Procedure to Flash Firmware and Get Data from the Product

Please follow the steps below to ensure flashing programs will work properly.

Generate image using CCS

1. By default the board, SOP1 is having jumper on it
2. Open Uniflash and choose CC31XX/CC32XX from the device list

Run the UniFlash application. A list of all supported devices appears; choose *CC31xx / CC32xx* from the device list, as shown in Figure 4-1.

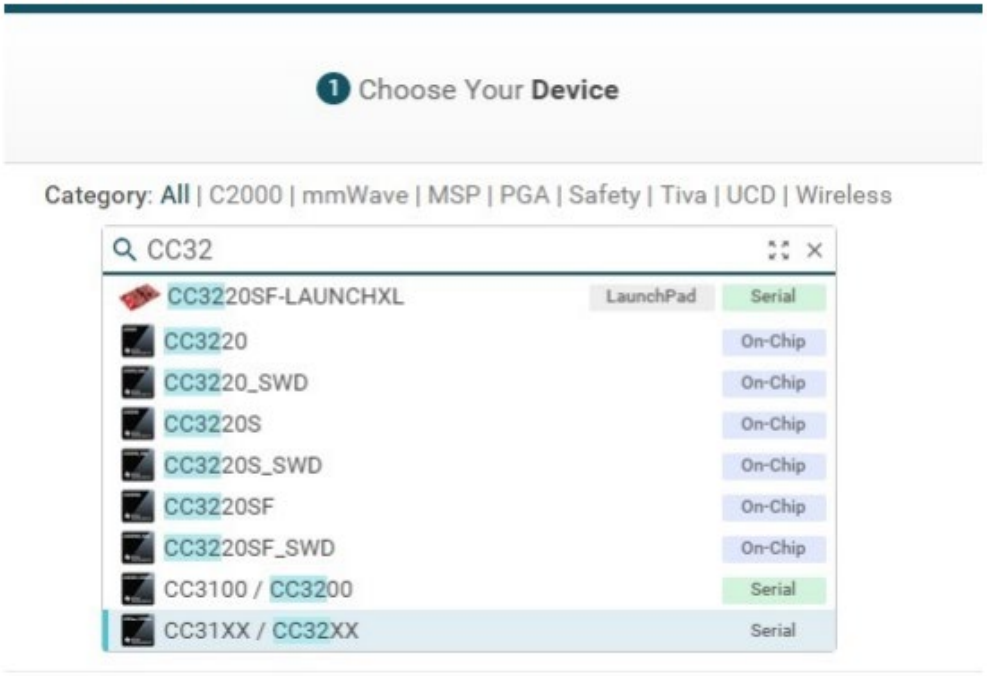
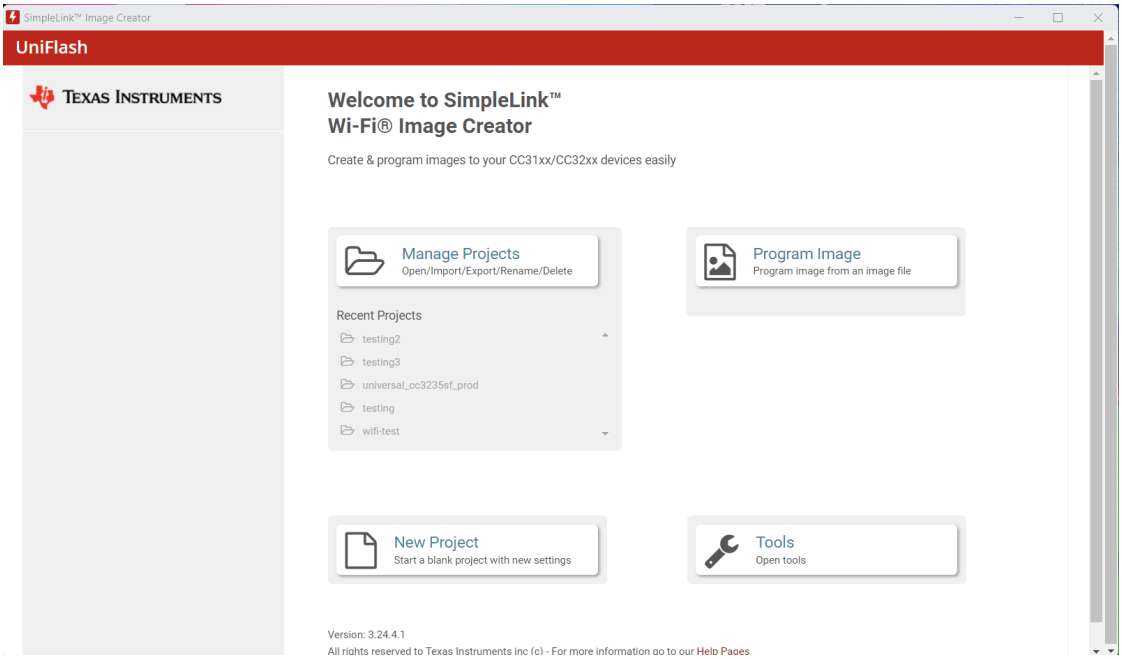
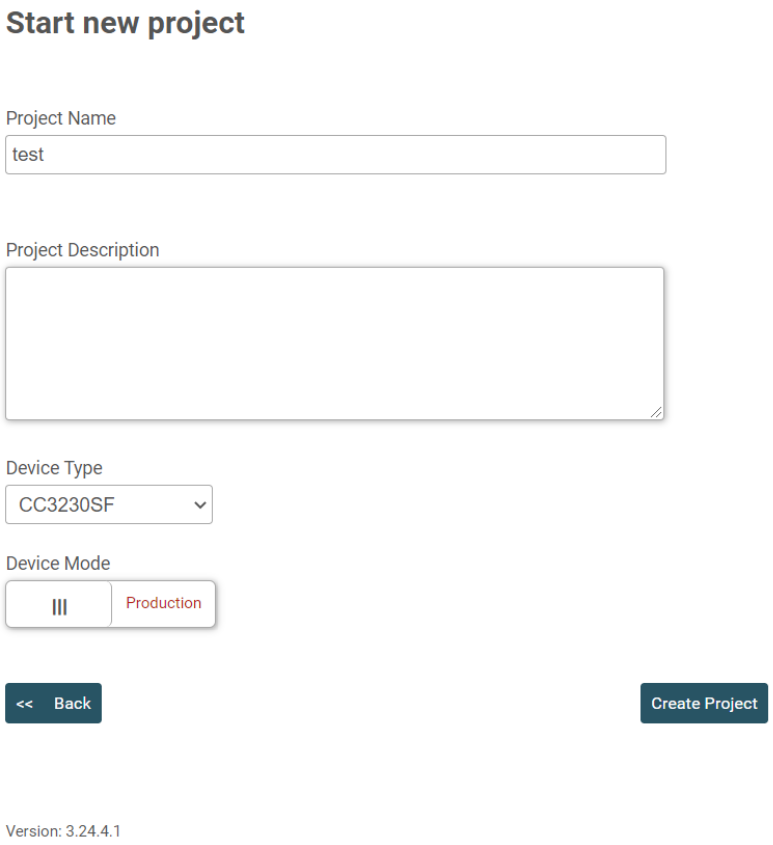


Figure 4-1. Opening ImageCreator Through UniFlash (1 of 2)

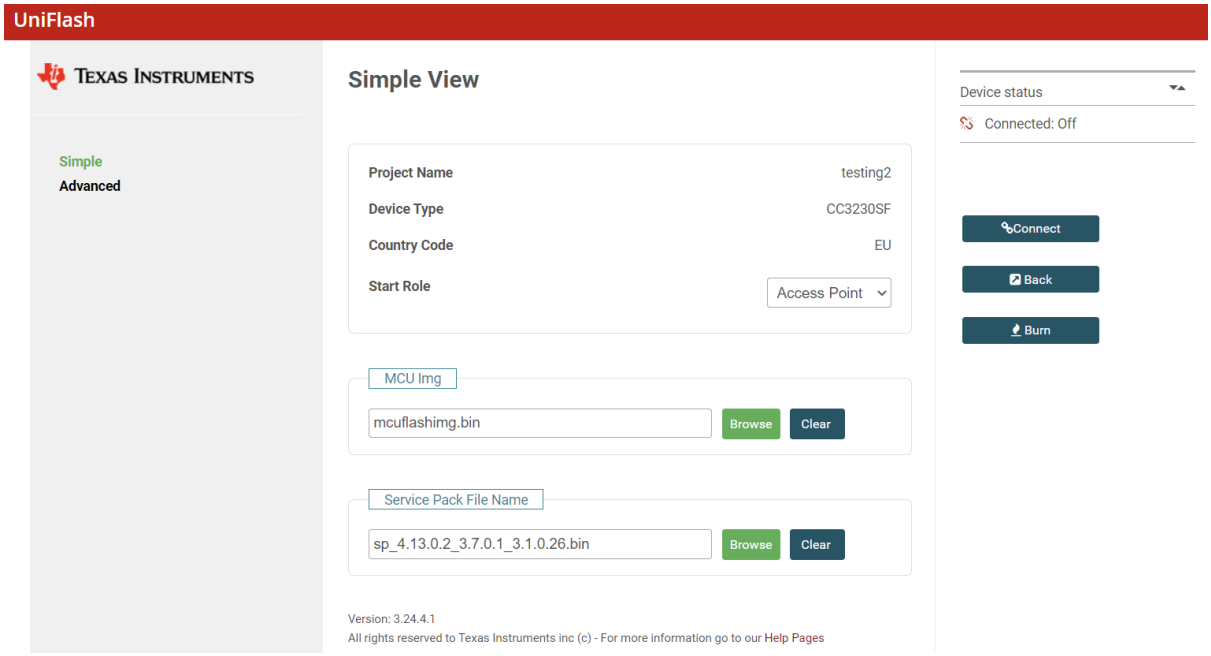
3. Open new project



4. Create a project name, choose the device type option according to the model number (This project using cc3230sf) and click the device mode into production mode

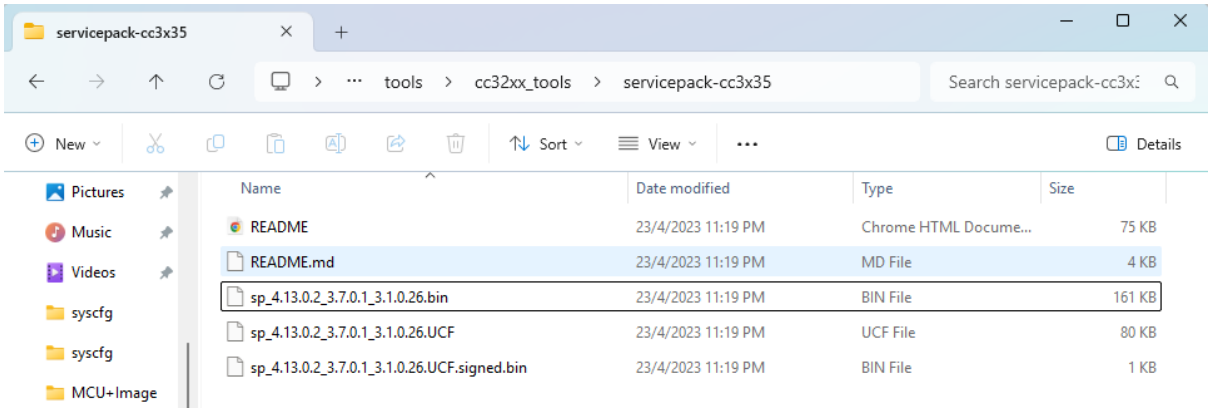


5. When create project user will be directed to this simple view page, thus there are 2 files will be added which consists of MCU img and Service pack file

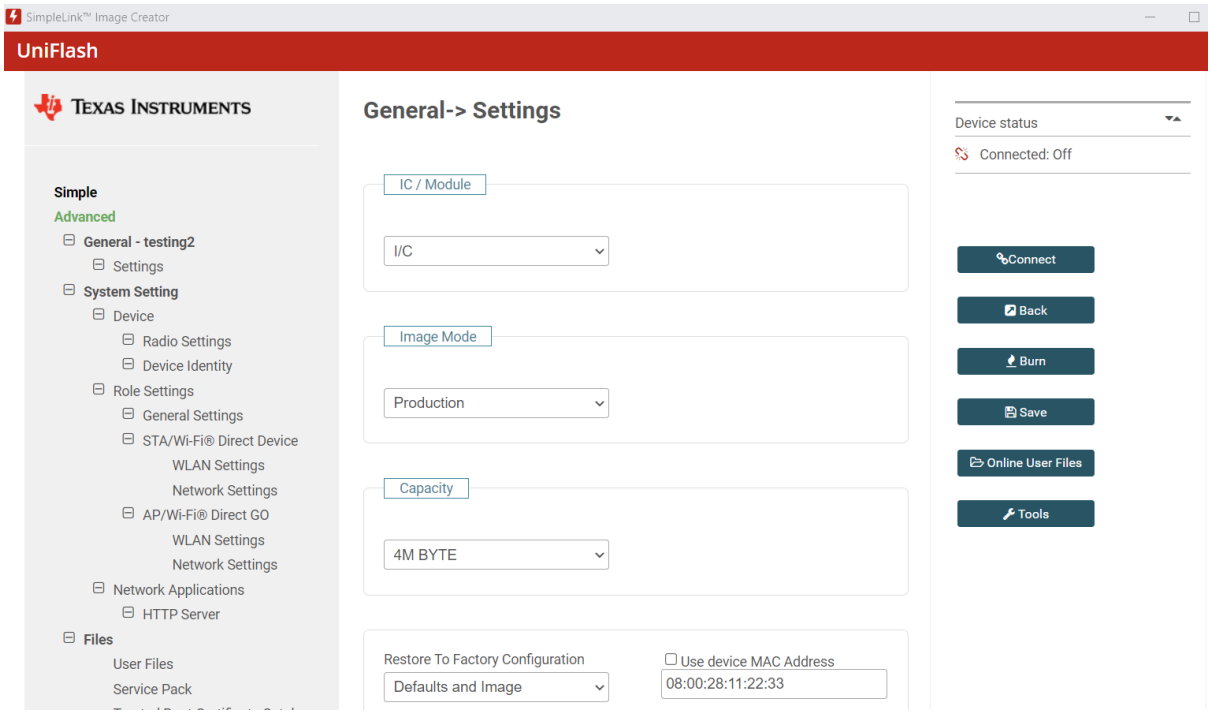


6. For MCU img, when click browse, find a project which have a bin format (Just open the generated MCU+ image folder after build the program in the CCS (build the program first to create .bin file))

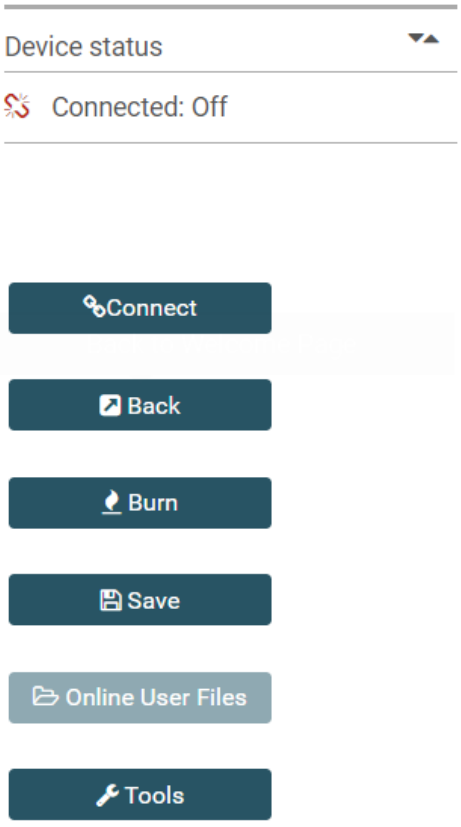
7. Meanwhile for the service pack file can locate the file in the SDK on user respective pc (e.g. C:\ti\simplelink_cc32xx_sdk_7_10_00_13\tools\cc32xx_tools\servicepack-cc3x35). Additionally choose the sp_4.13.0.2_3.7.0.1_3.1.0.26.bin



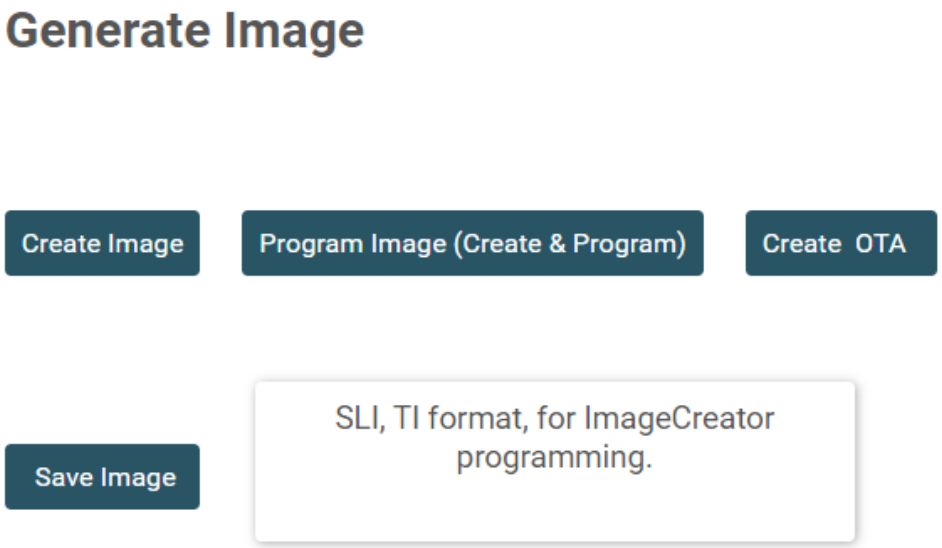
8. After that, go to the Advanced mode on the left navigation side and go to testing (e.g. Advanced -> general – testing2). Untick the use device MAC Address


SimpleLink™ Image Creator
UniFlash
Texas Instruments
Simple
Advanced
General - testing2
Settings
System Setting
Device
Radio Settings
Device Identity
Role Settings
General Settings
STA/Wi-Fi® Direct Device
WLAN Settings
Network Settings
AP/Wi-Fi® Direct GO
WLAN Settings
Network Settings
Network Applications
HTTP Server
Files
User Files
Service Pack
General-> Settings
IC / Module
I/C
Image Mode
Production
Capacity
4M BYTE
Restore To Factory Configuration
Defaults and Image
Use device MAC Address
08:00:28:11:22:33
Device status
Connected: Off
Connect
Back
Burn
Save
Online User Files
Tools

9. After performing all the necessary steps, then on the right side click the burn options

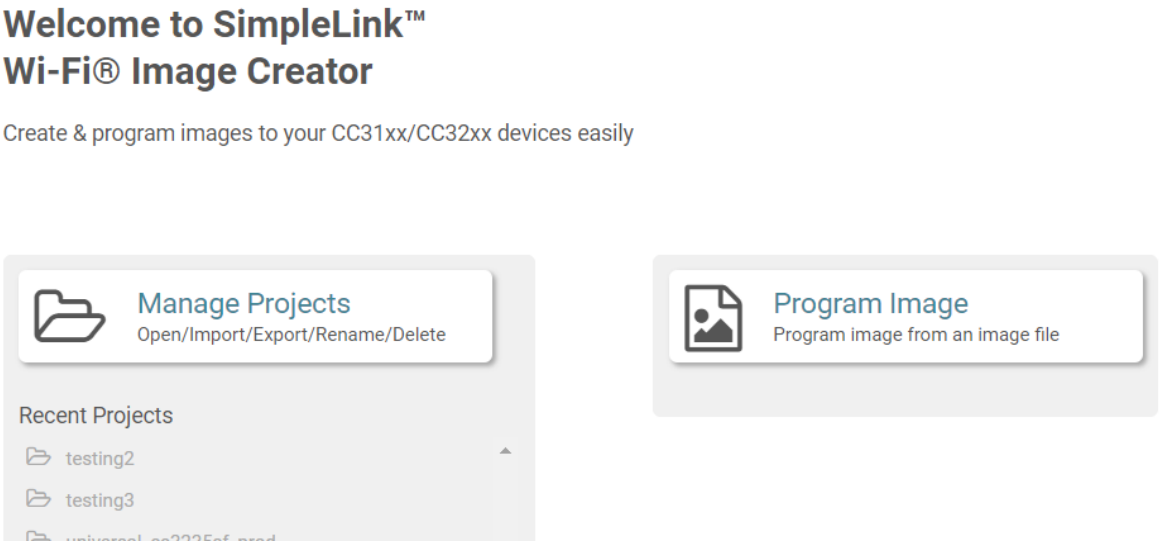


10. After clicking the burn options will be directed to this page. Click the create image after a while then save image (save it in any preferred directory). This will create a universal .sli file which can be flash in multiple boards

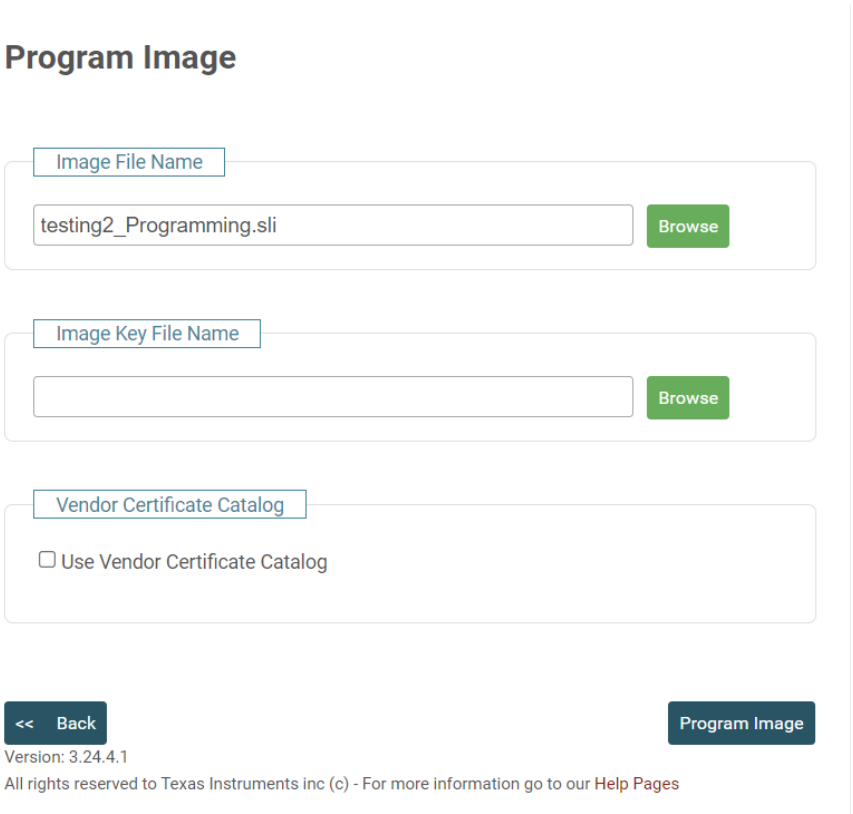


Testing the generated .SLI file using CLI step

11. Click the back button to go to the main menu and then click program image



12. In the program image just locate the directory of the saved image file from the 10th step. Finally, click the program image (Now can be flashed in the multiple board)



Functional Mode Step

1) Unplug the USB (JTAG) and battery from the product

2) By default, the jumper is connected to the SOP1, indicating it is in the flashing mode. Thus, we need to remove the jumper for release mode.

3) Plug the battery back into the product for a reset, then open the MQTT Broker and wait for at least a minute to get the results.

Reference :

1) https://www.ti.com/lit/ug/swru469h/swru469h.pdf?ts=1745143523971&ref_url=https%253A%252F%252Fdev.ti.com%252F
2) https://dev.ti.com/tirex/explore/node?node=A__AeMwEeGHutxa6hb3catsJg__SIMPLELINK-ACADEMY-CC32XX__-LLELo7__LATEST
3)