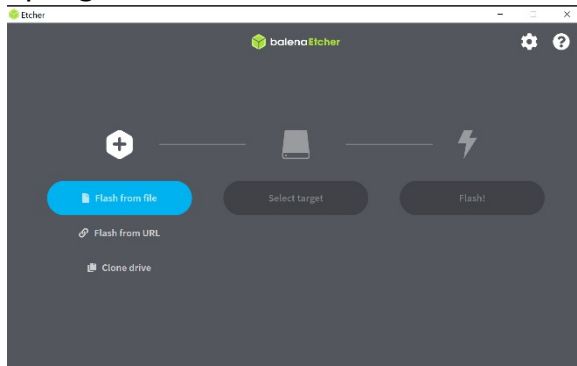User manual for flashing and testing the camera

1. In order to have the necessary ubuntu image for testing you will need Balena Etcher to write the .img file on a usb. You can download it from the following link: https://www.balena.io/etcher/

1.1 The program should look ike this:



1.2 On the left you have to select the "Flash from file option" and select the .img file downloaded from the server (tof_test.img)

1.3 After this you will have to select the target device, this should be the usb pendrive or SD card with at least (64 Gb memory)

1.4 Start Flashing

2. After you plug in the Usb pendrive or the sd card and restart your PC, you will have to enter it's boot menu and select the recently written drive as booting surce (in case of DELL the bootmenu can be started with F12 command right after restarting the PC)

3. open terminal and type:
   "bash production_test.sh"

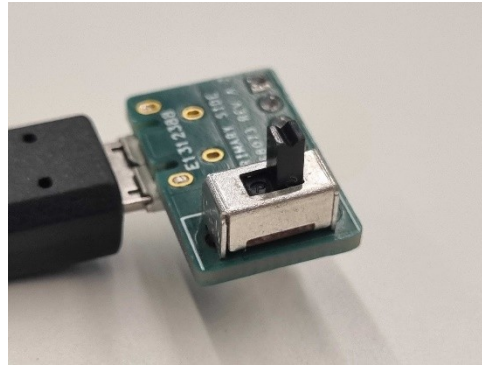4. after running the bash script you will be shown a menu:

```
 4
-----------------------------------------
 M A I N - M E N U
-----------------------------------------
1. Flash image on camera
2. Test camera
3. Exit
----------------------------------
Enter your choice [1-3] :
```

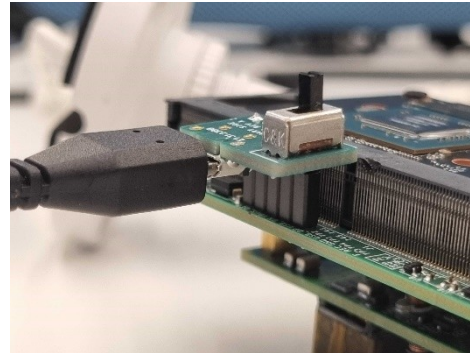5. connect the camera with the following specifications:

5.1 flashing image:

5.1.1 insert the usb cable into the programming adaptor

5.1.2 set the programming adaptor's switch the same way you see on the



following image:


5.1.3 insert the programming adaptor into the camera's board with the switch faced downwards, as you see on the following figures:



5.1.4 connect the usb to the host PC

5.1.5 connect the camera to the power supply

5.1.6 press 1 from the menu, in order to flash the camera image

IF THE FOLLOWING ERROR APPEARS: "Make sure the target board is connected through USB port and is in recovery mode.", start again from step 5.1.1

5.1.7 wait until the terminal ends the task (this might take a while) and appears the following message: "*** The target t210ref has been flashed successfully ***"

5.2.1 Now you can disconnect the programming adaptor and the USB cable and assamble the camera

5.2.2 Connect the camera to the power supply and to the same LAN network the PC is connected to, on which the test will run. Please wait for an additional 40 -50 seconds in order for the camera to start the wifi module

5.2.3 You can select the 2$^{nd}$ option from the menu and see the output of the test on the screen. WARNING: This step may not work from first, you may have to start it again a several time in order to have everything running. This can be done by successively selecting the 2$^{nd}$ option from the meniu.