# TSW14XX USB3 SPI Flash Programmer GUI - User Guide

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#### GUI Version 1.1

## I. Program USB3 FW and Random Serial number

Please follow the below listed guidelines for successful program of the TSW14XX USB3 SPI Flash.

- Install the 'TSW14XX USB3 SPI Flash Programmer' GUI from below given shared location by running the TSW14XX USB3 SPI Flash Programmer v1.1- Installer.exe <u>\\hsp\_dt002\Other Installers\TSW14J56 USB3 SPI Flash Programmer</u>
- 2. Open the 'TSW14XX USB3 SPI Flash Programmer' GUI using the shortcut on desktop.
- 3. In TSW14J56 RevD EVM, change the **PMODE Jumpers** to "USB Boot Mode" which is JP11 and JP12 should be connected to 1-2 and JP13 should be open as shown in Figure 1.



Figure 1 - PMODE Jumper settings for USB Boot Mode

- 4. Power cycle the TSW14J56 RevD EVM
- 5. Connect the EVM to PC (Device Driver would have been installed already and Device Manager should show it as Boot Loader Device)

6. Click on the "**Program SPI Flash**" button (This program the SPI Flash with random serial number and the USB3 Firmware) as shown in Figure 2.

**Note:** When the GUI is installed in any fresh station, for the first time, programming of the SPI Flash will **fail** as the driver needs to be initiated for the BootProgrammer Mode. It will work just fine from the second attempt onwards.

TSW14JXX USB3 SPI Flash Programmer v1.1				
Configuration	Program Status			
Board Name	Serial Number Programmed			
TSW14J56revD				
USB3 Firmware File Path				
C:\Program Files (x86)\ Texas Instruments\ TSW14XX USB3 SPI Flash	Program Status			
Program SPI Flash				
<ul> <li>Read Me</li> <li>1. In TSW14J56 RevD EVM, make sure that the PMODE Jumpers J11 and J12 are connected between 1-2 and J13 is open</li> <li>2. Power cycle the TSW14J56 RevD EVM and connect the EVM to PC</li> <li>3. Click on the "Program SPI Flash" button to program the SPI Flash with random serial number and the USB3 FW</li> <li>4. The "Serial Number Programmed" indicator will display the programmed serial number for the connected device.</li> </ul>				
	READ			

Figure 2 - TSW14XX USB3 SPI Flash Programmer GUI

7. The **"Serial Number Programmed**" indicator (shown in Figure 3) which is present in the main tab of the GUI will display the programmed serial number for the connected device. This can be used for label creation.

TSW14JXX USB3 SPI Flash Programmer v1.1	- • •					
Configuration Board Name TSW14J56revD USB3 Firmware File Path C:\Program Files (x86)\ Texas Instruments\ TSW14XX USB3 SPI Flash	Program Status Serial Number Programmed T804CF1w					
Program SPI Flash         Read Me         1. In TSW14J56 RevD EVM, make sure that the PMODE Jumpers J11 and J12 are connected between 1-2 and J13 is open         2. Power cycle the TSW14J56 RevD EVM and connect the EVM to PC         3. Click on the "Program SPI Flash" button to program the SPI Flash with random serial number and the USB3 FW         4. The "Serial Number Programmed" indicator will display the programmed serial number for the connected device.						
Idle	READY					

#### Figure 3 Programmed Serial Number

- 8. 'Program Status' should trun green if the programming is successful.
- 9. Power Off the EVM
- 10. Change the PMODE Jumpers to "**SPI Boot Mode**" which is JP11 should be connected to 1-2, JP12 should be open and JP13 should be connected to 2-3 as shown in Figure 4.



SPI Flash Boot mode: PMODE0 -> High; PMODE1 -> Open; PMODE2 -> Low;

Figure 4 - PMODE Jumper settings for SPI Boot Mode

This will enable auto boot from SPI Flash from next Power ON onwards.

# <<<This procedure is only required if the EVM is not detected on the PC automatically>>>

# II. Manual Device Driver Installation

1. Connect the TSW14J56revD EVM to the PC. EVM will be detected as the "West Bridge" in the Device Manager. We need to configure the driver for the first time. To configure the driver, Right Click the west bridge in the device manager and select update driver software and select Browse My Computer for Driver Option as shown in Figure 1.



Figure 1. Device Driver Configuration

 Now browse to the following location C:\Program Files (x86)\Texas Instruments\TSW14XX USB3 SPI Flash Programmer\Driver and the appropriate operating system and click on Next. This will install the EZ-USB FX3 Driver. Figure 2 Shows for windows 7 x64bit operating system.

0	Update Driver Software - Intel(R) USB 3.0 Root Hub	X
	Browse for driver software on your computer	
	Search for driver software in this location:           hstruments\TSW14XX USB3 SPI Flash Programmer\Driver\win7\x64         Browse	
	☑ Include subfolders	
	<u>N</u> ext C	ancel

Figure 2 Navigate to TSW14XX USB3 SPI Flash Programmer installation directory

- 3. If any error appears like "*Windows was unable to install your driver*" please select "<u>Let me</u> <u>pick from a list of device drivers on my computer</u>" option in the window as shown in the Figure 2. If no error appears in the step3, skip the following steps and proceed to step 7.
- 4. Select the "Have Disk" button in the next window shown in Figure 3

G 🛛 Upd	late Driver Software - Intel(R) USB 3.0 Root Hub	
Select	the device driver you want to install for this Select the manufacturer and model of your hardware de	hardware. vice and then click Next. If you have a
Shov	disk that contains the driver you want to install, click Har v <u>c</u> ompatible hardware	ve Disk.
Mode Int	I el(R) USB 3.0 Root Hub	
Tł Tł	nis driver is digitally signed. Ill me why driver signing is important	Have Disk
		<u>N</u> ext Cancel

Figure 3 Selecting Have Disk Driver Installation Window.

5. In the pop up window select browse option and browse to the following location C:\Program Files (x86)\Texas Instruments\TSW14XX USB3 SPI Flash Programmer\Driver and the appropriate operating system and select the "cyusb3.inf" file and click 'open' as shown in figure 4

📇 Locate File		the later in the	-	×
Look in:	) fx3_win7_x64	_driver 👻	G 🤌 📂 🛄 -	
Recent Places	Name	* 	Date modified 10/13/2014 4:30 AM	Type Setup Infc
Desktop				
Libraries				
Computer				
Network		III		Ŀ
	File <u>n</u> ame: Files of <u>t</u> ype:	cyusb3 Setup Information (*.inf)	- [	Open Cancel

Figure 4 Selecting driver file cyusb3.inf

- 6. Click on Install this Driver anyway to install this driver in the pop up shown after selecting Open.
- 7. Now, TSW14XX USB3 drivers are installed, please open the GUI and check the page 1 user guide for the GUI.