

## Firmware for STEVAL-IME014V1B

### Features

- Easy drag and drop programming procedure

### Description

STSW-IME014FW is a compiled and ready to use firmware for NUCLEO-F401RE.

This firmware is intended to be used in conjunction with the [STEVAL-IME014V1B](#) evaluation board to evaluate the characteristics and functionality of the [STHV1600](#) 16-channel high voltage pulser designed for ultrasound imaging applications.

Product summary	
16-channel high voltage pulser evaluation kit for ultrasound imaging applications	<a href="#">STEVAL-IME014V1B</a>
16-channel high voltage pulser designed for ultrasound imaging applications	<a href="#">STHV1600</a>
Graphical user interface	<a href="#">STSW-IME014GUI</a>
Compiled ready to use firmware	<a href="#">STSW-IME014FW</a>

# 1 How to connect Nucleo to the PC

You can download the new firmware version from the following location on [www.st.com](http://www.st.com): [STEVAL-IME014V1B](#).  
To connect the STM32 Nucleo to a PC, follow the sequence below:

- Step 1.** Connect the [STEVAL-IME014V1B](#) evaluation board to your PC via a USB cable or just supply it from the Power Supply Module.  
Only VEXT and GND are needed, the HV supplies HVP0, HVP1, HVM0 and HVM1 must be disconnected.

**Figure 1. STEVAL-IME014V1B evaluation board connection**



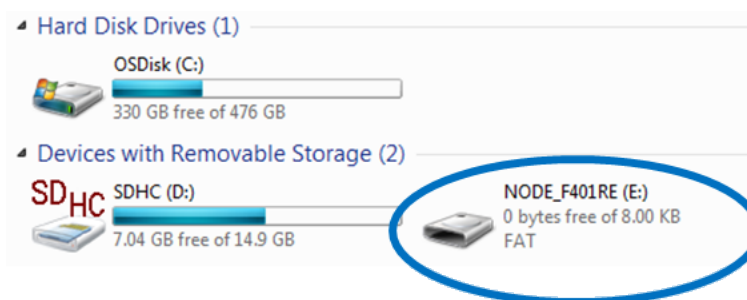
- Step 2.** Connect the STM32 Nucleo development board to your PC with a USB cable.

**Figure 2. STM32 Nucleo development board connection**



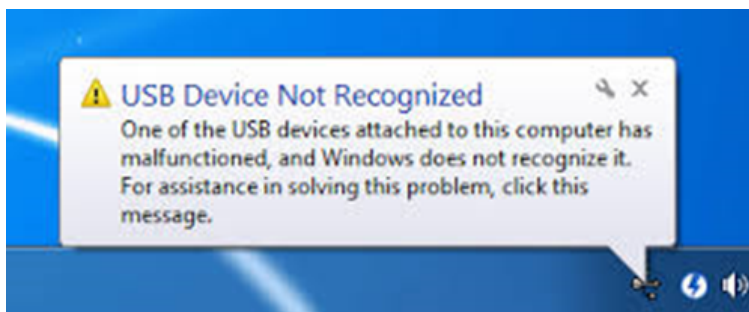
- Step 3.** If the drivers have been correctly installed, a new Mass Storage Device will be available in Computer Resources.  
In the example below, it is the E drive.

**Figure 3. Computer resources**



If the USB device is not recognized, try using a USB + charging port, identified by the symbol in [Figure 5. USB+charging port](#).

**Figure 4. USB device not recognized**



**Figure 5. USB+charging port**

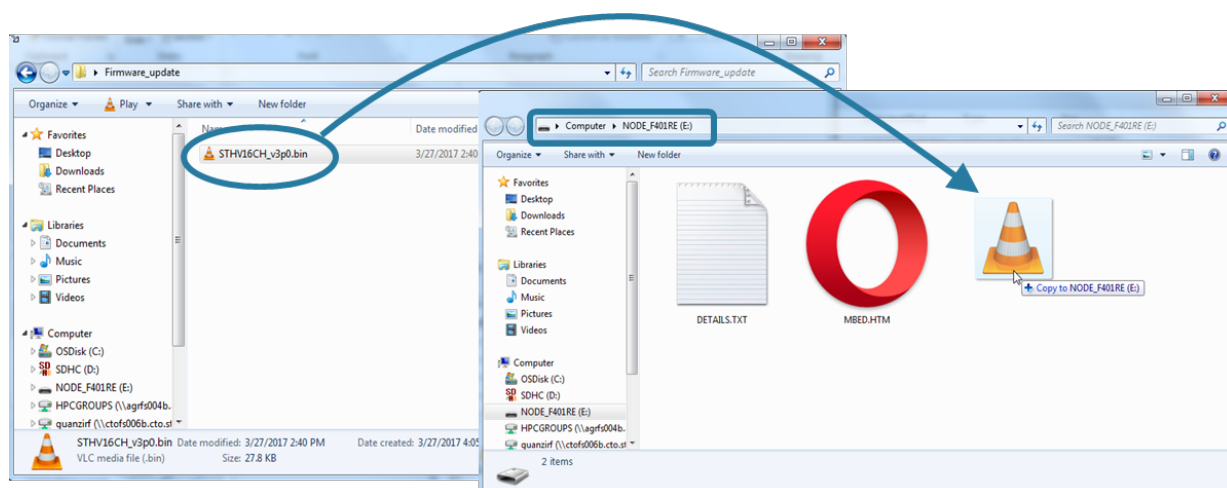


## 1.1 Firmware update procedure

Before you update the firmware, ensure that the STEVAL-IME014V1B evaluation board is correctly powered and the STM 32 Nucleo development board is correctly connected to your pc.

- Step 1.** Although the update procedure does not modify the waves file on the STEVAL-IME014V1B drive, you should make a copy of the \*.bin file on the evaluation board.
- Step 2.** Drag and drop the firmware file (\*.bin) onto the STM32 Nucleo drive.  
In the example below it is the E drive named "NODE\_F401RE".

**Figure 6. Drag and drop firmware**



- Step 3.** Reset the STEVAL-IME014V1B evaluation board by disconnecting its USB cable connection from your PC and switching off the power supply (if used)

## Revision history

**Table 1. Document revision history**

Date	Version	Changes
17-May-2018	1	Initial release.

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