Vzense UpgradeTool User Guide

Windows OS Only

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Vzense Technology Co., Ltd.

Vzense

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1 Overview

Welcome to the Vzense UpgradeTool User Guide. UpgradeTool is a graphical Windows-based tool developed for Vzense TOF Cameras including DCAM710, DCAM305, DCAM550P, DCAM550U,DCAM560CPRO, DCAM560CLITE, (herein referred to as a *camera module*). This document describes how to upgrade the firmware of the camera module.

The tool supports two type of product interface, USB and Ethernet. Please do setup the hardware correctly.

USB interface Product: DCAM710, DCAM305, DCAM550-U;

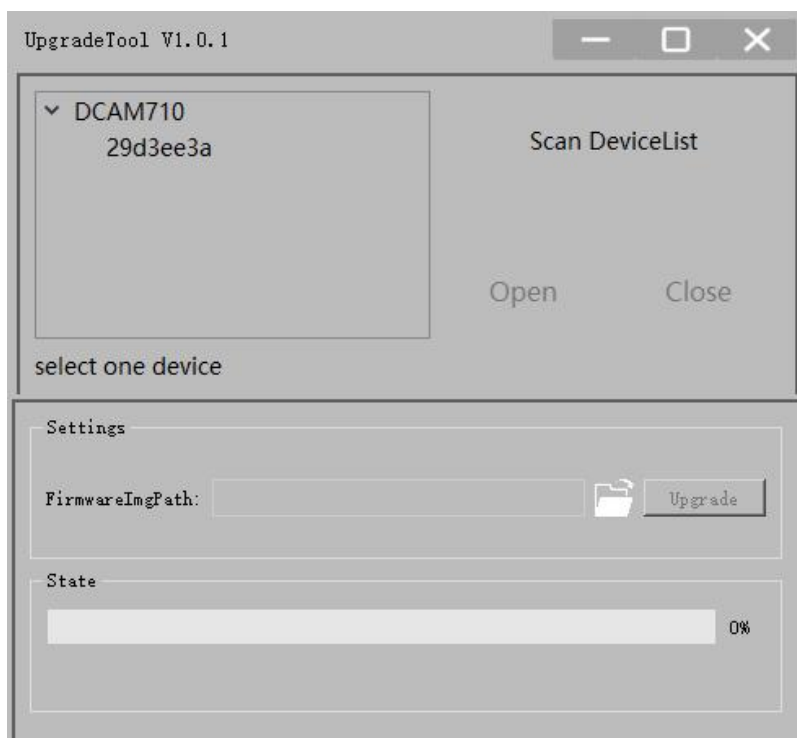Ethernet interface Product: DCAM550-P,DCAM560CPRO, DCAM560CLITE;

Figure 1 - VzenseUpgradeTool.

2 Package Structure

Download the VzenseUpgradeTool from below link:

China: https://gitee.com/Vzense/VzenseUpgradeTool

Oversea: https://github.com/Vzense/VzenseUpgradeTool

The UpgradeTool package for Windows contains the following notable directories and files:

名称	修改日期	类型	大小
platforms	2021/7/28 12:38	文件夹	
Upgrade	2021/7/28 12:38	文件夹	
ImgPreProcess.dll	2021/7/16 9:30	应用程序扩展	10,632 KB
msvcp140.dll	2021/7/16 9:30	应用程序扩展	440 KB
Qt5Core.dll	2021/7/16 9:30	应用程序扩展	4,646 KB
Qt5Gui.dll	2021/7/16 9:30	应用程序扩展	4,843 KB
Qt5Widgets.dll	2021/7/16 9:30	应用程序扩展	4,348 KB
README.md	2021/7/16 9:30	MD 文件	1 KB
ReleaseNotes.txt	2021/7/16 9:30	文本文档	1 KB
version	2021/7/16 9:30	文件	1 KB
vzense_api.dll	2021/7/16 9:30	应用程序扩展	1,166 KB
Vzense_UpgradeTool_User_Guide.pdf	2021/7/16 9:30	Foxit Reader PD...	713 KB
VzenseUpgradeTool.exe	2021/7/16 9:30	应用程序	195 KB

3 Requirements

UpgradeTool has the following requirements:

Supported Operating Systems: Windows 7 32/64 bit, Windows 10 32/64 bit

RAM: A minimum of 4GB

Download the latest firmware from below link:

China: https://gitee.com/Vzense/DeviceFirmware-List

Oversea: https://github.com/Vzense/DeviceFirmware-List

DCAM10	add DCAM800 device firmware; add DCAM10 device firmware	a year ago
DCAM305	add new version of DCAM305 20201229_b43	6 months ago
DCAM500	Modify the version naming convention	8 months ago
DCAM510	add DCAM510 device firmware; update README.md	a year ago
DCAM550P	add B29 versions for DCAM550P	2 months ago
DCAM550U	add B29 version for DCAM550U	a month ago
DCAM710	add new version of DCAM710 20201229_b80	6 months ago
DCAM800	add DCAM800 device firmware; add DCAM10 device firmware	a year ago
DCAM800Lite	Modify the version naming convention	8 months ago
TMP_Firmware	add B26 version for DCAM800Lite	a month ago
README.md	change file path	2 months ago

4 Setting up the Upgrade Environment

4.1 Hardware Installation

Connect the camera module to a PC using a USB cable or a Network cable as shown in Figure 1:

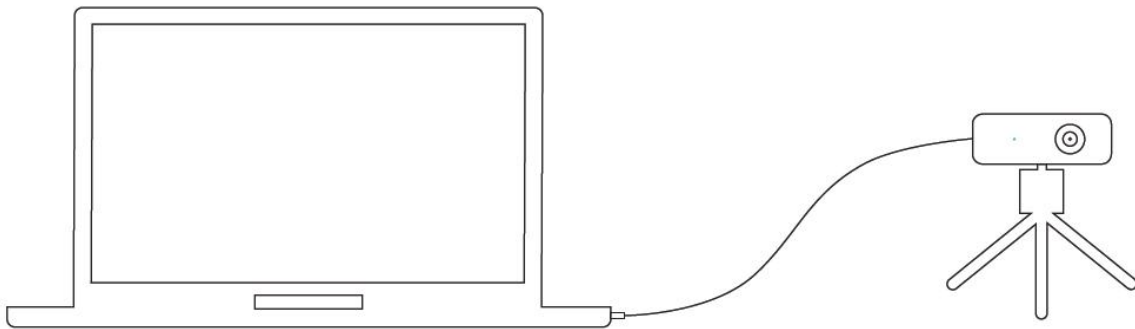**Please do make sure ONLY ONE Vzense product is connected to the PC while upgrading the firmware.**

Figure 1 - Hardware installation.

4.1.1 USB Interface Product Setup

DCAM710, DCAM305, DCAM550-U products support firmware upgrade by USB interface.

1) Connect the camera module to PC USB interface through USB cable.
2) In Windows, when the camera module is successfully connected, it will pop up the notice of the device driver installation. After the driver is auto-installed successfully, it will show the `Vzense TOF Camera` device in Windows Device Manger.
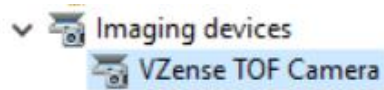
Figure 3 Vzense TOF Camera

3) The USB upgrade driver shall be installed before upgrade.

    a) Find the upgrade driver in the directory …\VzenseUpgradeTool-
master\Upgrade\DriverAssitant_v4.8.zip and unzip it;

    b) Execute "DriverInstall.exe"

    c) Click left button to next

4) Go to 4.1.3 after the driver successfully installed;

4.1.2 Ethernet Product Setup

DCAM550-P, **DCAM560CPRO**, **DCAM560CLITE** products support firmware upgrade by Ethernet interface.

The product shall be connected to the windows PC by Ethernet, the IP address of the product could be either a fixed IP address or DHCP by AP.

1) Fixed address

The fixed address connection can be directly connected to the camera and the computer, or it can be configured to be used in the same network segment.

Direct connection: one end is connected to the camera, and the other end is connected to the network cable interface of the PC host. The default IP of the camera is 192.168.1.101. On the PC side, set the subnet mask of "local connection" to 255.255.255.0, and the IP address to the same network segment (such as 192.168.1.100).

Figure 3.1 Direct connection

2)   DHCP

For the DHCP connection mode, the camera needs to be connected to the router with DHCP enabled, and the PC in the same LAN is used for connection. It is recommended to set the "local connection" of the PC to obtain the IP address automatically.
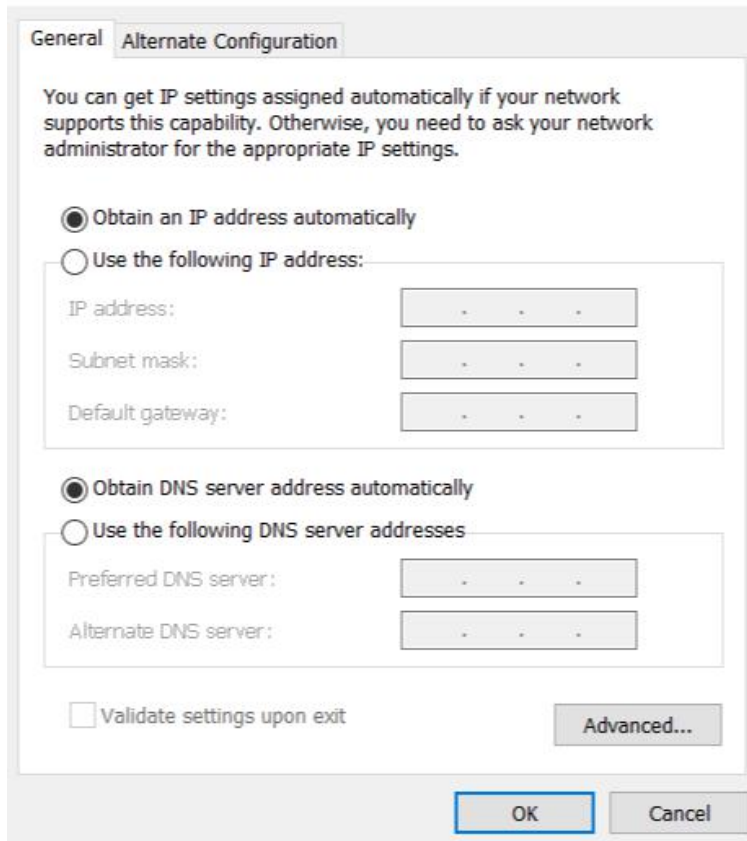
Figure 3.2 DHCP

Note:

1)   Please do always allow access through the firewall;

Figure 3.3 firewall setting

5 UpgradeTool Settings and Functionality

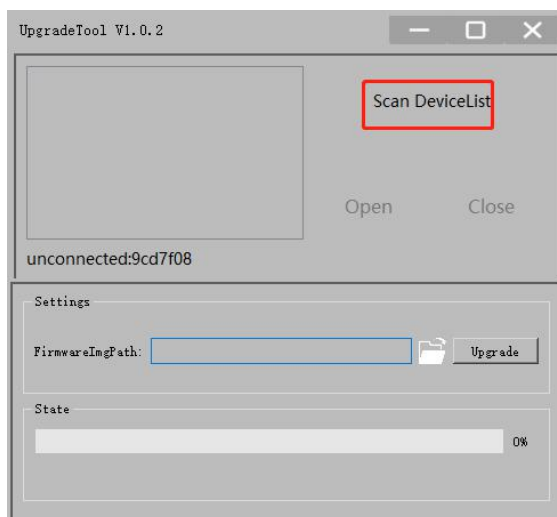The following subsections describe the settings and functionality of UpgradeTool.

Please do make sure ONLY ONE Vzense product is connected to the PC while upgrading the firmware.
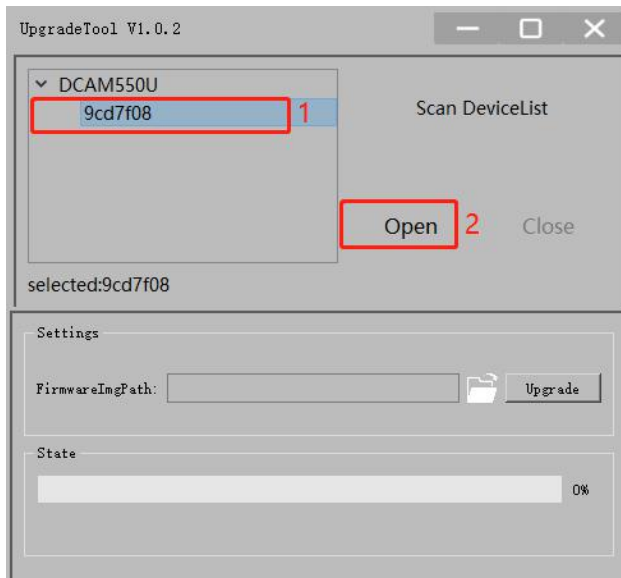
5.1 Launch the VzenseUpgradeTool.exe

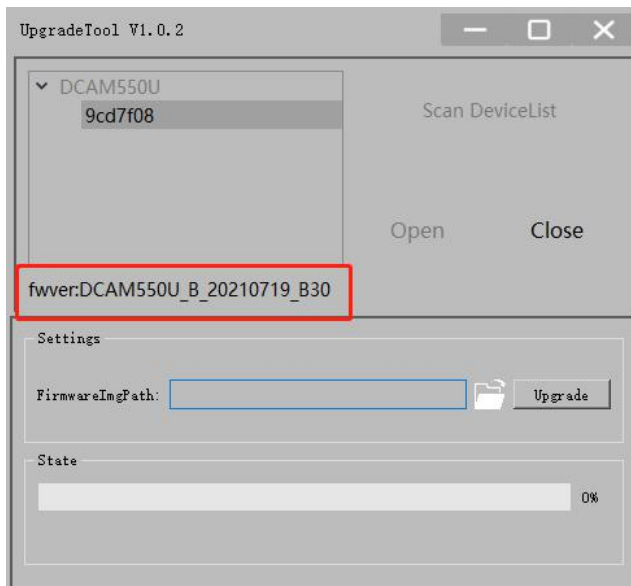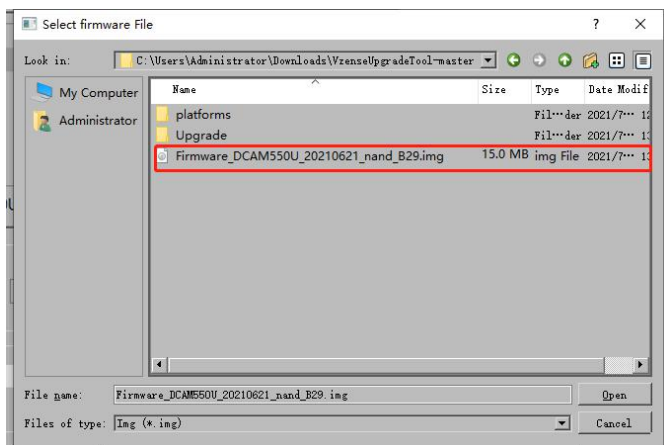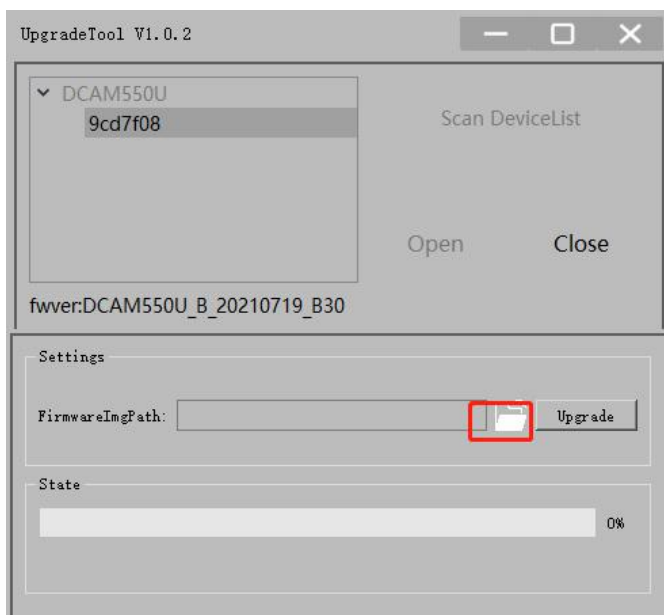|			
platforms	2021/7/28 12:38	文件夹	
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VzenseUpgradeTool.exe	2021/7/16 9:30	应用程序	195 KB

5.2 Find the device

1) Scan the device

2) Open the device
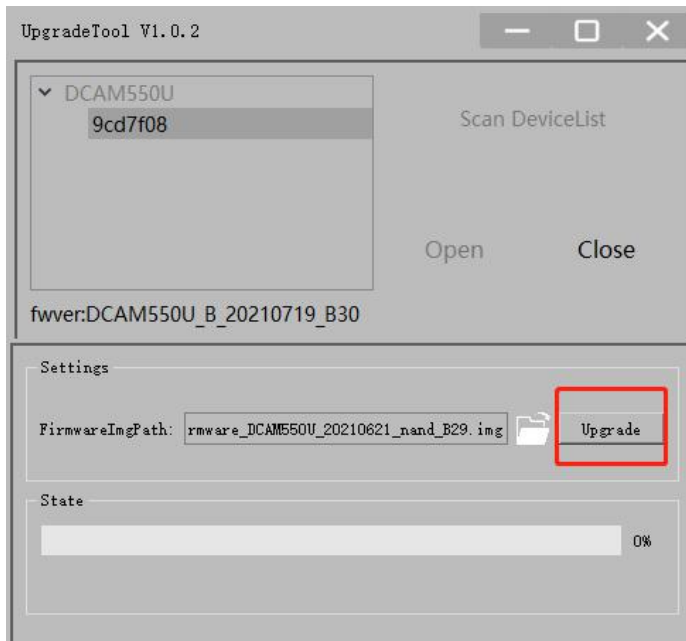
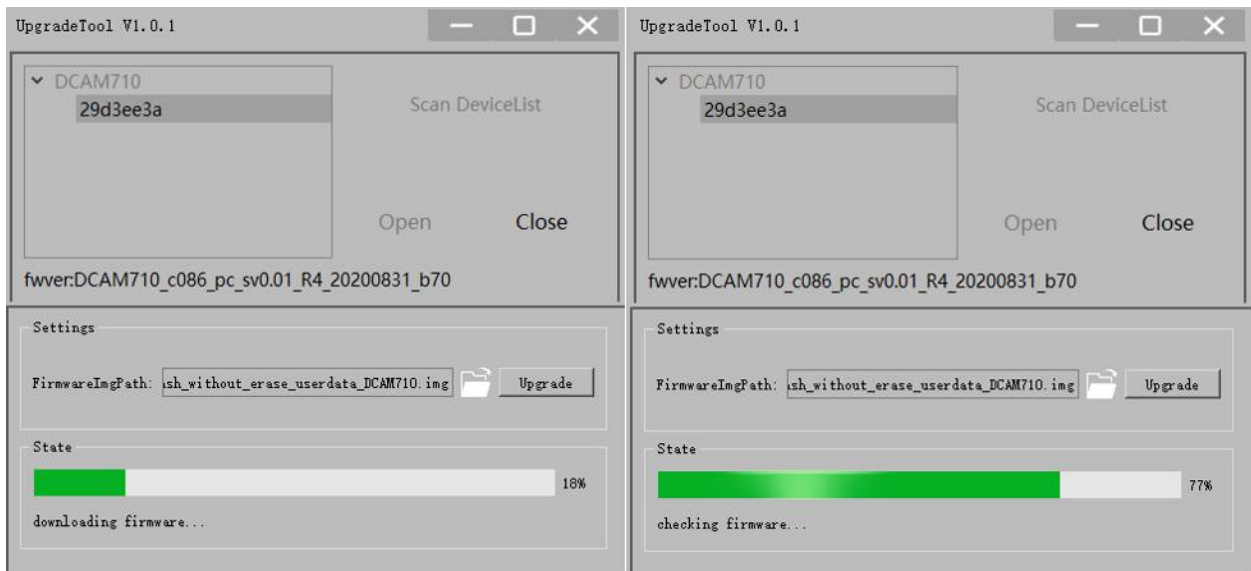3) You can get the current firmware version number in the product

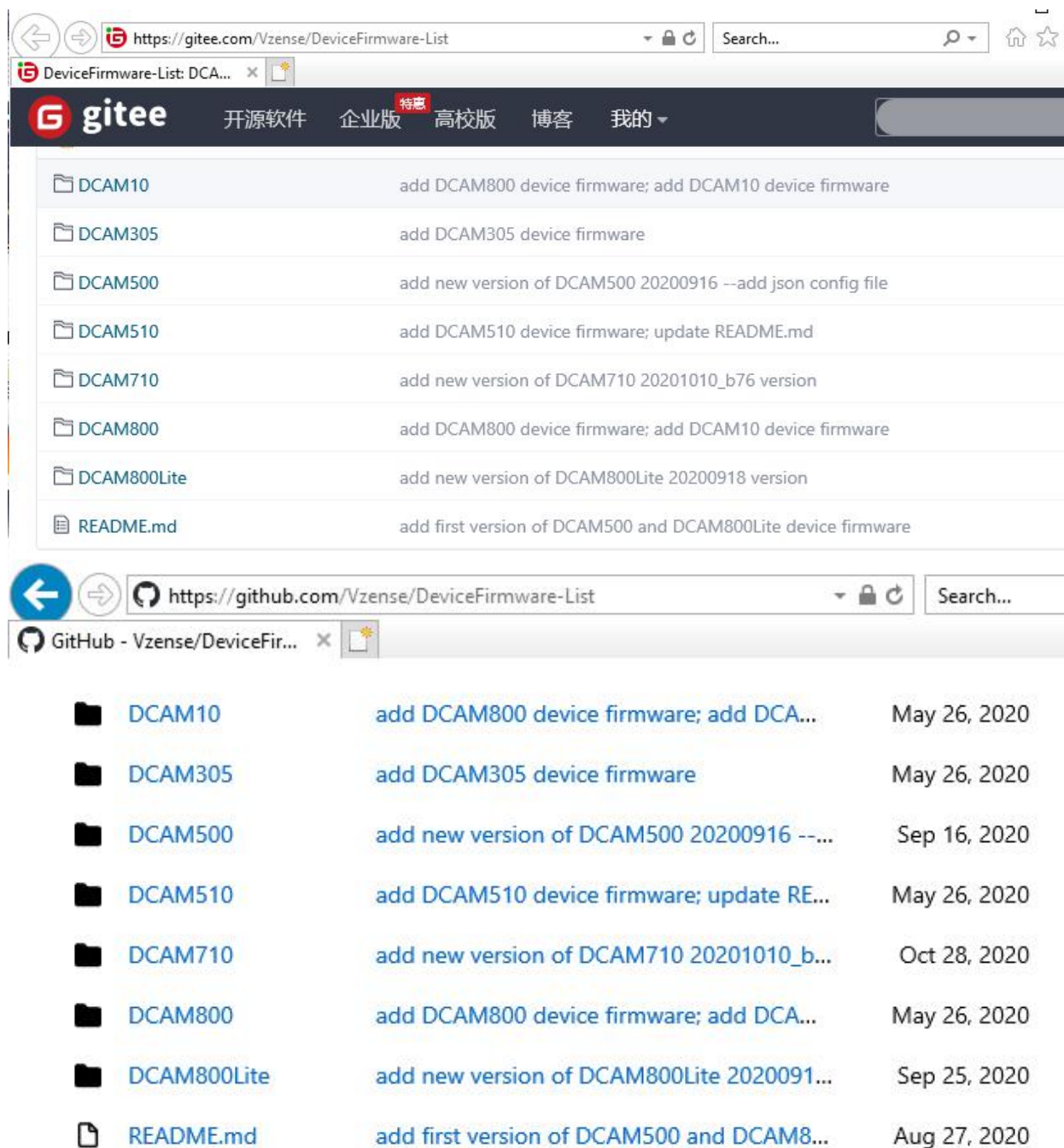4) Find the firmware image and select it

5) Start firmware upgrade

6) Wait until upgrade finished

6 Firmware Download

Download the Firmware for "https://gitee.com/Vzense/DeviceFirmware-List" or
"https://github.com/Vzense/DeviceFirmware-List"

For more information, please check the file "**DCAM...**" that you pull.

7 FAQ

Q1: About "The Other Instance is Running!"

A1: "The Other Instance is Running!" represents that the existing UpgradeTool program is running. You can restart the UpgradeTool after closing the program. If this prompt still appears after closing, check the background process to close VzenseUpgradeTool.exe directly.

Q2: Do We need to install a driver to drive the camera?

A2: USB interface products, DCAM710, DCAM305, DCA550-U require the upgrade driver be installed. See 4.1.1

Ethernet interface products don't need other driver.

Q3: Driver Install.exe cannot install the driver properly.

A3: Try to run DriverInstall.exe with administrator privileges.

Q4: For the series for DCAM560, upgrade failed.

A4:Check the firmware path , Do not use the Chinese path