

Starting 430eForth-IDE

Starting with Rev1.5, TI's LaunchPad has jumpers to switch RX and TX pins between Software USART and Hardware USART. The TXD and RXD jumpers on J3 on the LaunchPad board are in software USART position when delivered by TI. 430eForth uses the hardware USART, so position the TXD and RXD jumpers on J3 must be switched from vertical to horizontal orientation. In case you are using 430eForth with an older LaunchPad version 1.4, remove the TXD and RXD jumpers and connect the TXD and RXD pins crosswise.

Here is a 12 step program to bring up 430eForth-IDE on your PC, with Windows XP or Windows 7, and you need of course a LaunchPad with a MSP430G2553 chip and a USB cable.

- 1 Start Windows PC and 430eForth-IDE for Windows.
- 2 Click on 430eForth-IDE Menu
LaunchPad>Preparing LaunchPad Connection.
- 3 Unpack MSP430-LaunchPad: cut foil, take out circuit board and take out USB-Cable hidden under cardboard cover.
- 4 Check HW | UART position of RX/TX-Jumper, turn by 90° if necessary.
- 5 Connect USB-Cable out of MSP430-LaunchPad box to MSP430-LaunchPad.
- 6 Connect USB-Cable to PC - green Power-LED lights, red and green LEDs blink.
- 7 MSP430 Application UART Hardware Wizard appears on screen. If not already set, click on
Install Software automatically.
Click on button Next - it will need some time till software is found.
- 8 A message will come up telling the MSP430 Application UART has not passed Windows Logo testing to verify its compatibility with Windows. Click on button
Continue Anyway.
Installation will need some seconds. Click on button Finish.
- 9 Some messages are coming, telling that hardware is ready for use. Proceed with 430eForth-IDE.
- 10 Click on 430eForth-IDE Menu
LaunchPad>FLASH the LaunchPad> 430eForth.a43
- 11 Popup warning message:
All your Forth Words will be lost.
Proceed with FLASHING the 430eForth?
Click on button Yes.
- 12 Flashing needs several seconds, when ready, message
Flashing 430eForth done -checking connections now
shows up. If everything is okay, the message:
430eForthFLASH connections checked ! Click 'Start' button
to connect to target !
shows up. Now 430eForth is installed on the LaunchPad! The red and the green LED are lit as long as the LaunchPad is connected to the PC and no program switched them off.

Click the START button on lower right of the IDE screen. Reset LaunchPad and you get the sign-on message:

430eForth v4.3

After bring up 430eForth, type <return> key on the keyboard several times, and each time you will get a new line with an ok message. Now, with CapsLock set on the keyboard, type:

```
WORDS <return>
```

and you will see a list of eForth commands on the terminal console.

Try the following commands:

```
2 3 + . <return>
1 2 3 4 5 <return>
.S <return>
0 DUMP <return>
HEX
C000 DUMP <return>
0 21 C! <return>
41 21 C! <return>
```

Notice that you are turning the LEDs on LaunchPad on and off.