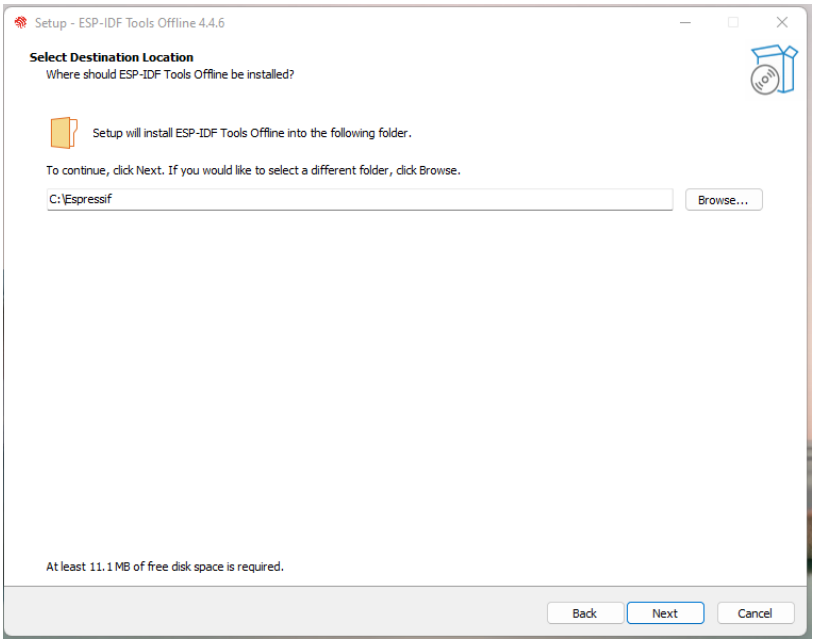
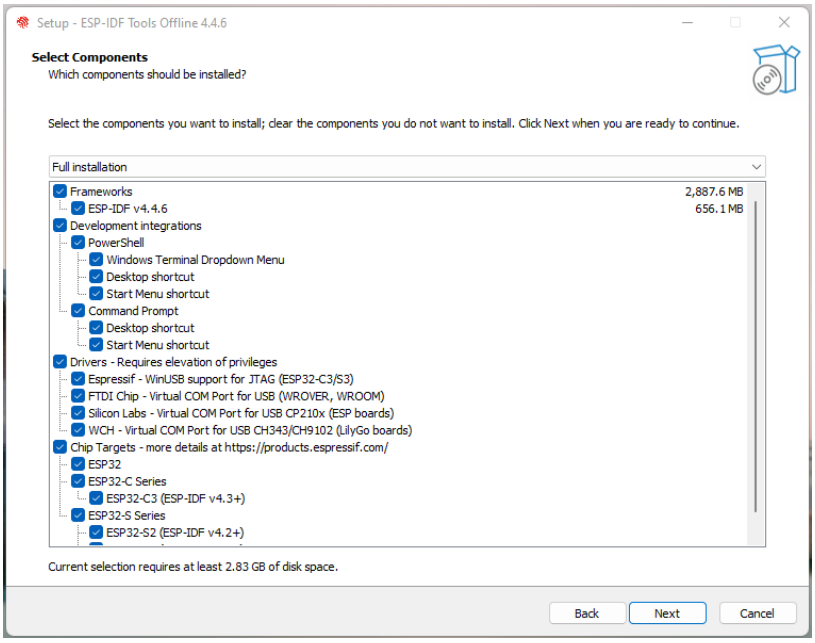
RoomSense Serial Flasher Reference Guide For Windows

Follow the steps below to flash the device via the serial port.

1- Run **esp-idf-tools-setup-offline-4.4.6.exe** and install esp-idf in 'C:\Espressif

2-





3- Install python 3:

$python --version

4- Unzip and copy project-test-jig folder on your computer in certain location. Write down the location.

5- Restart your machine.

6- Connect all boards to your computer through a USB hub and USB-c cables. This set up allows multiple boards get programmed in one batch. Each connected board creates a virtual COM ports on your windows machine.

7- Open the python script ***test-jig-roomsense-iq.py***

8- Set these two variables in the script based on your setup location:

esp_idf_directory = r'C:\Espressif'

project_directory = r'C:\temp\testing\project-test-jig

9- Run the python script.

10- The code scans all available COM ports and starts flashing the boards one by one:

```
Available port(s) are: ['COM7', 'COM3']

> Flashing the board connected to COM7...
roomsense-web.bin binary size 0x156e80 bytes. Smallest app partition is 0x300000 bytes. 0x1a9180 bytes (55%) free.
Bootloader binary size 0x5110 bytes. 0x1ef0 bytes (28%) free.

> Flashing the board connected to COM3...
roomsense-web.bin binary size 0x156e80 bytes. Smallest app partition is 0x300000 bytes. 0x1a9180 bytes (55%) free.
Bootloader binary size 0x5110 bytes. 0x1ef0 bytes (28%) free.
```

11- At the end it shows how many boards are passed or failed the flashing process:

```
 2 boards successfully programmed:
-----------------------
COM7: PASS
COM3: PASS

 0 boards failed:
```

After the board flashed successfully it takes around 10 seconds to boot up. **If there is an issue with the hardware it starts flashing RED LED**. Otherwise, it flashes blue and orange.

The tester should separate the bad boards for further investigation.