

Software Installation Tutorial for Hardware Hacking Board

In this tutorial, you will install the software for HaHa board in a Windows machine.

Instructor: Dr. Swarup Bhunia

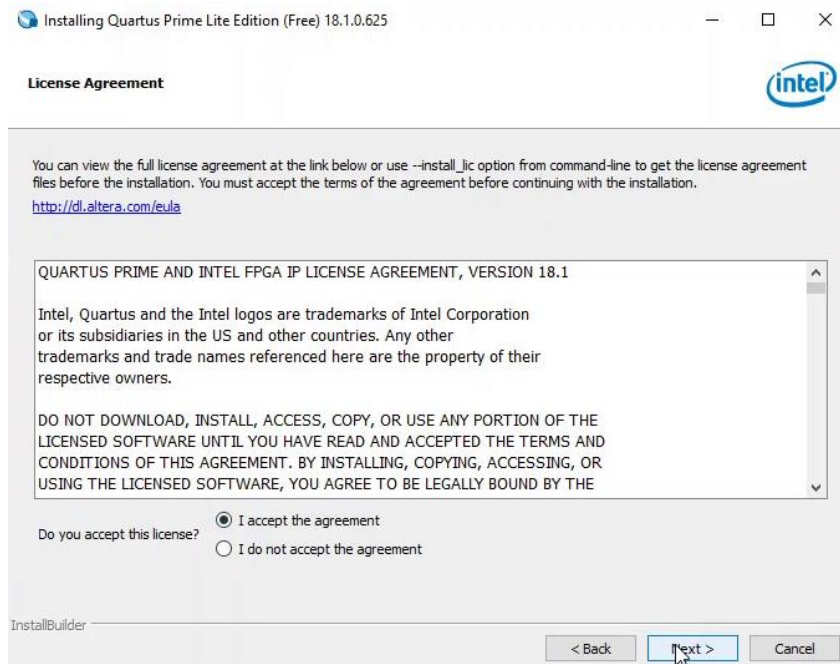
TAs: Reiner Dizon and Shuo Yang

PART I: Install Quartus II

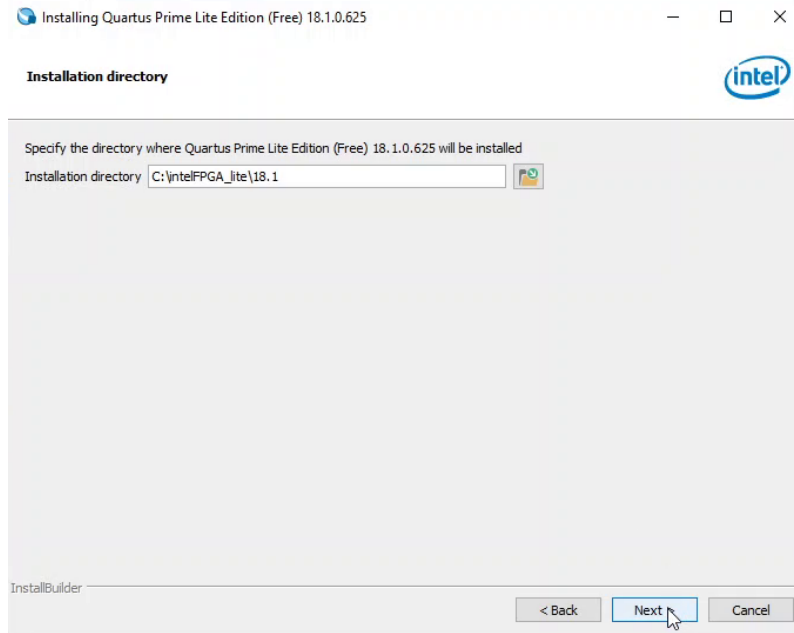
1. Go to link [1] and download the following files into the same folder for installation:
 - a. Quartus Prime (includes Nios II EDS)
 - b. MAX 10 FPGA device support
 - c. *Optional* - ModelSim-Intel FPGA Edition (includes Starter Edition)
2. Start installing Quartus. Click “Next” in the following picture.



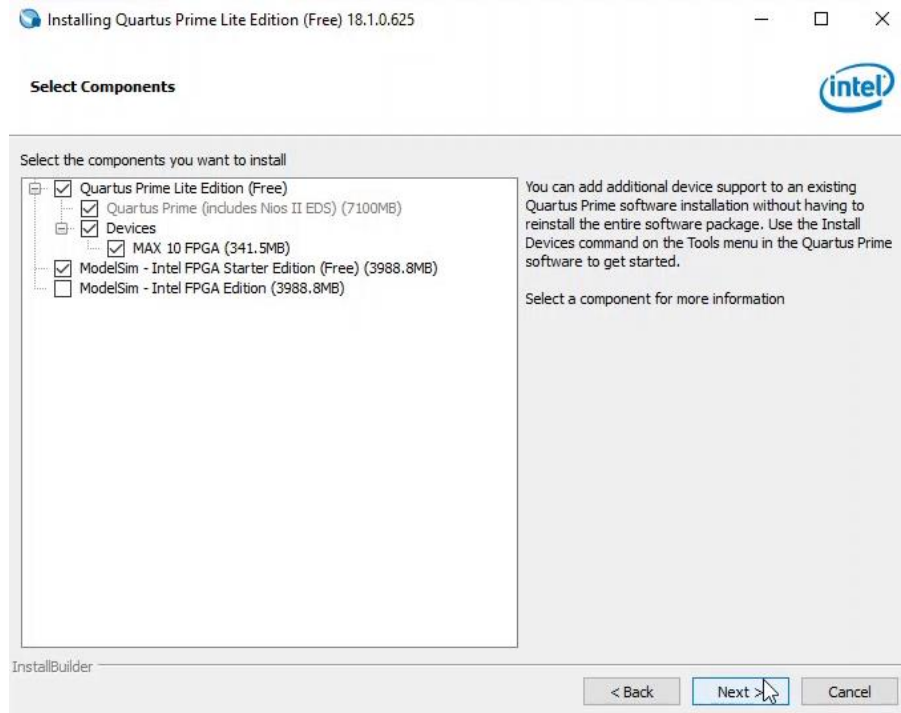
3. Click on “I accept the agreement” and then Next.



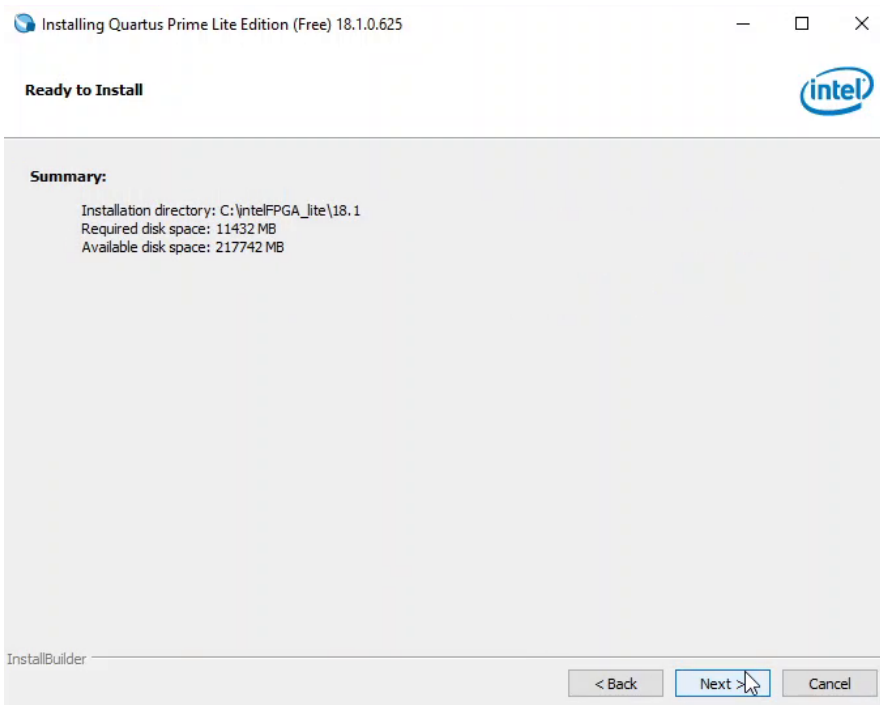
- This is the installation directory. You can change your directory here, especially if you have an dual drive configuration. By default, it will install in the C:\ drive. Then, click Next.



- Click Next. Please note that ModelSim is optional.



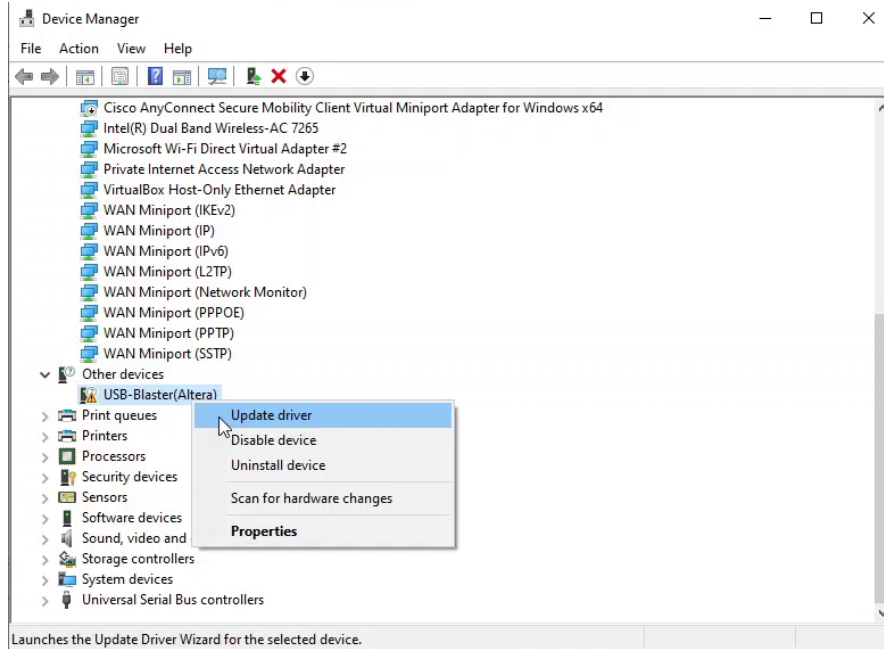
6. Click Next.



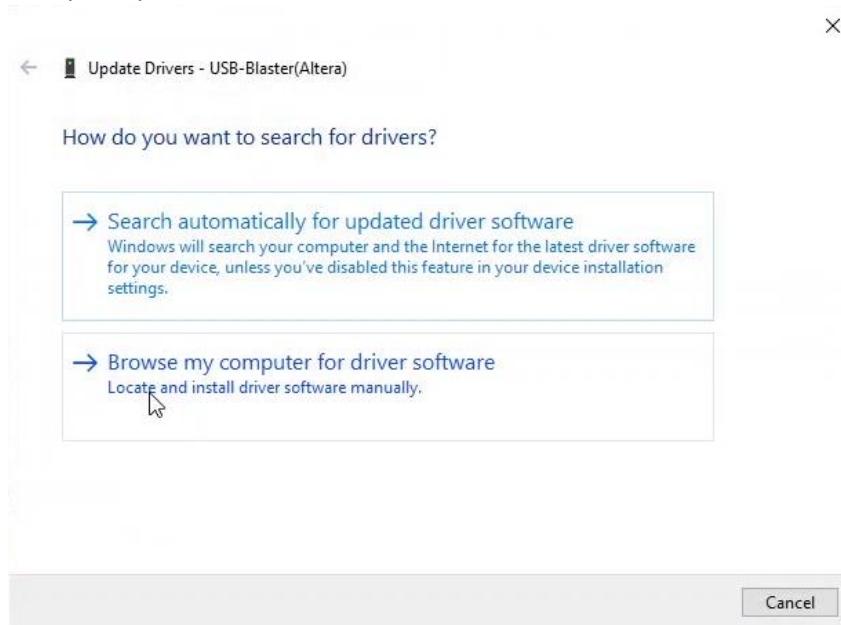
7. Wait until the software finishes installing.

PART II: Install driver for the USB Blaster

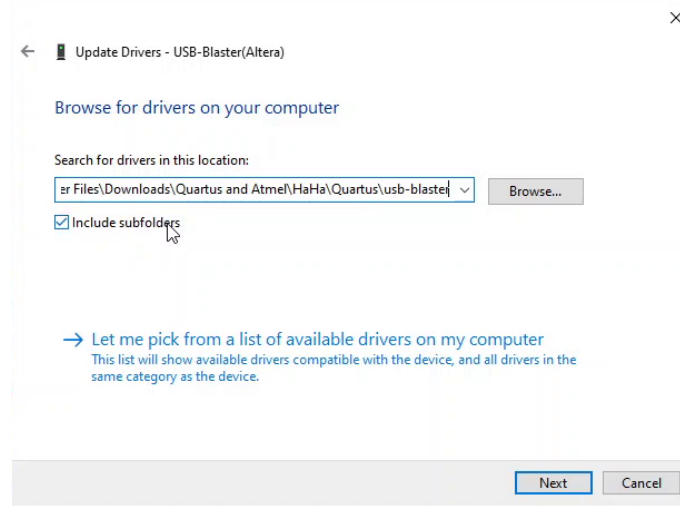
1. Get the “usb-blaster.zip” file and unzip it.
2. Plug in the USB Blaster to your computer.
3. Open the device manager of your computer as shown below.



4. Find the “USB-Blaster(Altera)” in the listed devices.
5. Right-click this device and click “Update driver”.
6. Select “Browse my computer for driver software” as shown below.



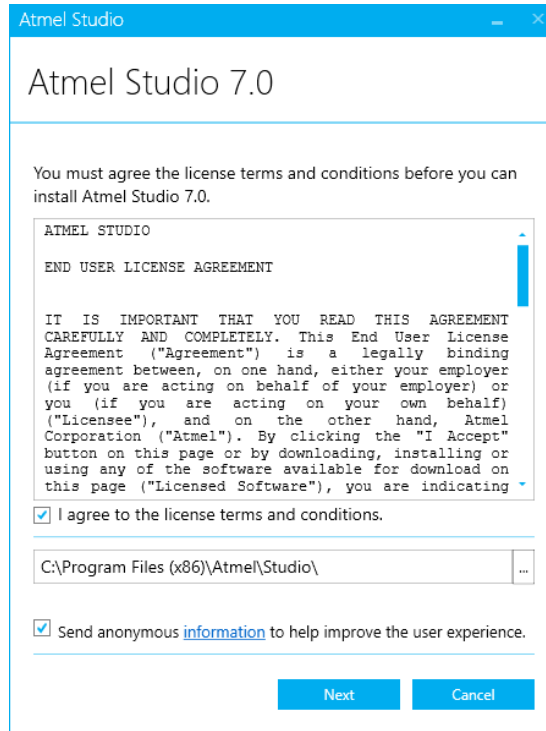
7. Input the directory that contains your unzipped files from step 1 and click “Next”.



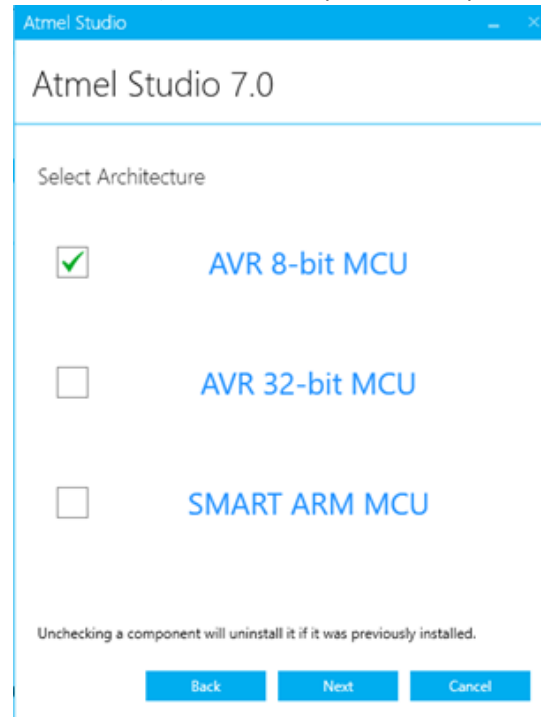
8. The USB-Blaster should now be installed on your computer.

PART III: Install Atmel Studio

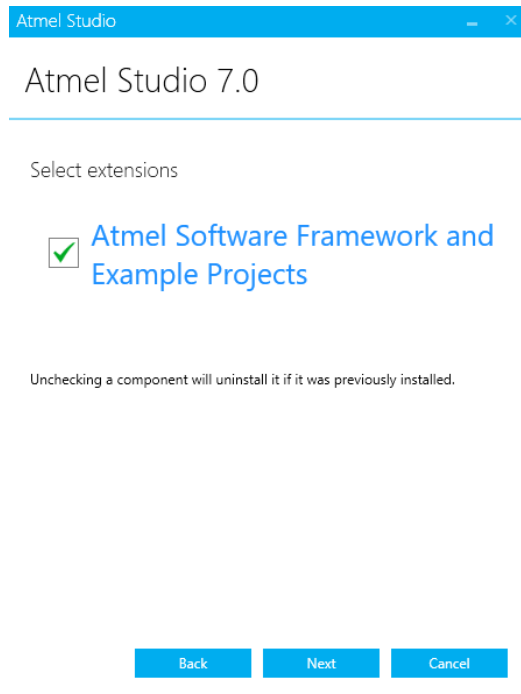
1. Go to link [2] and download the installer.
2. Open the installer. Click on “Agree to the terms” and click Next.



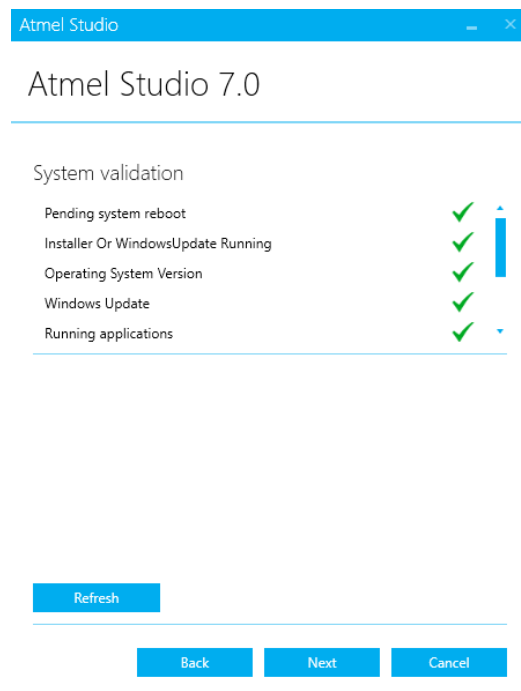
3. Select the first option and then Next. (The other 2 options are optional.)



4. Select the option and Next.



5. Click Next.



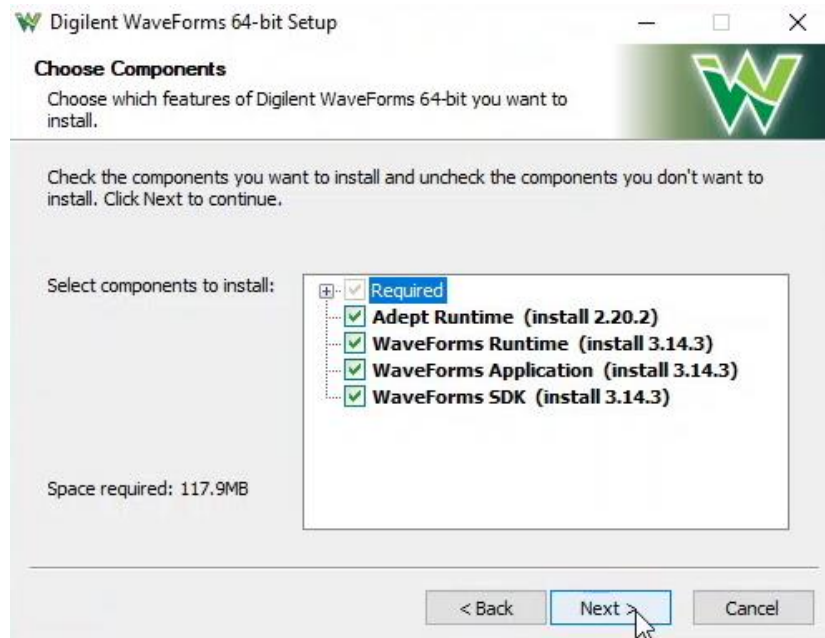
6. Click Install and wait until it is installed.

PART IV: Install Waveforms (Only if you have AD2 board)

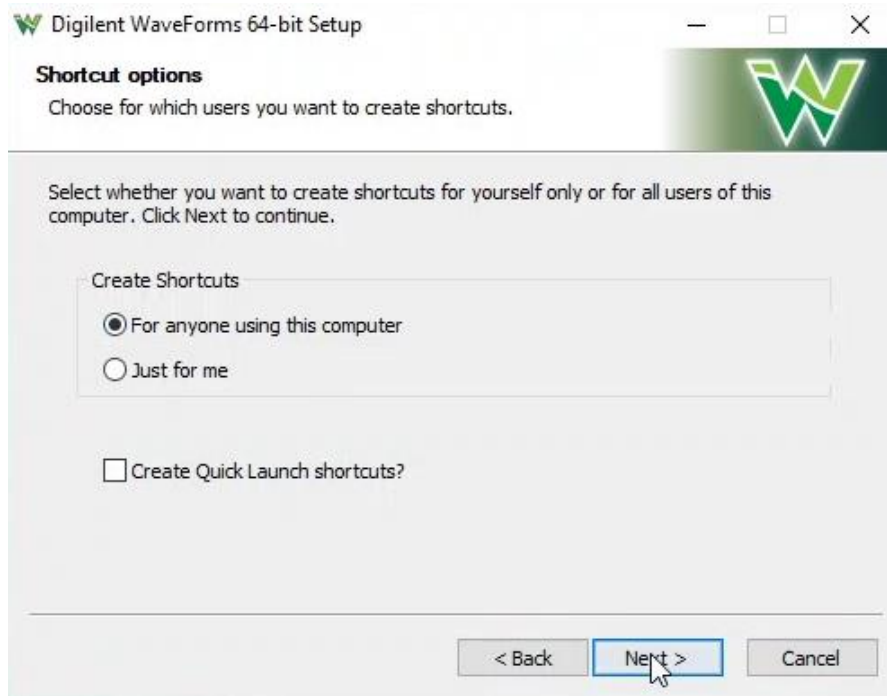
1. Go to [3]. It should direct to the download link for Waveforms 2015. If it does not, go to [4] and provide your information to get the download link.
2. Open the installer. Click Next.



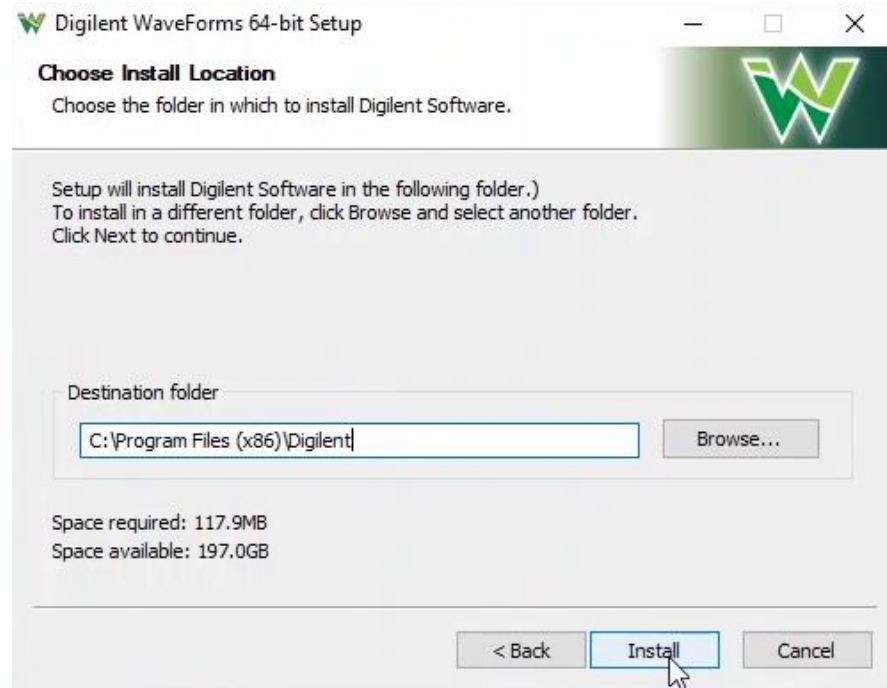
3. Click Next.



4. Click Next.



5. If needed, select your destination folder. Otherwise, keep it the same. Click Install.



6. Wait until the software finishes installing.

References

- [1] <https://fpgasoftware.intel.com/18.1/?edition=lite&platform=windows>
- [2] <http://studio.download.atmel.com/7.0.2389/as-installer-7.0.2389-full.exe>
- [3] <https://mautic.digilentinc.com/asset/110:waveforms-windows-64-bit-download>
- [4] <https://mautic.digilentinc.com/waveforms-download>