Explore the next sense

Getting Started Guide Acconeer XE132 Entry Module Evaluation Kit

March 2022

V1.3

Installation guide

The XE132 is used for evaluation of both XM132 and XM131.

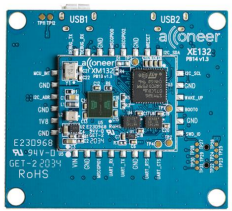
The XE132 is delivered non-flashed. This installation quick guide will show you how to get the Acconeer XE132 Module Server up and running. For a hands-on instruction video, please visit Acconeer channel.
https://youtu.be/PTcQ0FpRz7E

© 2019 by Acconeer – All rights reserved

Preparing the HW Installation

The Evaluation kit for Our Entry Module (XM132) differs from previous EVK in that it comes already soldered onto the breakout board. All you need is the micro USB cable.

XE132 EVK



Additionally*:

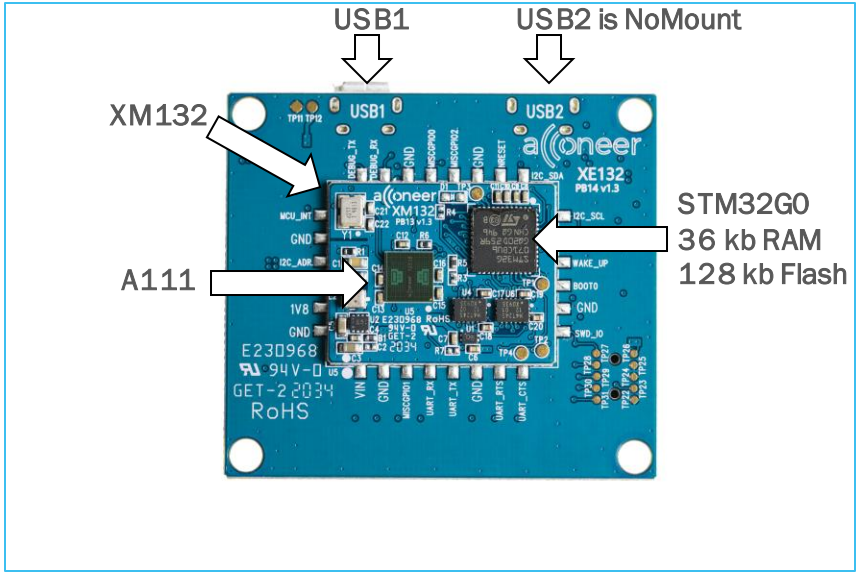
- USB Micro Cable for connection to PC

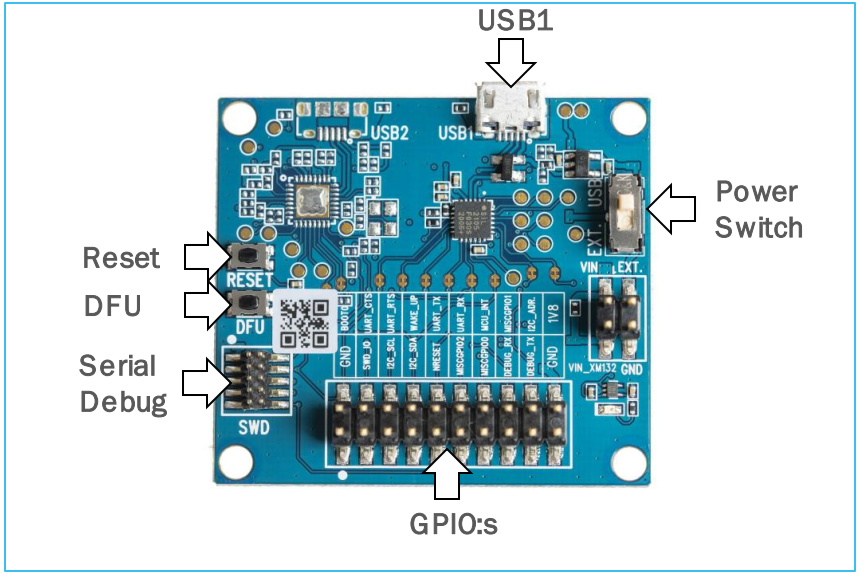
* Not provided by Acconeer.

© 2019 by Acconeer – All rights reserved

HW Overview

XE132 EVK Front and Back Side





© 2019 by Acconeer – All rights reserved

Preparing the SW installation

The following applications will be required to complete an installation. Also, they will be very useful when working with the Radar Sensor Module Server. Please download and install:

- Acconeer Module SW Image for XM132: Available from https://developer.acconeer.com/
- Acconeer Exploration tool: https://github.com/acconeer/acconeer-python-exploration

For all users (Windows, Linux):

- Python: Available from https://python.org/downloads

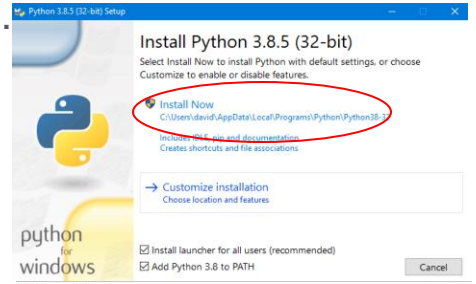
© 2019 by Acconeer – All rights reserved

Installing python

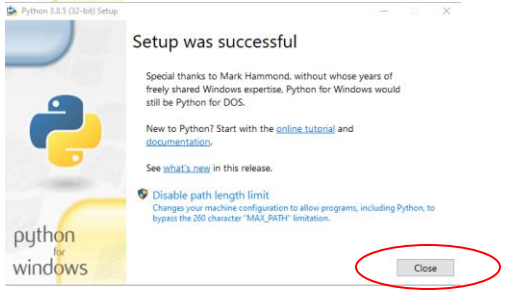
- Start the installer file that you downloaded from python.
- Make sure the Add Python to PATH option is selected. (Pic 1)
- Click Install Now. No need for a customized Installation. (Pic 2)
- Close once the installation is completed. (Pic 3)

1.

2.



3.

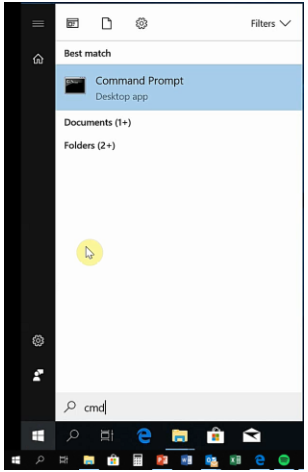


© 2019 by Acconeer – All rights reserved

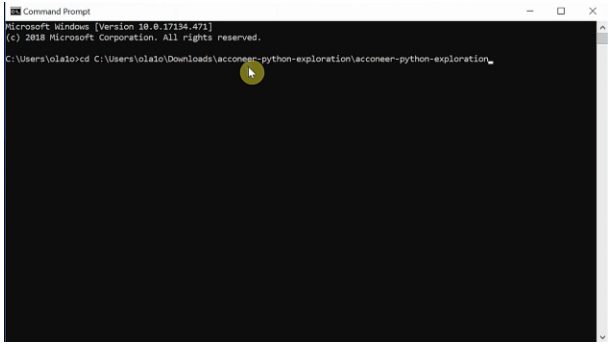
Installing Exploration tool

- Unzip the file downloaded from Acconeer. Acconeer-python-exploration
- Start windows command prompt. (Pic 1) You can always find it by searching for “cmd”.
- In the command prompt, change the directory to where you unzipped the exploration tool by typing the command *cd* followed by the path to the folder. (Pic 2)

1



2

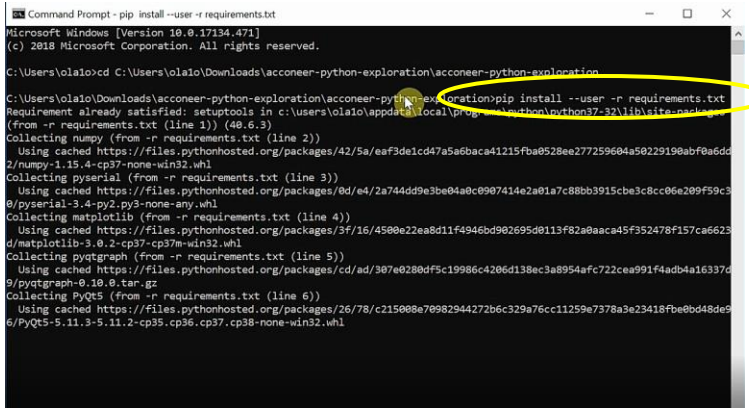


© 2019 by Acconeer – All rights reserved

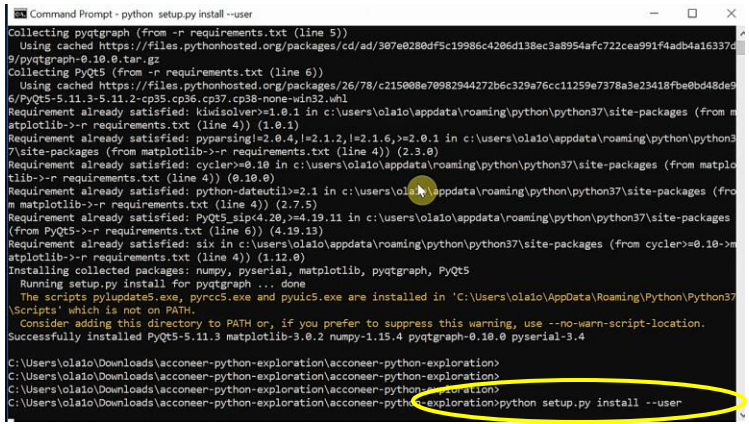
Installing Exploration tool

- In Command Prompt: Run the command: *python -m pip install -U –user setuptools wheel*
- Then the command: *pip install –user –r requirements.txt* (Pic 1)
- Wait until the installation has finished and run the next command: *python setup.py install –user* (Pic 2)

1



2

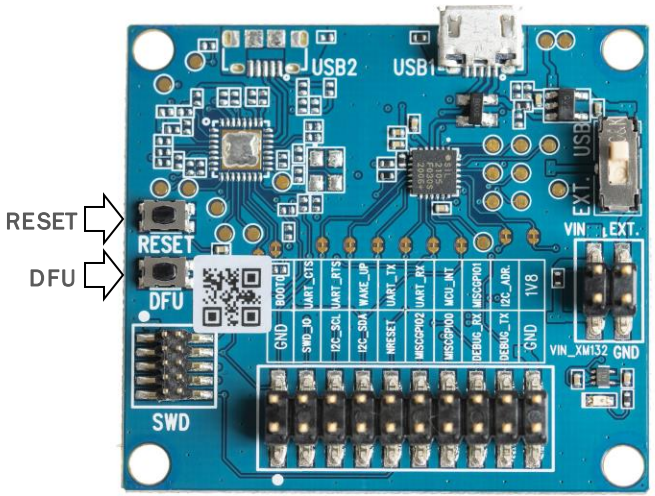


© 2019 by Acconeer – All rights reserved

Start Boot Mode (DFU Mode)

1. Press the DFU-button and hold it.
2. Press the RESET-button and hold it.
3. Release the RESET-button.
4. Release the DFU-button

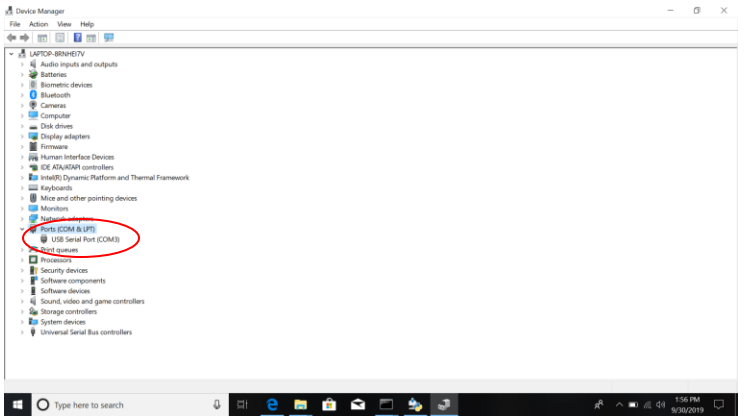
Now the module is in DFU mode and ready to be flashed.

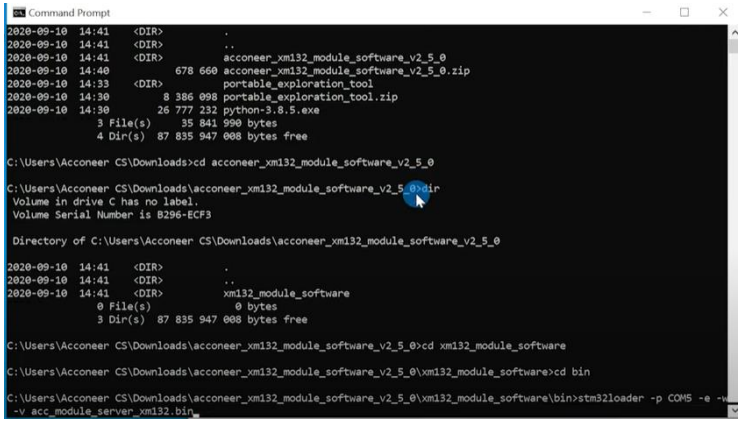


© 2019 by Acconeer – All rights reserved

Flashing

1. Start Device Manager in Windows
2. Find the COM-Port that the XE132 is connected to. COM5 in our example.
3. Install the flashing utility: *pip install stm32loader*
   You might need to add stm32loader to the PATH environment variable
4. In the command prompt directory where you placed XE132 Entry Module Server run the following command: *stm32loader -p COM5 –e –w –v acc_module_server.bin*
5. Make sure COM5 above is replaced with your COM port.
6. Now the XE132 is flashed and ready to use. Make sure to restart the module by pressing the RESET button.

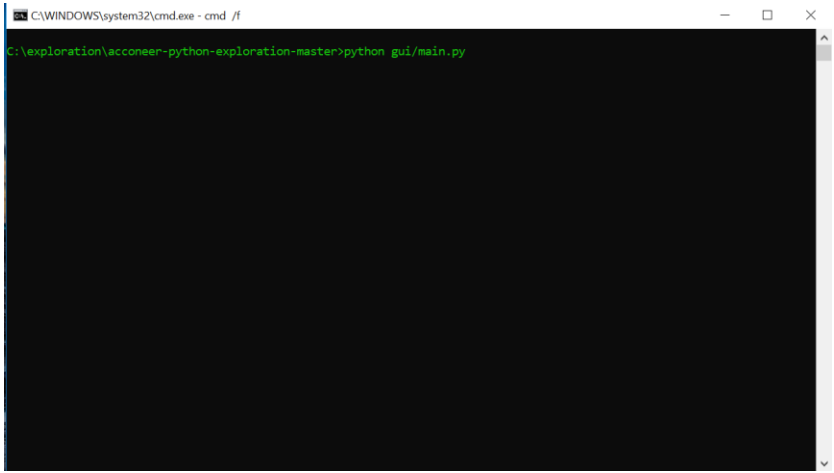




© 2019 by Acconeer – All rights reserved

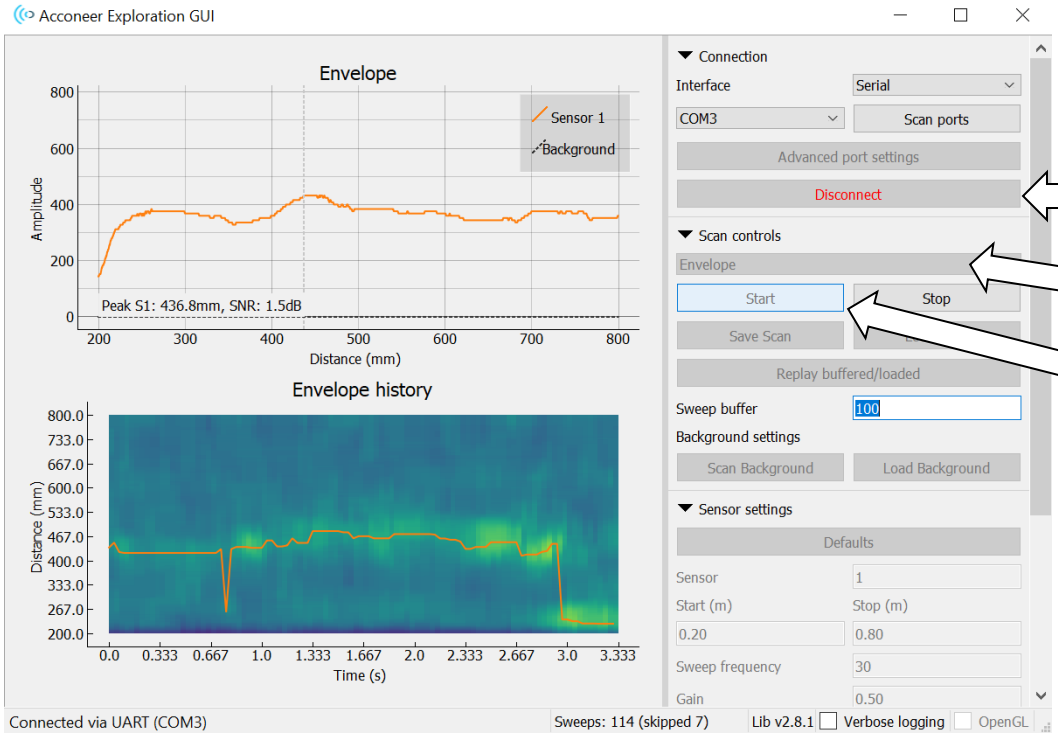
Run the exploration tool

- Run the following command in the command prompt: *python gui/main.py*
- Choose Serial as Interface in the dropdown.
- Click Connect
- Choose a service or a detector and click Start. (We used Envelope as an example)
- The result should be a graph showing the envelope data output from the sensor. Shown in next page.



© 2019 by Acconeer – All rights reserved

Exploration Tool GUI, Envelope graph



Connect/Disconnect

Select Service/Detector

Start

© 2019 by Acconeer – All rights reserved