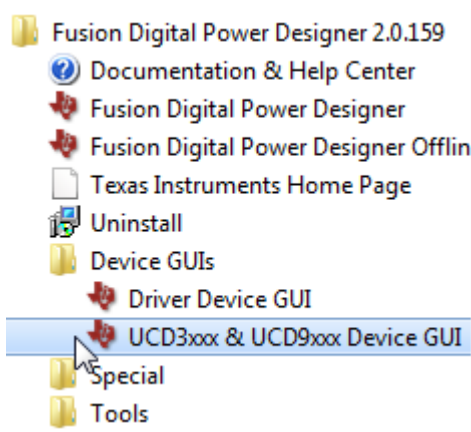
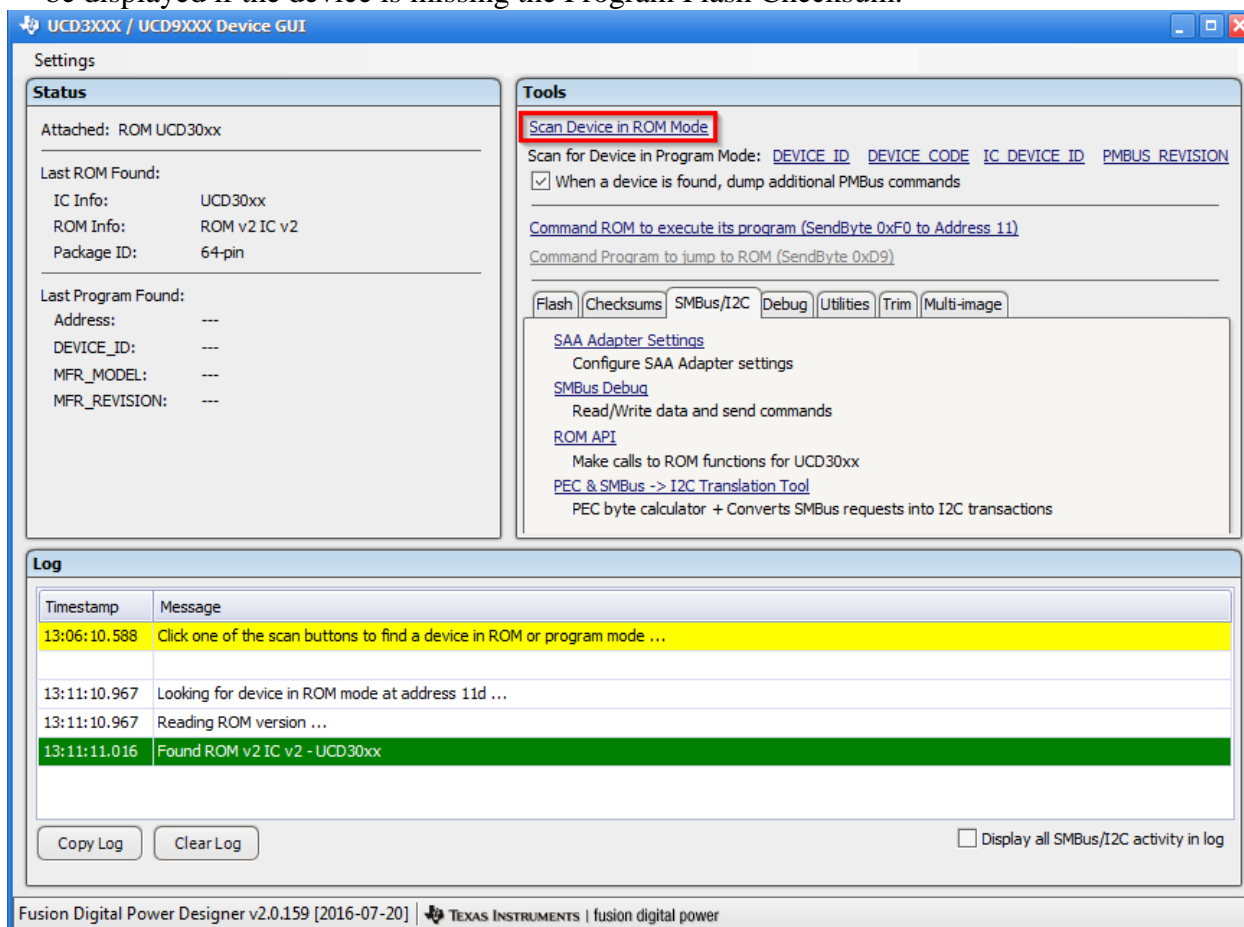


Procedure for Recreating the Program Flash Checksum for UCD9xxxx Devices which fail to execute program code when removed from the Fusion Digital Power Designer GUI

1. Close any open instances of the Fusion Digital Power Designer
2. Cycle the input voltage to the UCD9xxxx power controllers or sequencers, the device with the issue needs to be in the non-functioning state. Connect the device to PC.
3. Navigate to **Start** → **All Programs** → **Texas Instruments** → **Fusion Digital Power Designer** → **Device GUIs** → **UCD3000 Device GUI**
 - a. Depending on GUI version, the Tool may be labeled **UCD3xxx Device GUI** or **UCD3xxx & UCD9xxx Device GUI**, they all function the same



4. Under the **Tools** section click on **Scan Device in ROM Mode** and the following screen should be displayed if the device is missing the Program Flash Checksum.



5. In the lower half of the **Tools** section, click the **Checksums** tab, then the **Calculate** link. The Program Flash checksum will be calculated and displayed in the **Log** section.

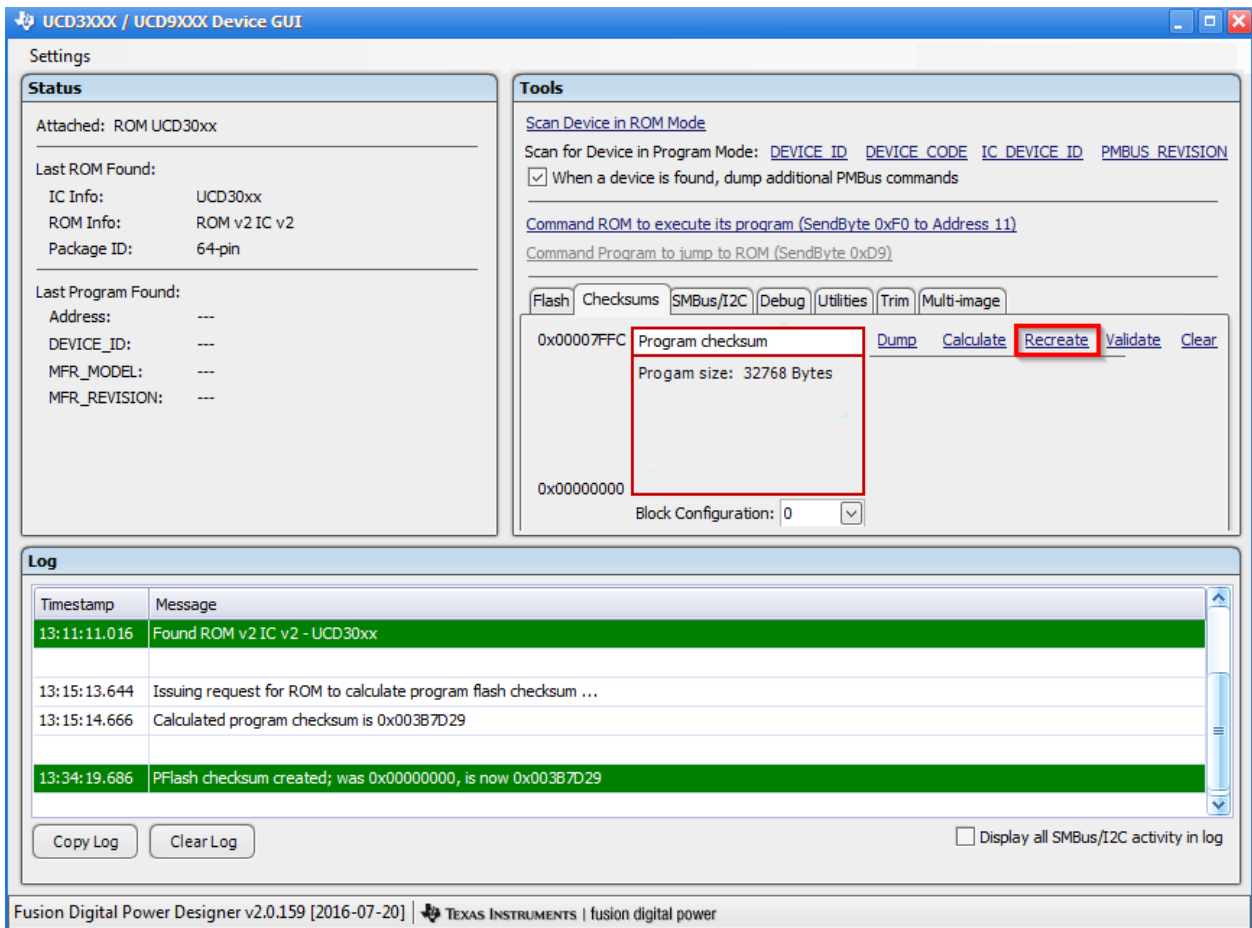
The screenshot shows the UCD30xx / UCD90xx Device GUI. The **Settings** section on the left displays device information: Attached: ROM UCD30xx, Last ROM Found: IC Info: UCD30xx, ROM Info: ROM v2 IC v2, Package ID: 64-pin. The **Tools** section on the right has the **Checksums** tab selected. It shows a table with a row for address 0x00007FFC, labeled 'Program checksum', with a 'Program size: 32768 Bytes'. Below the table, the 'Block Configuration' is set to 0. The **Log** section at the bottom shows a list of messages, with the final message 'Calculated program checksum is 0x003B7D29' highlighted in red. The footer of the GUI indicates 'Fusion Digital Power Designer v2.0.159 [2016-07-20] | TEXAS INSTRUMENTS | fusion digital power'.

6. Compare the checksum calculation against the checksum value provided on page 45 of *Configuration Programming of UCD Devices* document.

http://e2e.ti.com/cfs-file/__key/communityserver-discussions-components-files/212/1007.Configuration-Programming-of-UCD-Devices.pdf

If the calculated checksum doesn't match the provided checksum value, it means the firmware is changed or corrupted. Abort this procedure and contact TI representative.

If the calculated checksum matches the provided checksum, click the link to **Recreate** the checksum. (Note: if the calculated checksum doesn't match the provided checksum value, clicking **Recreate** may "brick" the device).



7. When the GUI Log has indicated that the PFlash checksum has been created, close the GUI.
8. Disconnect the PMBus interface
9. Power cycle the board and it should now execute the program code