ESIstream

The **E**fficient **S**erial **I**nterface

ESIstream Install Python Environment

Version 1.0

ESIstream is license-free high efficiency serial interface protocol based on 14b/16b encoding.
Its main benefits are low overhead and ease of hardware implementation.

Introduction

New ESIstream IP package listed in the section Package supported by this document, use python scripts software interface to control the FPGA design; thus completing the control hardware interface composed of push-buttons, switches and status leds.

This document aims at explaining the python environment to install to be able to use ESIstream IP packages.

For technical support, please get the team involved and contact us using the ESIstream contact web page or at GRE-HOTLINE-BDC@Teledyne.com

Package supported by this document

ESISstream_XILINX_KU060_V2-2
ESISstream_XILINX_KU040_V2-2
ESISstream_XILINX_7VX690_V2-2

Reference documents

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Documents Amendment

Issue	Date	Comments
1.0	April 2019	Creation

1. PYTHON ENVIRONMENT SETUP FOR WINDOWS
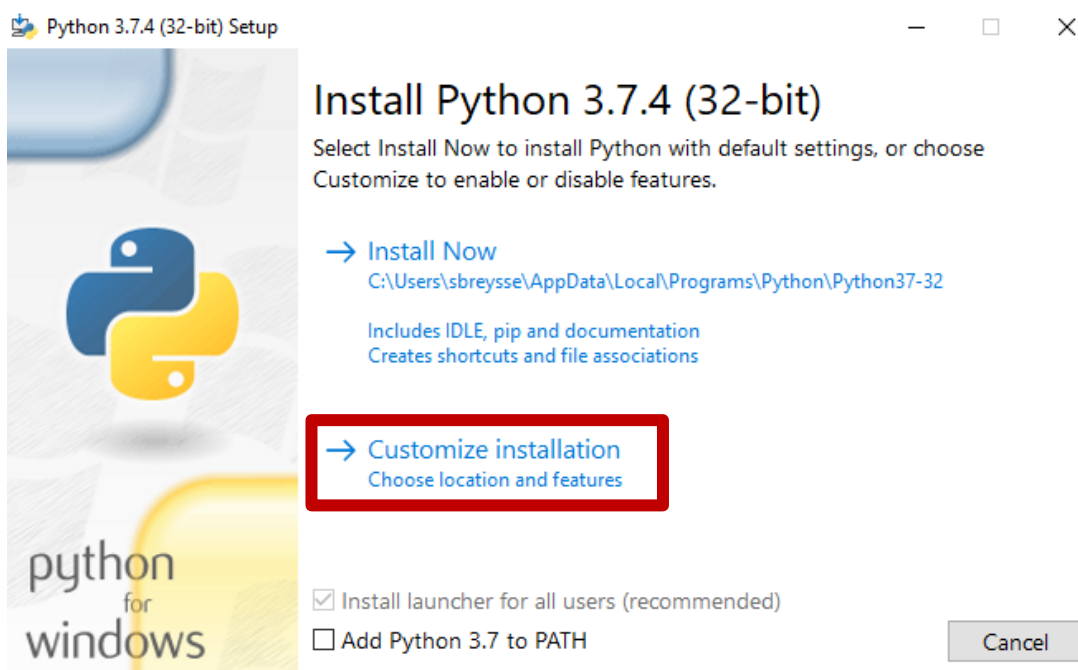
1.1. Go to: https://www.python.org/

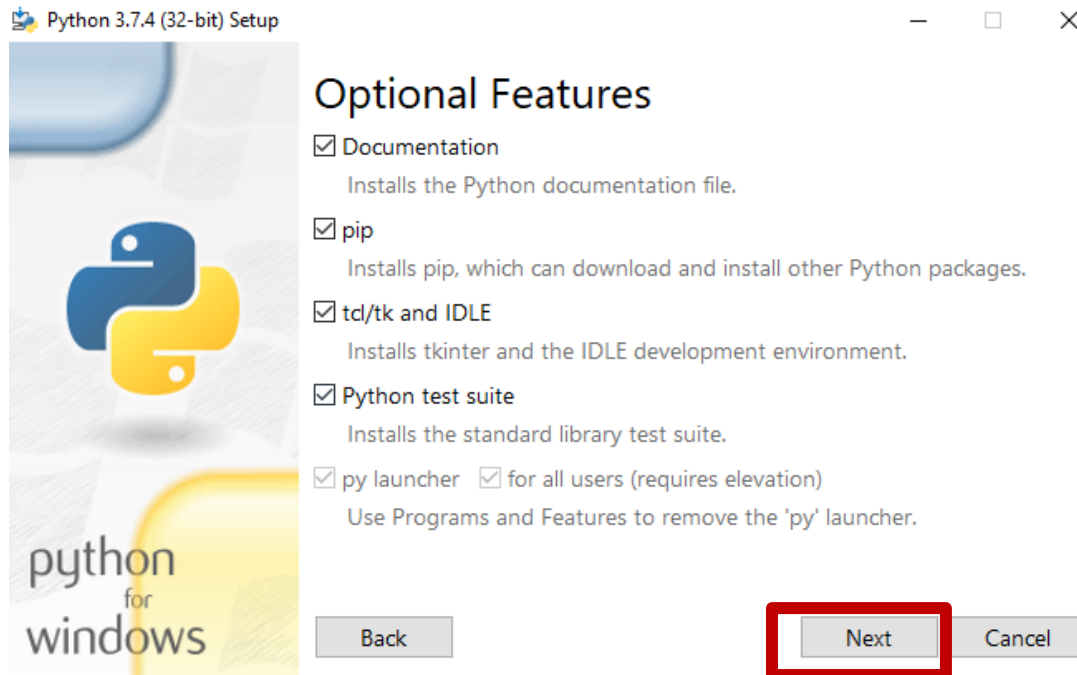Download the last version of python.

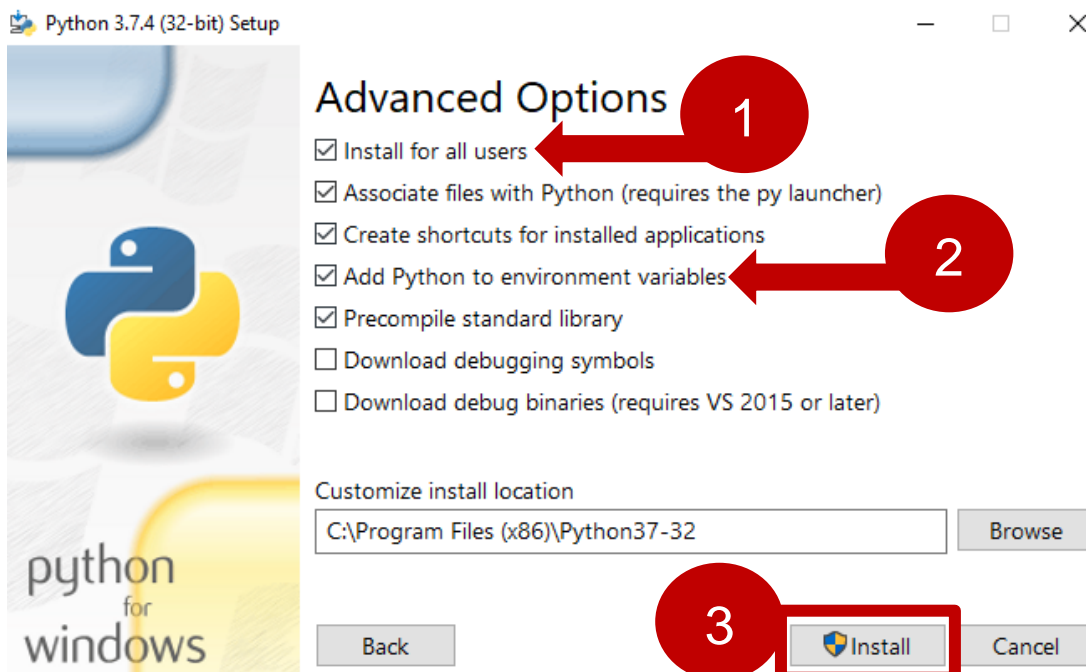### 1.2. Launch python-3.7.4.exe (or the last python version).
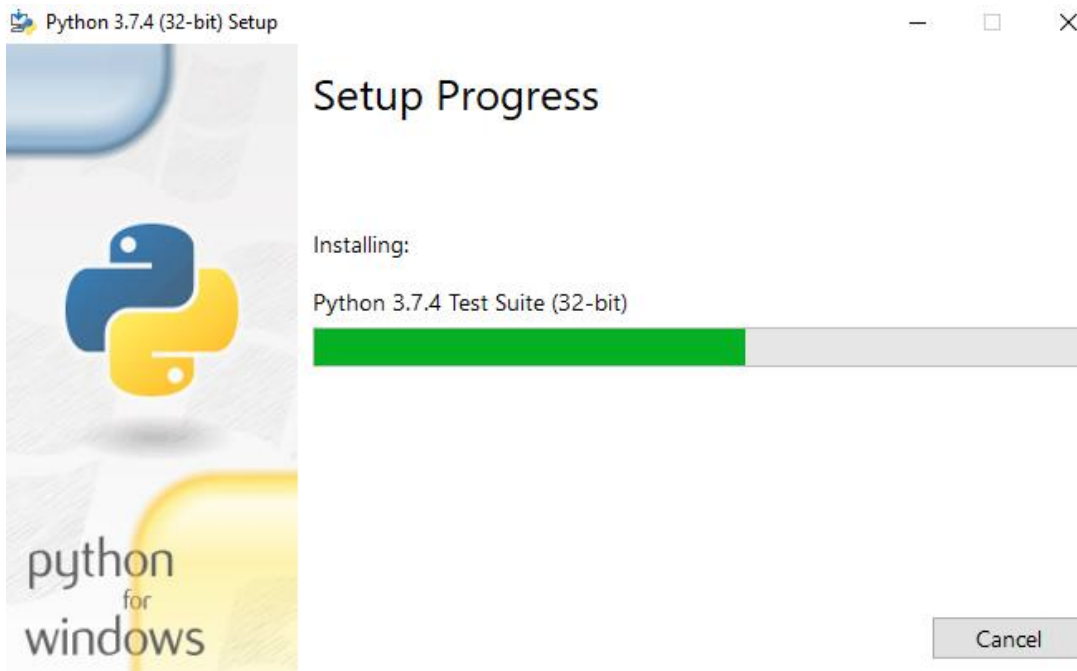
- Click on customize installation:

- Click on Next:

- Check *Install for all users* and *Add Python to environment variables*:

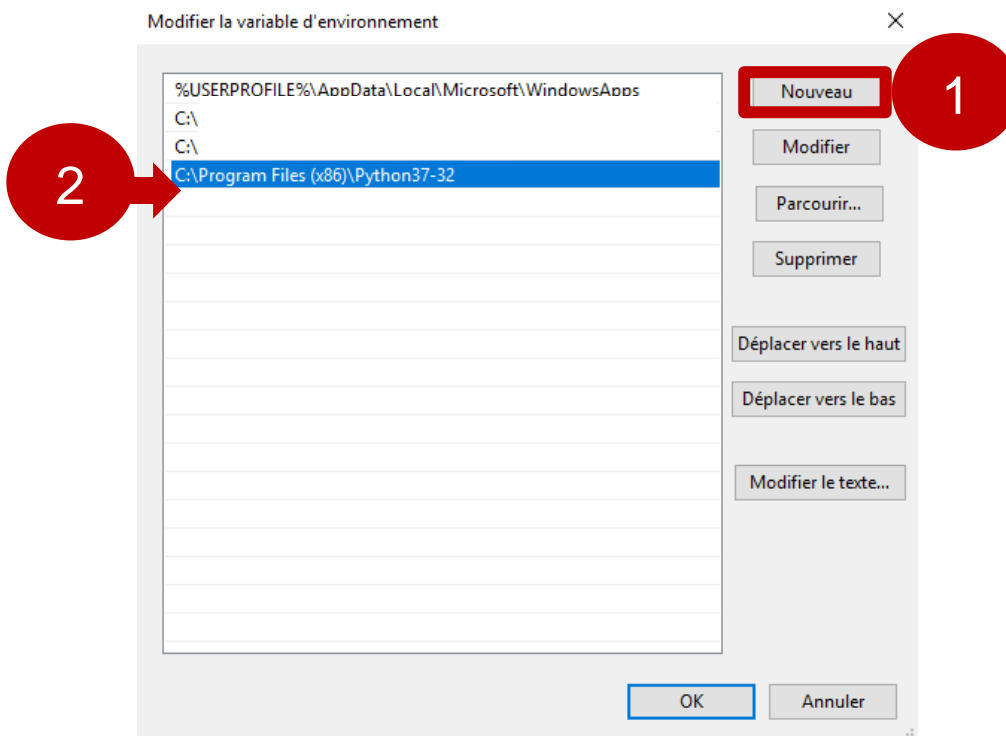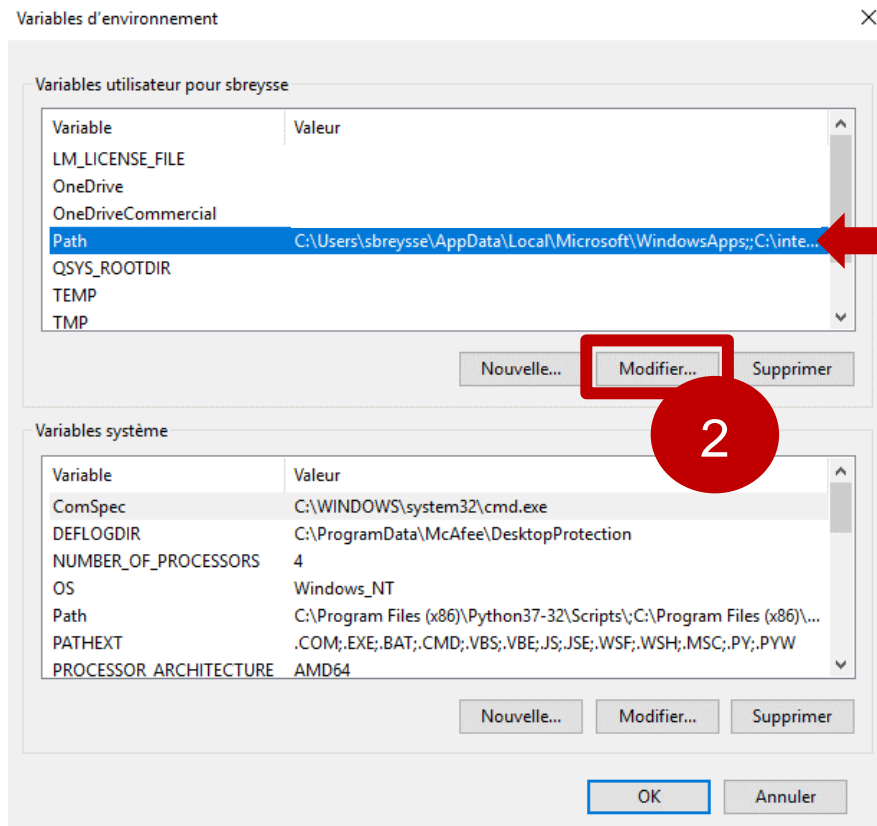- Then click on *Install* and wait end of installation processing:

- Click on *Close*:

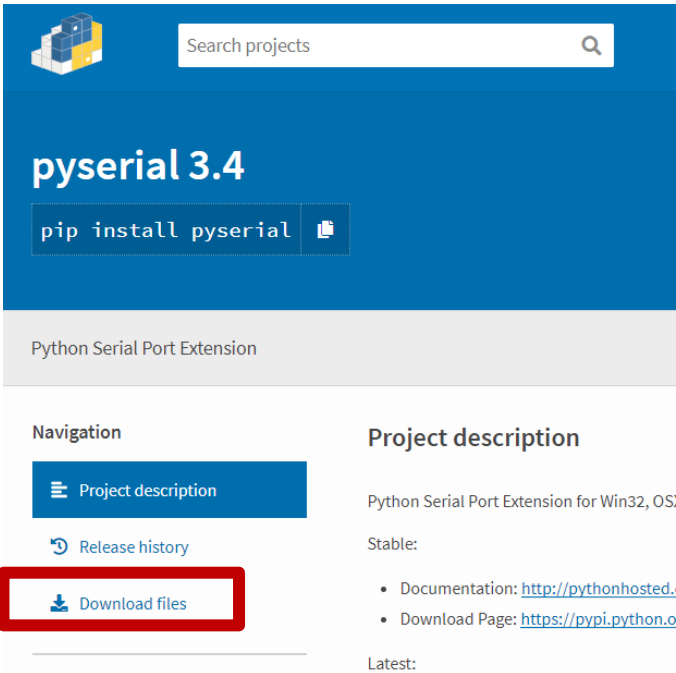### 1.3. Windows environment variable configuration

- Right-click the Computer icon and choose Properties, or in **Windows** Control Panel, choose **System**.
- Choose Advanced **system** settings.
- On the Advanced tab, click **Environment Variables**.
- Add the path C:\Program Files (x86)\Python37-32 to the path environment variable.
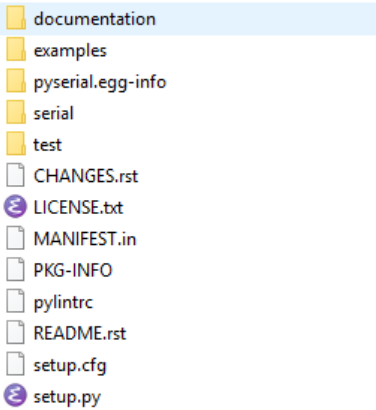
2. INSTALL PYSERIAL PYTHON LIBRARY

2.1. Go to https://pypi.org/project/pyserial/

- Download files.
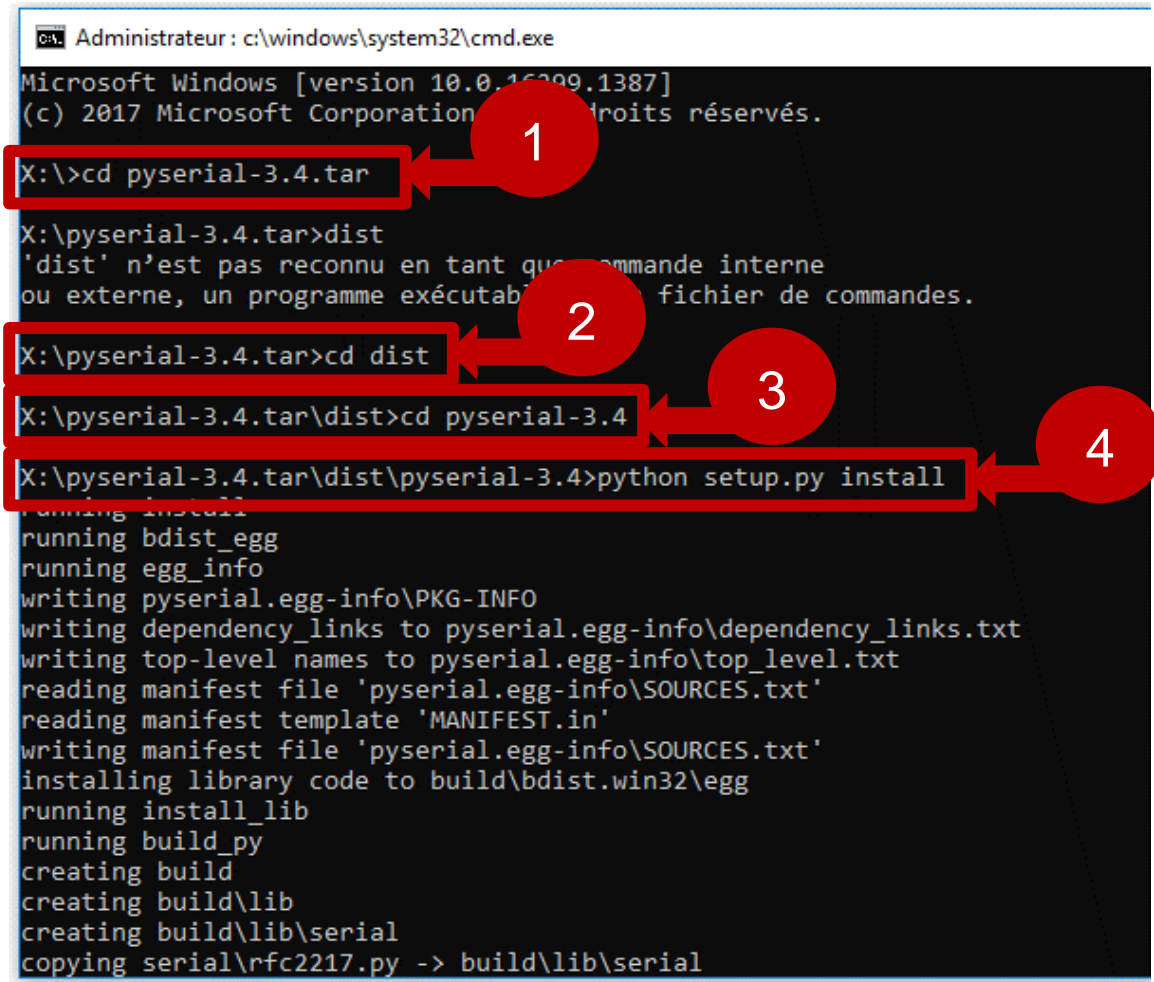
- For instance using 7-zip:
  - extract pyserial-3.4.tar.gz
  - extract pyserial-3.4.tar
- Now the folder .\pyserial-3.4.tar\dist\pyserial-3.4 should contains:

2.2. Launch pyserial library install

- Open a cmd window as administrator.
- Go to the pyserial-3.4.tar folder location.
- Then type the following commands:

- Wait end of the installation.

PYTHON environment for an ESIstream IP package is now ready.