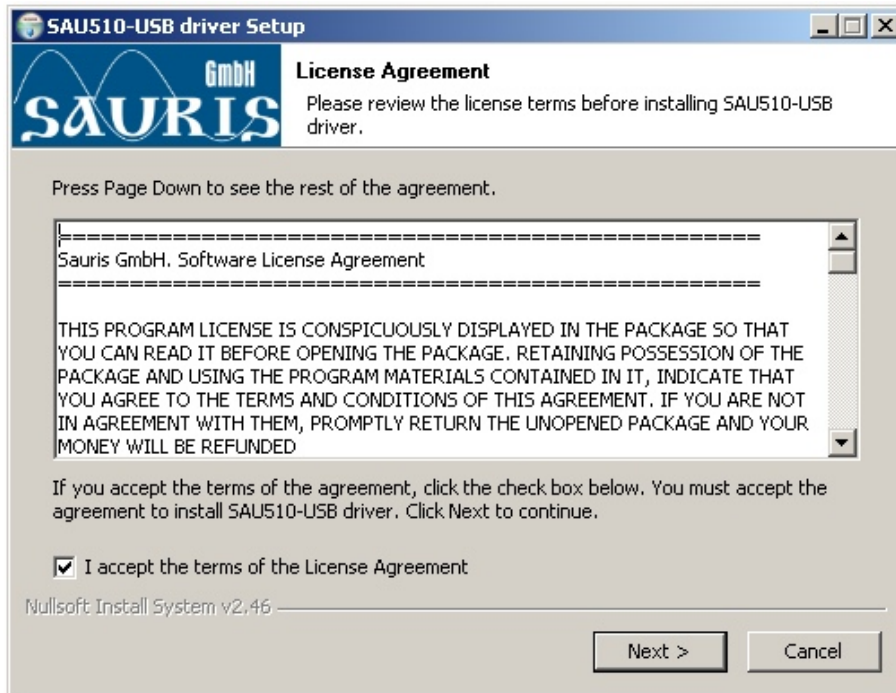
Please, don't forget to subscribe to new topics to keep track of the status of your question.

You will be informed by e-mail when our engineers respond to the message.

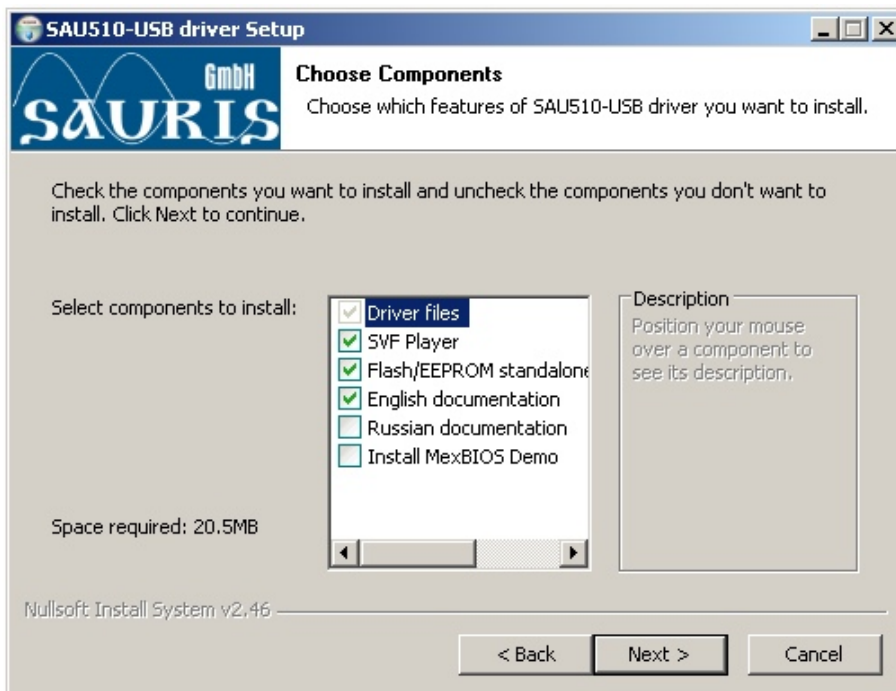
**3. Dear Friends, you could join projects support program right now [sending us RFQ](#), [Technical Questions](#) or [Samples Order](#). Also you can find [warranty terms on our web](#).**

## 1. Installing the SAU-XDS510-USB Lite Emulator drivers

- 1.1. Turn off the antivirus software.
- 1.2. Insert SAU-XDS510-USB Lite installation CD into CD drive.
- 1.3. The installer starts automatically if autoplay is turned on. If it doesn't, open the CD with the drivers in the File Manager window and run CD:\Windows\sau510usb\_Install.exe. In case of Sauris drivers were installed earlier, installation will require to remove it and restart sau510usb\_Install.exe.



- 1.4. You may choose options you need:

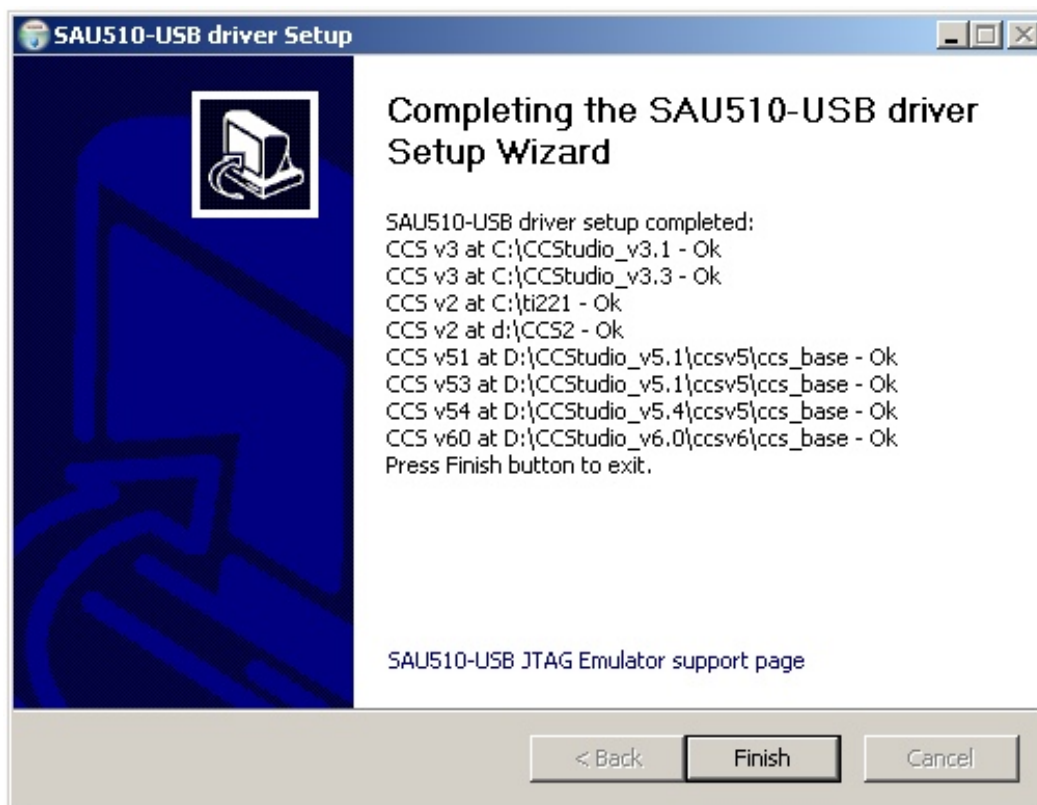


English documentation complete set, Flash/EEPROM utilities and «SVF player» utility are installed by default. Additionally it

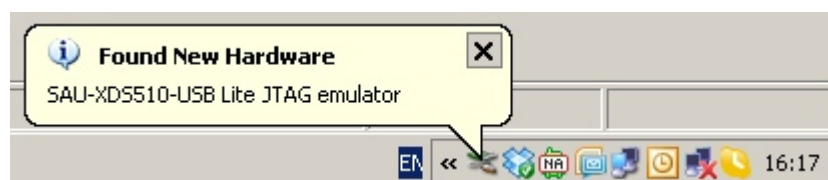
is possible to install Russian documentation set. In case of CD-ROM installation you may install MexBIOS Development Studio Demo version with TMS320F2833x library, which is using Sauris emulators to program microcontrollers.

MexBIOS Development Studio - is a visual environment for development and simulation/emulation of embedded software for control systems of electric motors, technological complexes, programmable logic controllers. If MexBios installation is selected at the end of installation two additional installer MexBIOS IDE and TMS320F2833x library will start.

- 1.5 Follow the on-screen wizard instructions to install the driver and software. After the installation is completed window will be displayed:



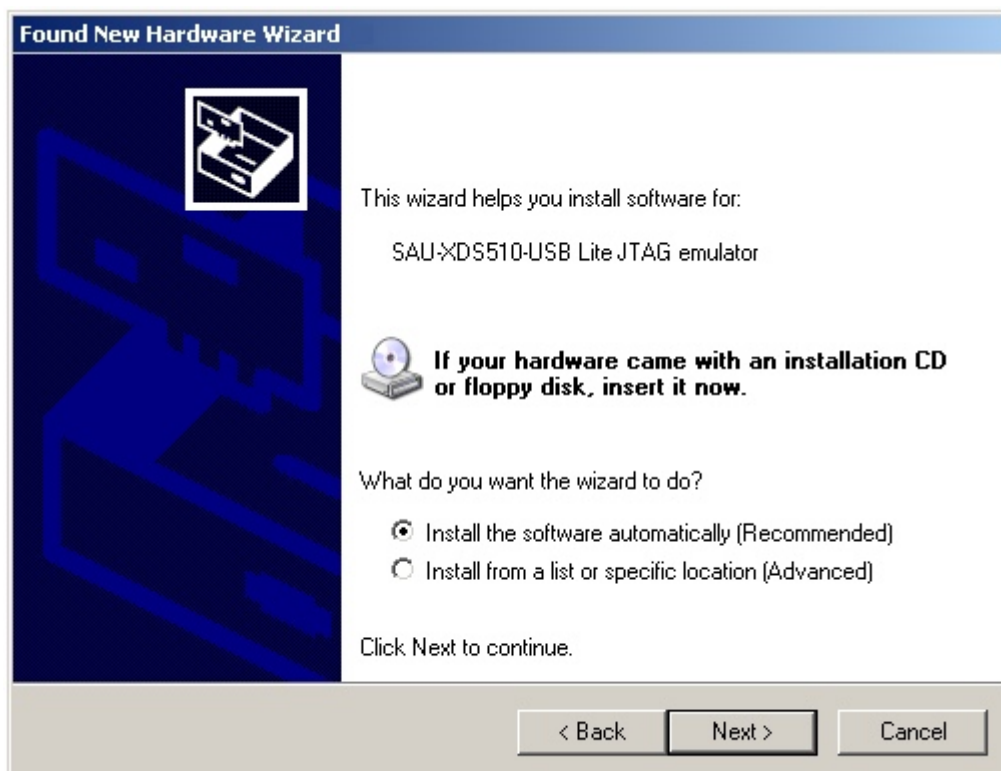
- 1.6. Turn on the antivirus software if needed.
- 1.7. Connect the Emulator to the USB-port of your PC. It is recommended to use USB 3.0 port to make sure that the Emulator operates at the maximum speed.
- 1.8. The system will find a new hardware.



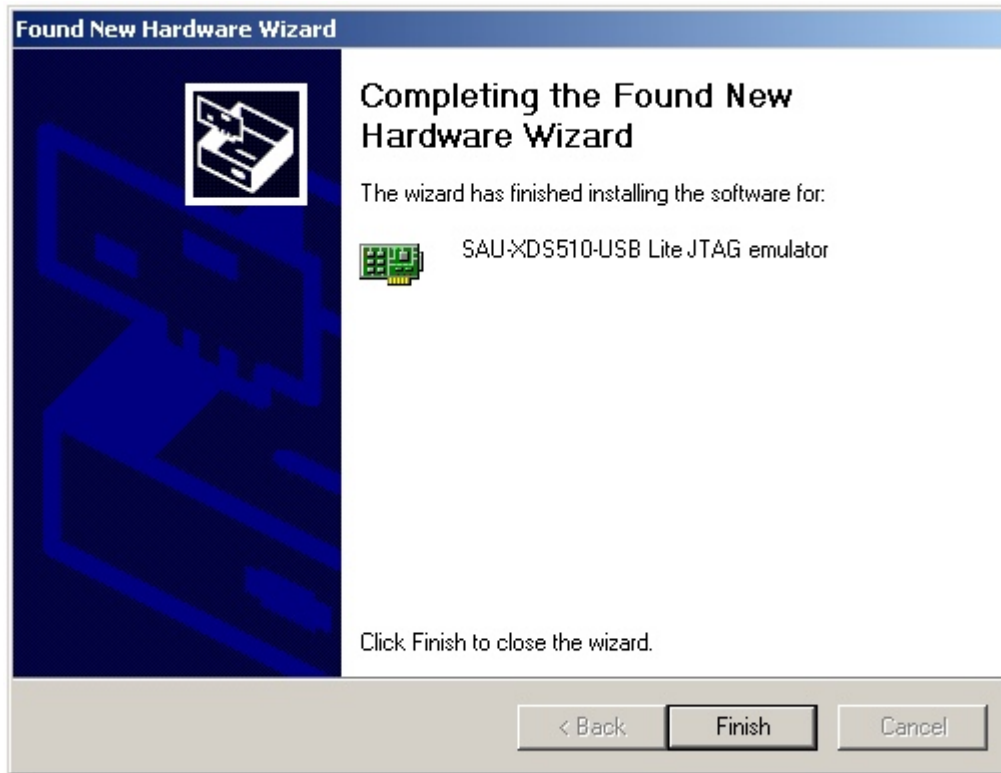
1.9. Refuse from connecting to Windows Update.



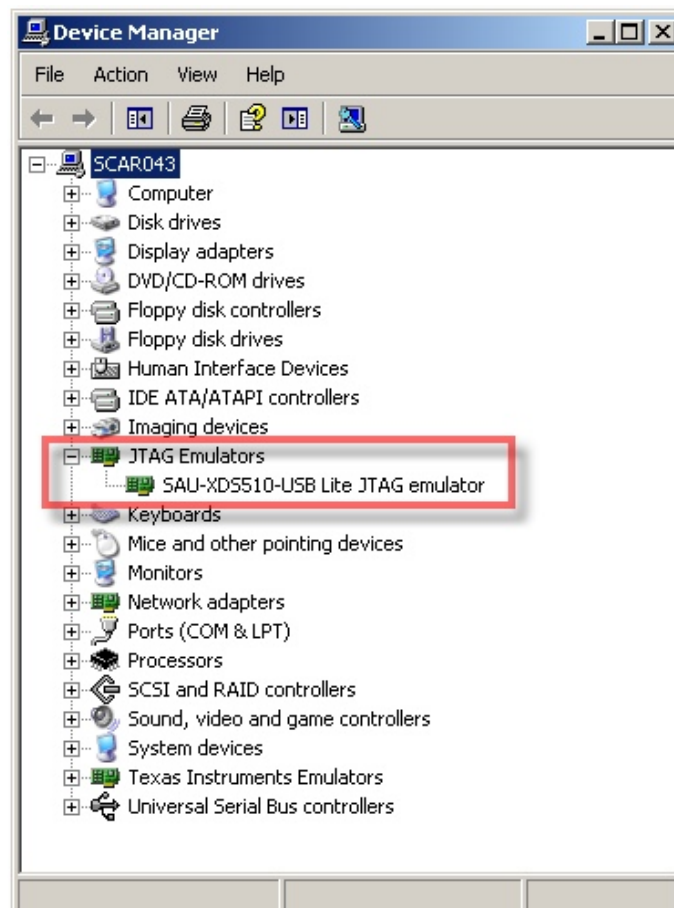
1.10. Choose Install the software automatically.



- 1.11. Now you can use the SAU-XDS510-USB Lite JTAG Emulator with your CCS.



- 1.12. You can check the connection correctness in the Device Manager of the Windows operating system. There should appear the line «JTAG Emulators» on the list.

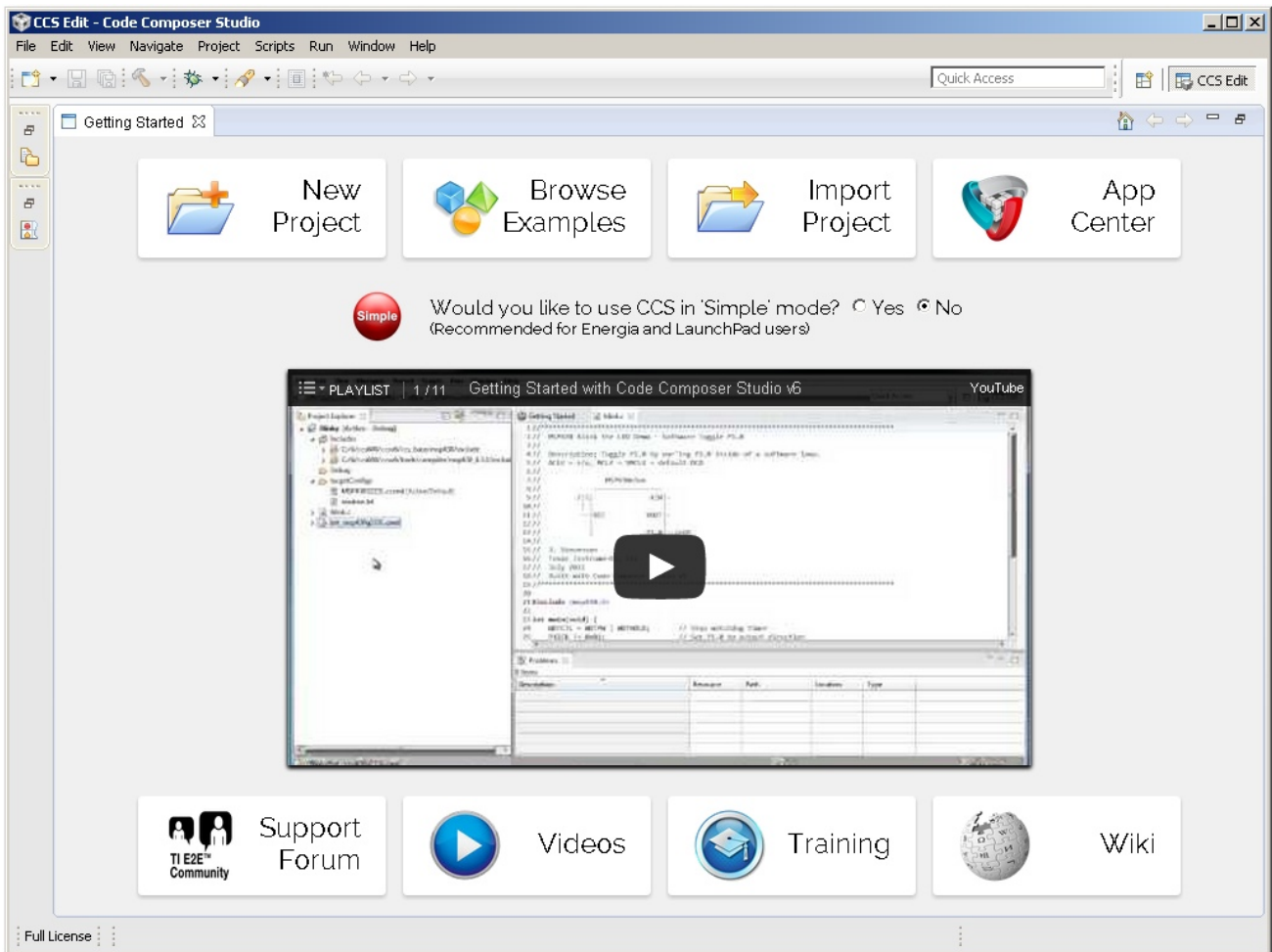


## 2. Connecting a board to a PC using SAU-XDS510-USB Lite through CCS v6.

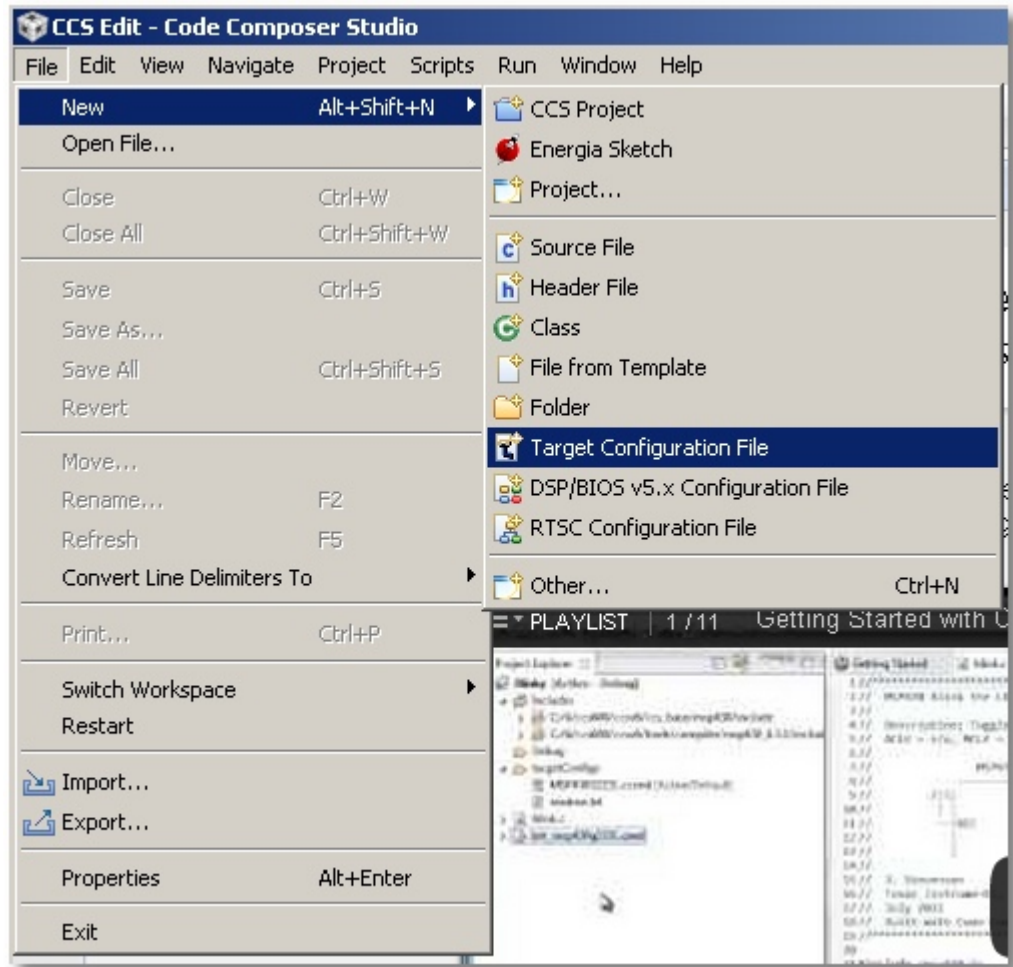
### 2.1. Creating the configuration for SAU-XDS510-USB Lite on the basis of factory boards.

2.1.1. Connect the Emulator to the board using JTAG interface. Supply power to the board. Connect the Emulator to the PC using the USB-cable from the Emulator delivery set.

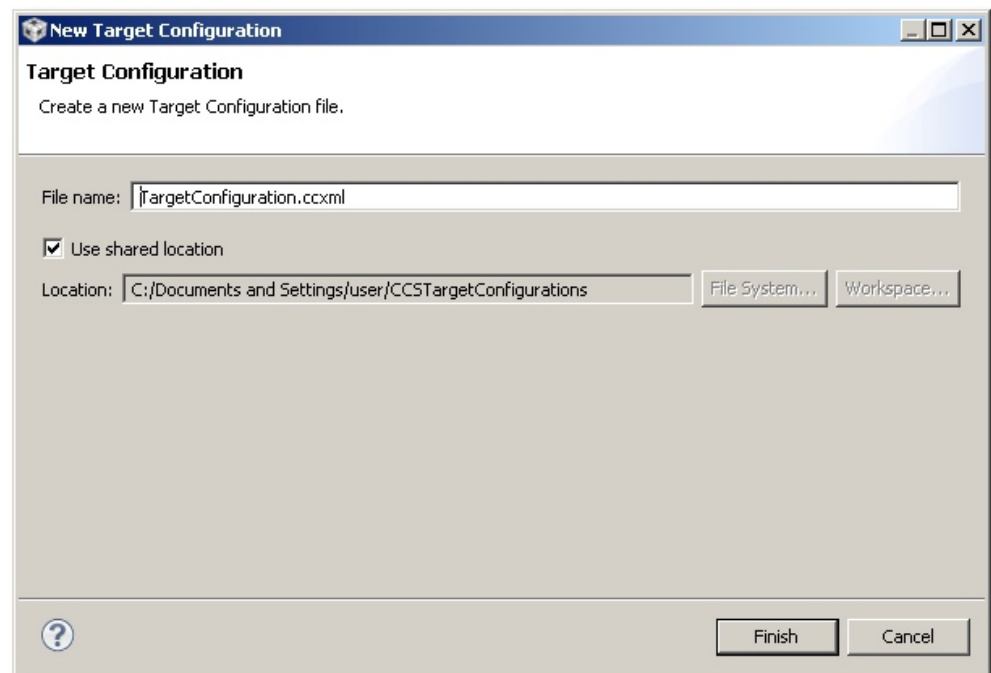
2.1.2. Run Code Composer Studio v6. You will find the icon either on the desktop or through the Start menu of the Windows operating system (Start → Programs → Texas Instruments → Code Composer Studio 6.0.0 → Code Composer Studio 6.0.0).



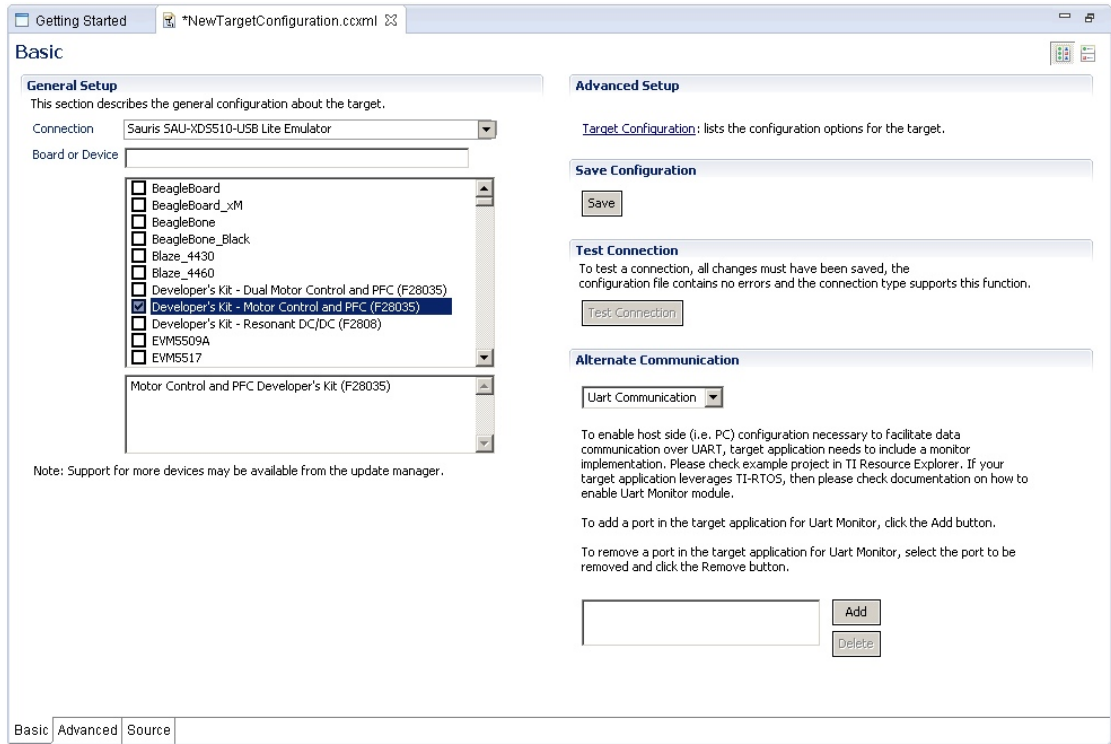
2.1.3. Select menu *File* ⇒ *New* ⇒ *Target Configuration File*



2.1.4. Enter the name of configuration and click *Finish* button.



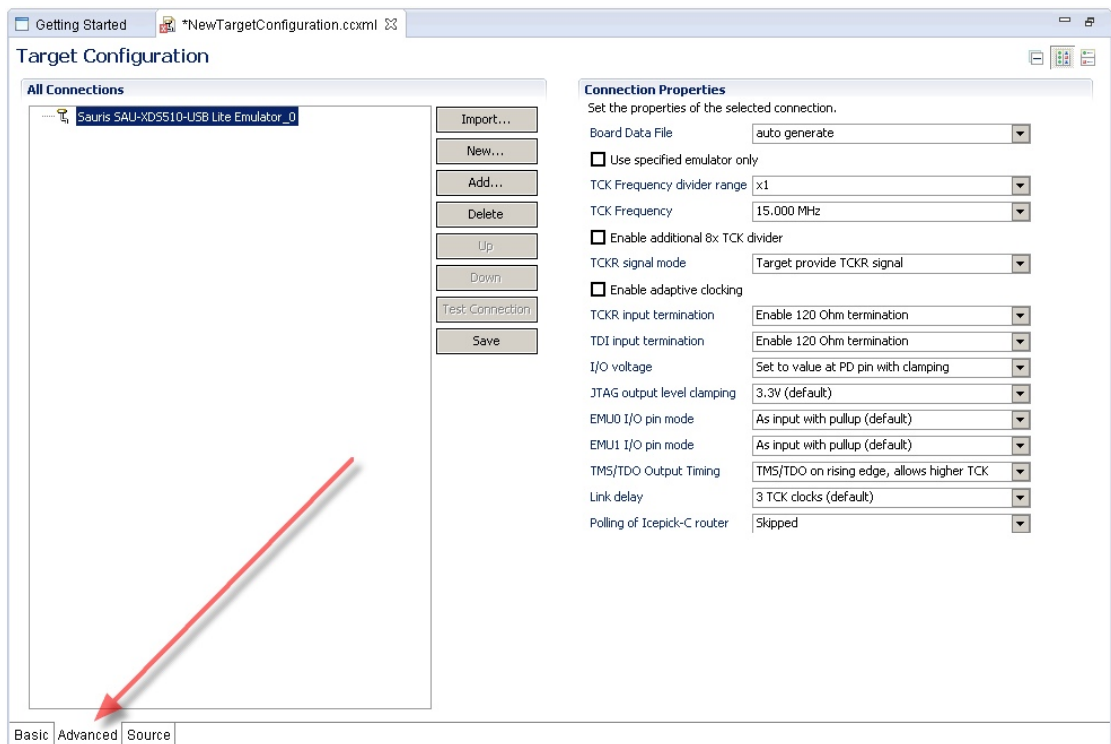
- 2.1.5. Choose *Sauris SAU-XDS510-USB Lite Emulator* in the Connection field. Select your board or processor on the Device pane and then click *Save* button.



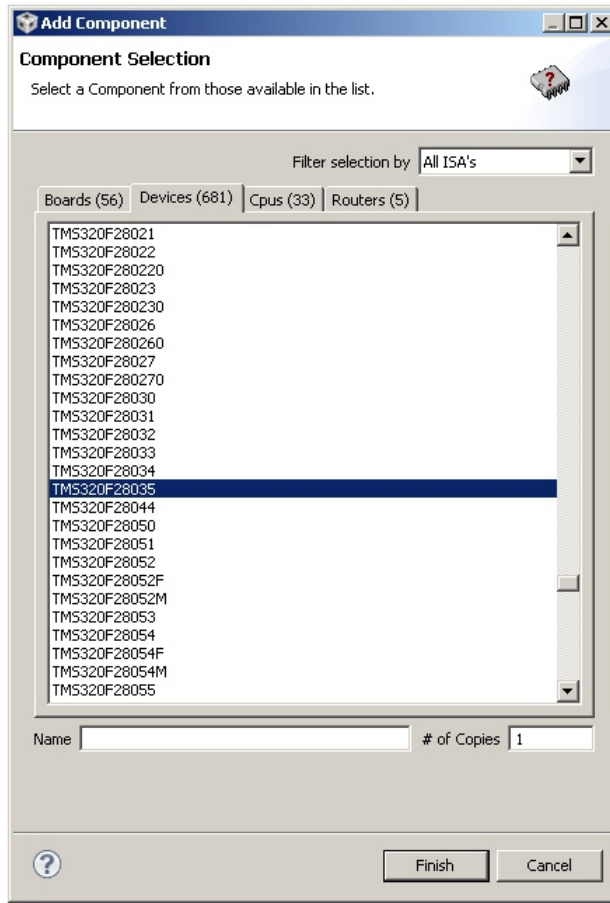
## 2.2. Connection using self-made board.

- 2.2.1. This type of configuration is to be chosen when there is no matching factory board, e.g. if there are several processors in the JTAG-chain or if there are some other devices in the chain that are to be set to BYPASS mode while debugging, etc.

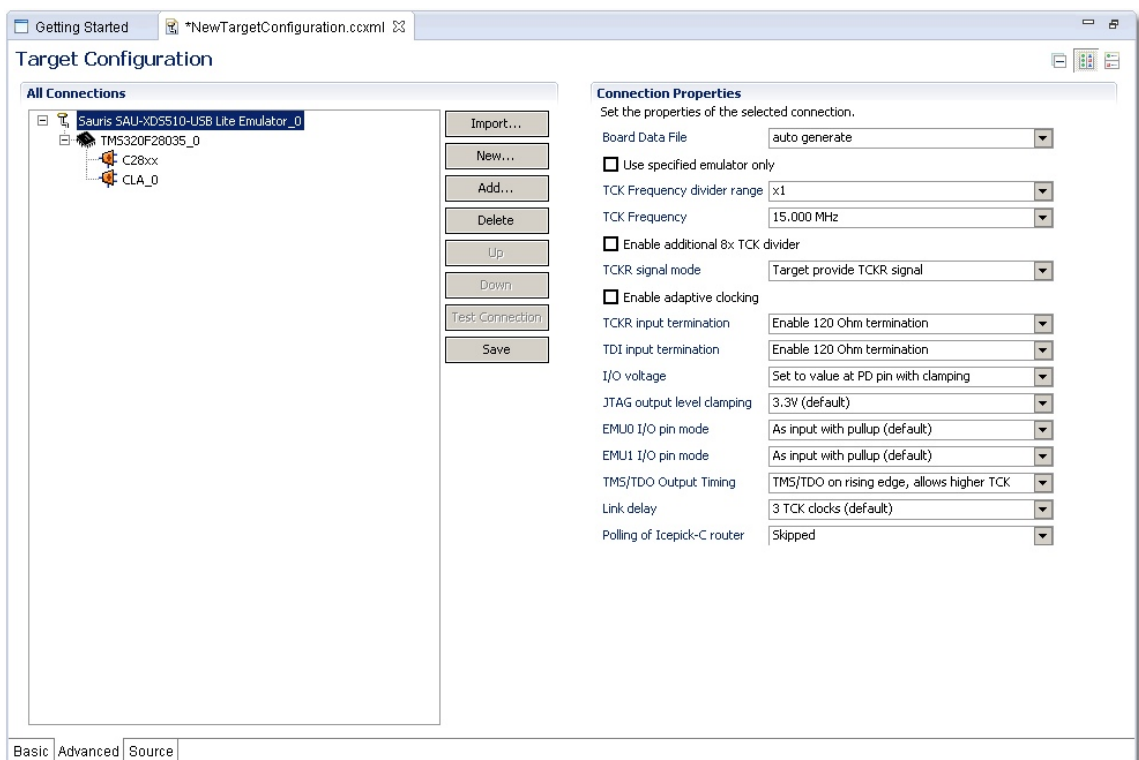
- 2.2.2. Select *Advanced* pane (on the bottom of CCS window).



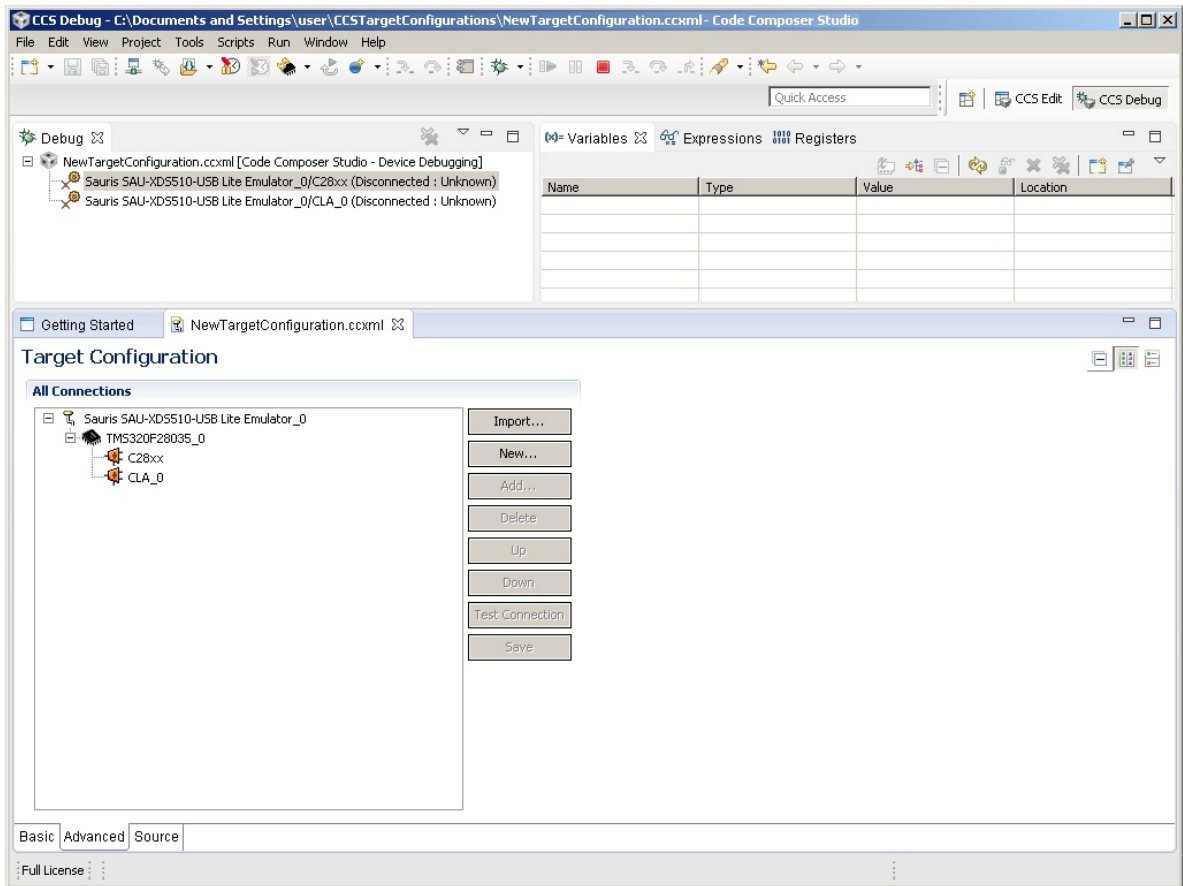
2.2.3. Click *Add* button and select Board, Device, CPU or Router.



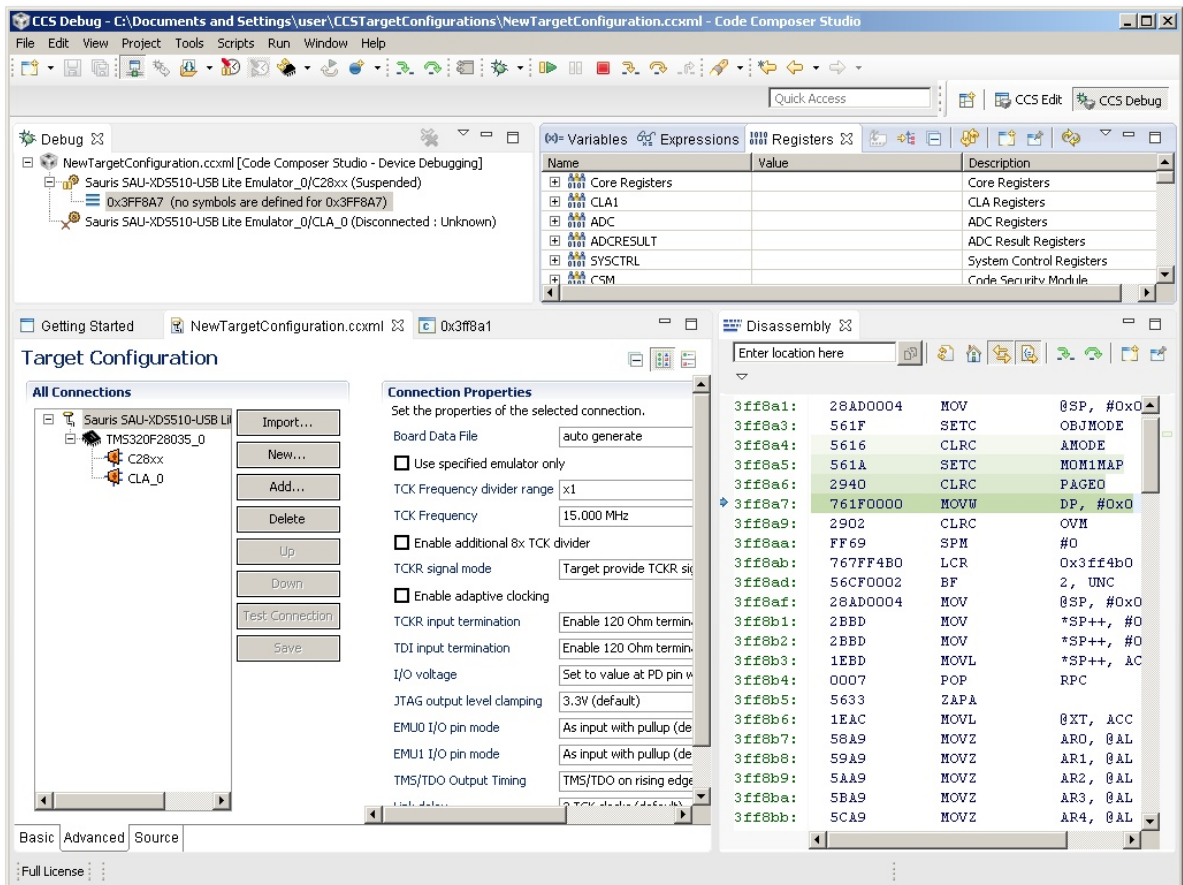
2.2.4. Click *Finish* button. Then you can setup your connection parameters using fields in the right part of the window. Click *Save* button.



2.2.5. To check your connection select menu *Run* ⇨ *Debug*.



2.2.6. Select menu *Run* ⇨ *Connect Target*.



If target is connected you should see disassembly code.

#### IMPORTANT NOTICE

Sauris GmbH and its subsidiaries (Sauris) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to Sauris' terms and conditions of sale provided at the time of order acknowledgment.

Sauris warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with Sauris' standard warranty. Testing and other quality control techniques are used to the extent Sauris deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Sauris assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using Sauris devices. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Sauris does not warrant or represent that any license, either express or implied, is granted under any Sauris patent right, copyright, or other Sauris intellectual property right relating to any combination, machine, or process in which Sauris products or services are used. Information published by Sauris regarding third-party products or services does not constitute a license from Sauris to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from Sauris under the patents or other intellectual property of Sauris.

Reproduction of information in Sauris data books is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. Sauris is not responsible or liable for such altered documentation.

Resale of Sauris products or services with statements different from or beyond the parameters stated by Sauris for that product or service voids all express and any implied warranties for the associated Sauris product or service and is an unfair and deceptive business practice. Sauris is not responsible or liable for any such statements.