MSP430-JTAG-TINY-V2

LOW COST FAST USB JTAG FOR PROGRAMMING AND FLASH EMULATION

FEATURES

- Suitable for most MSP430Fxxx flash microcontrollers
- Uses TI standard 2x7 pin JTAG connector
- Spy-By-Wire support for the newest TI MSP430 devices
- Can supply the target with 3.3V fixed voltage 50mA maximum current, no short circuit protection(!)
- The firmware uses version 2 of the MSP430 Debug stack - it is compatible with a large number of software tools
- Compatible with TI's Code Composer Studio up to version 6.1.2
- Compatible with IAR Embedded Workbench for MSP430 up to version 5.20.1 software for programming, real time emulation, debugging, step by step program execution, breakpoints, memory dump etc everything all high priced emulators do
- With IAR Kickstart versions you can write in assembler unlimited code size and to write in C with 2K limit for all MSP430 microcontrollers
- Works with free GCC C compiler and Insight MSP430 toolchain and debugger
- **Compatible with software tools that have support for MSP430 Debuck Stack version 2 (MSP430.dll v2).**
- **Not compatible with newest versions of IAR Embedded Workbench for MSP430 (6.x.x and after)**
- **Not compatible with newest versions of Code Composer Studio (6.1.3 and after)**
- For MAC-OS users: reported to work with PS X 10.4 and current Parallels
- Dimensions 50x40 mm (2x1.6") + 20 cm (8") cable

DOCUMENTS

- How to install Olimex USB MSP430 programmers
- List of supported microcontrollers by the latest drivers
- SPY-BI-WIRE connection please pay attention if you want to use SBW devices as the JTAG connection is different
- How to install and use Olimex JTAGs with CCS 4.x
- How to install and use Olimex JTAGs with CrossWorks
- MSP430-JTAG-TINY-V2 European Declaration of Conformity
- MSP430-JTAG-TINY-V2 UKCA Declaration of Conformity

HARDWARE

- MSP430-JTAG-TINY-V2 JTAG connector layout

SOFTWARE

- Windows drivers + MSP430-JTAG-TINY-V2 firmware version 2.0.0.7
- OLIMEX MSP430-PROGRAMMER - GUI 1.3.0.4_CLI 2.0.1.2_DLL1.0.4.2/ 17.11.2011 freeware - a stand alone software which allows you to program MSP430 devices without any 3rd party
- MSP430 JTAG drivers ver.1.0.4.2 -26-JUL-2011 adds support for all devices released by TI to July 2011
- MSP430 dll ver.1.0.4.1
- MSP430 JTAG drivers ver.1.0.3.9
- MSP430 Kick Start C compiler and debugger (free for assembly language, limited for C)
- MSPGCC - free C compiler and debugger
- MSPdebug support for Linux for MSP430-JTAG-TINY made by Daniel bear, tested to work fine in both JTAG and SBW mode with MSPdebug 0.16

FAQ

❓ **I think my device doesn't have the latest firmware. How do I update the firmware?**

Download and extract the package from the software section above. Follow the instructions in the README.txt file inside.

I use Windows 10 and the debugger doesn't seem to work. What should I do?

Disable "driver signature enforcement" and then install the drivers. Remember to copy-paste the latest dll files to the suitable folder of your IDE. More information about hte installation can be found in the user's manual.

Code Composer Studio 5 crashes after I upload some code on my target board. What is the problem?

We are aware of the problem and it is a problem on our side. We are working to resolve the issue. The workaround is to use the previous driver version 1.0.4.1, instead of the latest 1.0.4.2. Replace the dll with the 1.0.4.1 one, which can be found downloaded from a link above.

Can I use the MSP430-JTAG-ISO-MK2 with the XYZ development IDE/tools?

The MSP430.dll which is provided with the MSP430-JTAG-ISO-MK2 is 100% compliant to the Texas Instruments MSP430.dll and will work with *every* development software which supports the original TI MSP430-FET and MSP430-USBFET hardware platforms, we have tested IAR EW for MSP430, Code Composer Studio, Rowley CrossWorks, MSPDEBUG and MSPGCC.

My target device is supported in your free MSP430 programmer but I can't find it in the drop-down menu?

To be able to program it with the Olimex Programmer you will have to add your device's info in the olidev.ini (located in the main folder) by following the pattern below. You must use the following format for a single line, the required info can be acquired from the datasheet of the processor in "Memory organization" table. For more info refer to the readme text file in the install folder.

Other companies charge money for MSP430 programming software, why is yours free?

To write MSP430 programming software using the TI MSP430.dll is a very easy job, there would probably be tons of such programmers available if TI was not keeping the DLL content secret. The programmer software we offer is a beta testing software so it may have some bugs although we've been using it for years at home. Now we've decided to release it for the public as we got a number of questions about whether we know of any such software :). As we are a more hardware-oriented company rather than software-oriented and we've never gotten involved in sales of software, we decided to just release it as a freeware and not to hassle with software copy protections and such.Note that it's not open source but a copyrighted software, although it costs you nothing to obtain or distribute it. We are going to fix all reported bugs in a timely manner but keep in mind that it's not a commercial project and our people have a lot of other stuff to do.