

# EP Series

Fiber Extender




**Firmware Update Guide**

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# Contents

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Contents.....	ii
1 Introduction .....	1
2 Precautions.....	2
3 Update.....	3
3.1 BCTools Software Installation .....	3
3.2 Update Method.....	8
3.2.1 4x4Tx Card .....	8
3.2.2 4x4Rx Card .....	10
3.2.3 2x2 Card .....	12
4 Modify COM Port Number .....	15
5 Distinguish Different Boot Versions.....	18

# 1 Introduction

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The update process requires a certain level of technical expertise. Please read through the entire document, and if any unclear, ensure you communicate with technical support before proceeding.

# 2 Precautions

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- Disconnect all device inputs and outputs before update.
- If the update fails, power off the device and restart it to enter the boot mode.
- Do not connect the USB cable to the RX device before entering the boot mode.

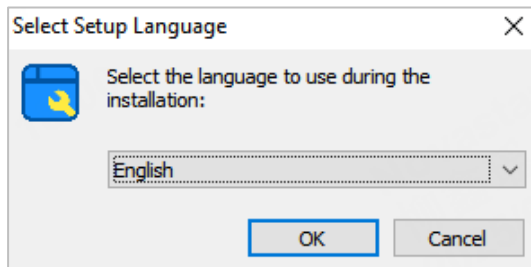
# 3 Update

## 3.1 BCTools Software Installation

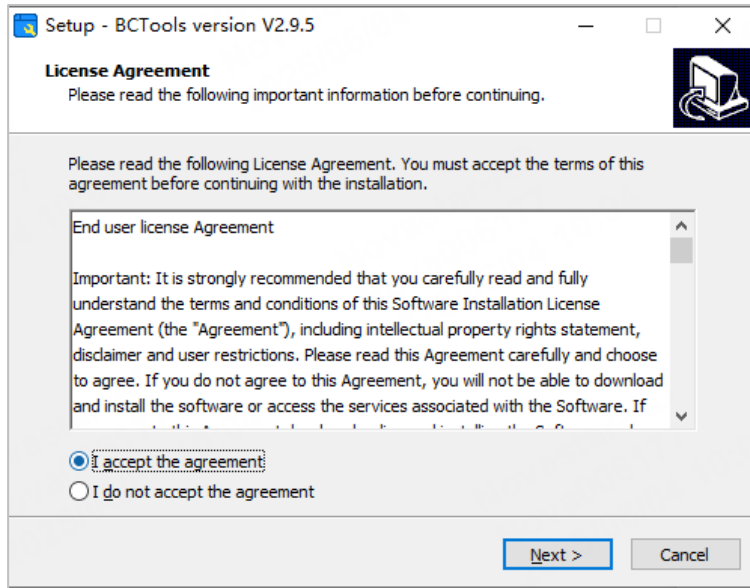
### Note

The BCTools pictures are for reference only. Please obtain the latest version from GTS or the official website.

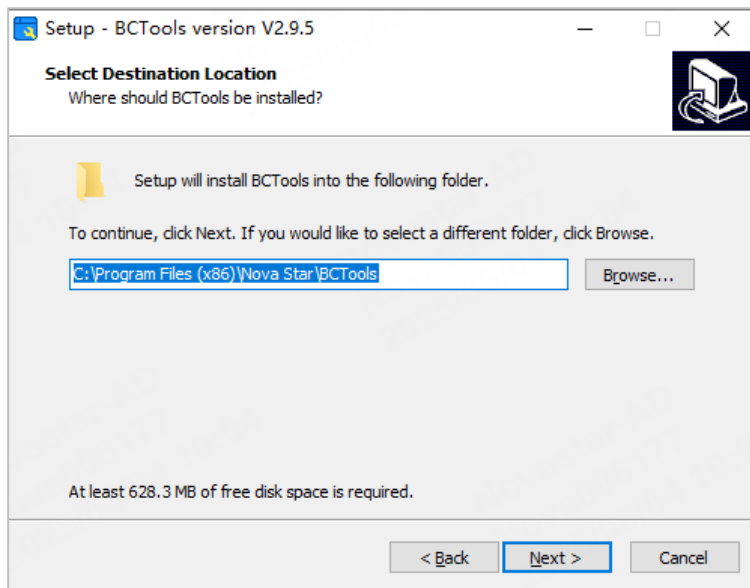
- Step 1 Prepare the BCTools software package.
- Step 2 Double click the package to begin the installation preparation.
- Step 3 Choose the desired language for installation.



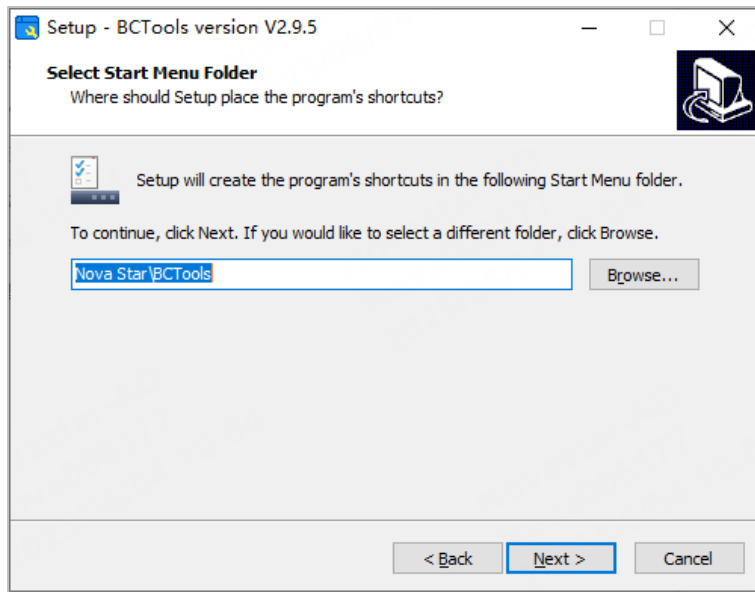
Step 4 Review the license agreement.



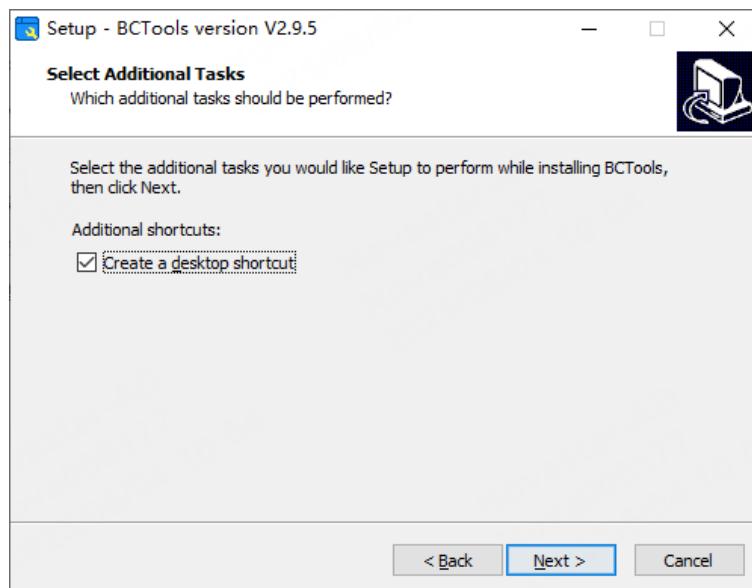
Step 5 Select the installation location.



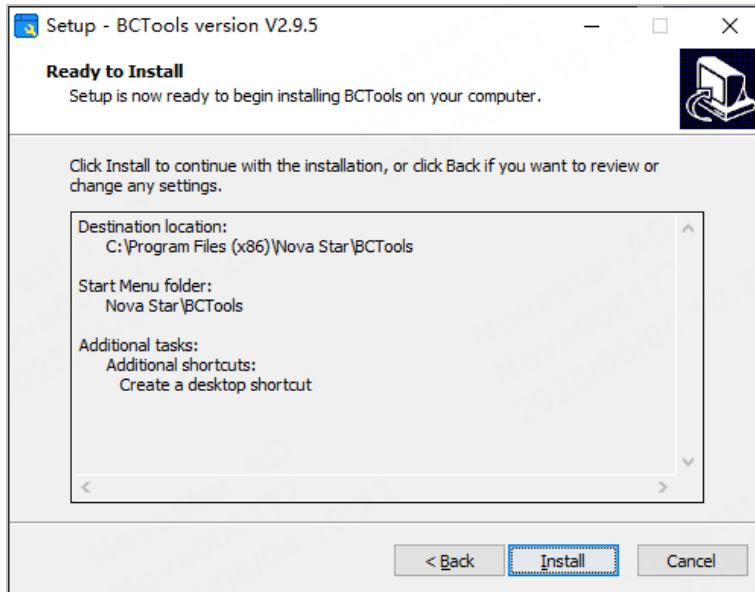
Step 6 Select the **Start Menu** folder.



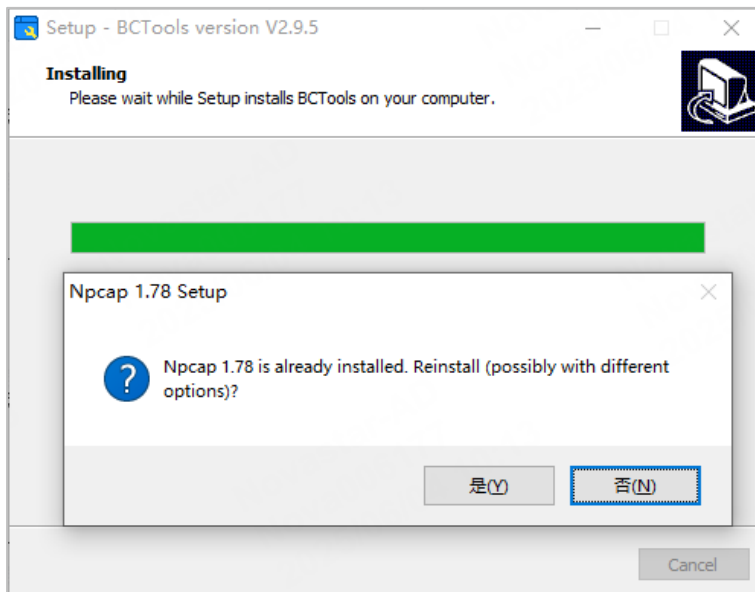
Step 7 Select the additional tasks.



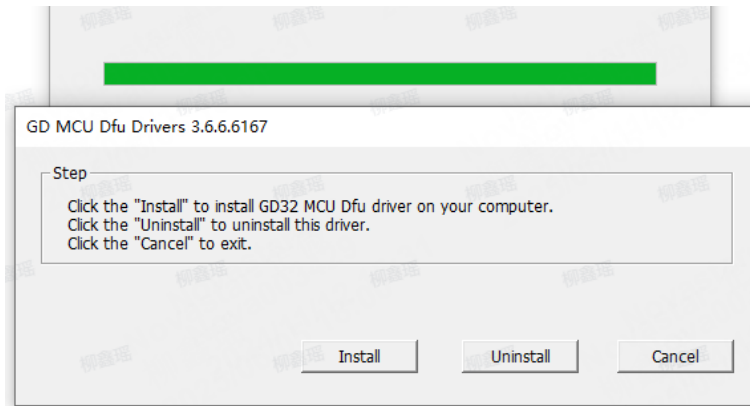
Step 8 Once prepared, start the installation.



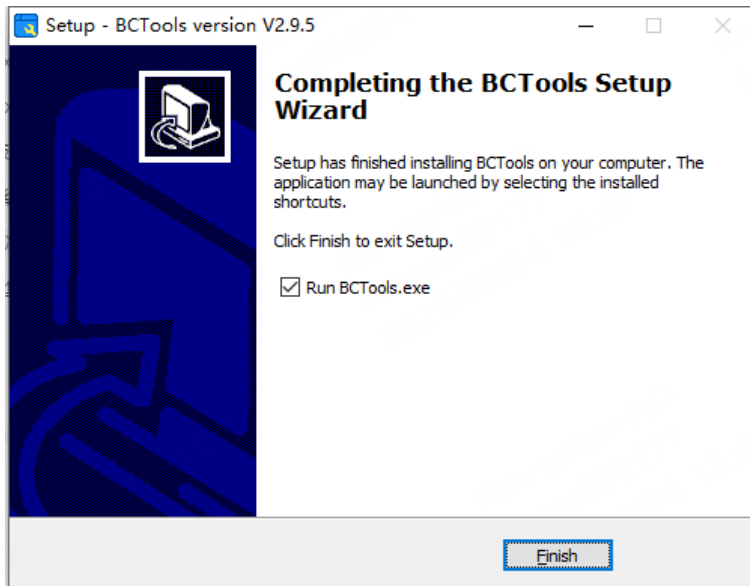
Step 9 If prompted to install Npcap and it's already installed, you may skip; otherwise, proceed with the installation.



Step 10 If the MCU update driver is not installed, click **Install** to proceed; otherwise, click **Cancel**.



Step 11 Once the installation is complete, you may begin use.



## 3.2 Update Method

### 3.2.1 4x4Tx Card

Use BCTools to update the overall device firmware.

- Step 1 Enter the boot mode by toggling the boot switch to the ON position (the diagram shows the default OFF state).

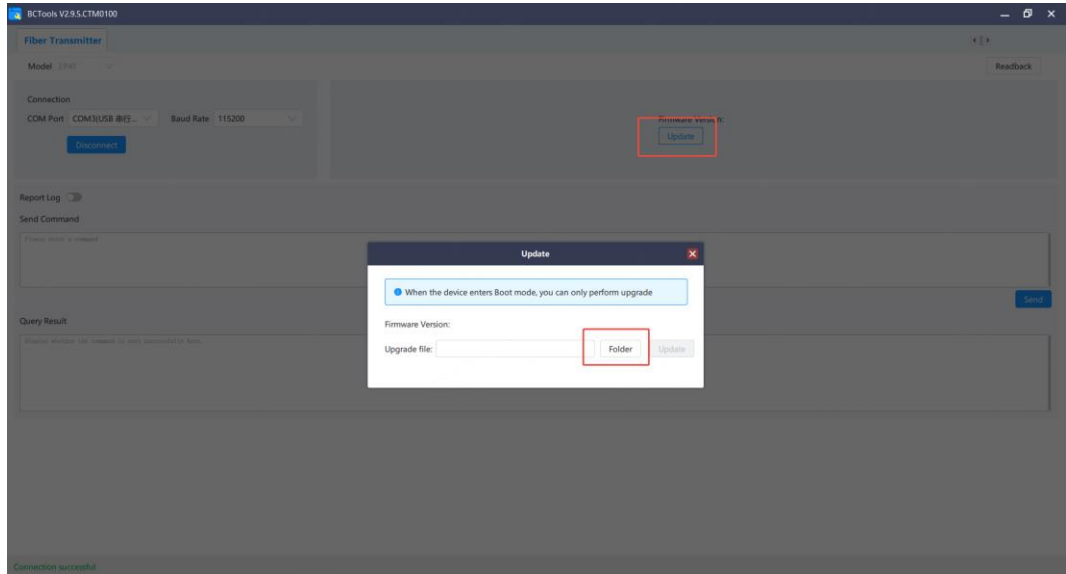


- Step 2 Power on the device, and connect the type-B USB port to the computer used for the update.

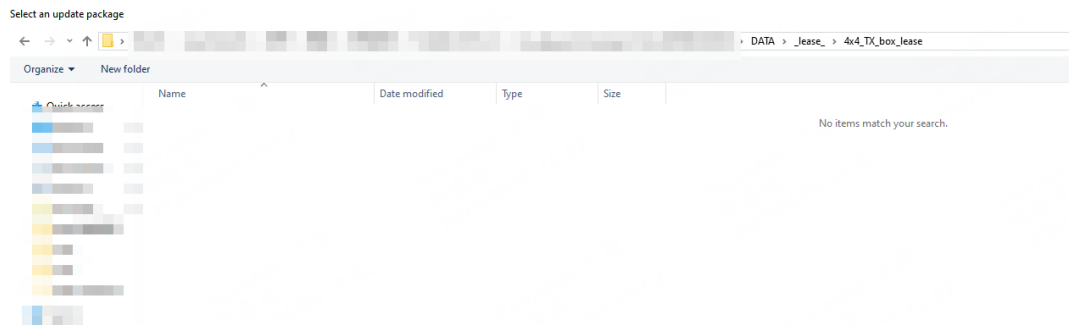
- Step 3 Select the port number from the **COM Port** drop-down list in the software, and click **Connect**.



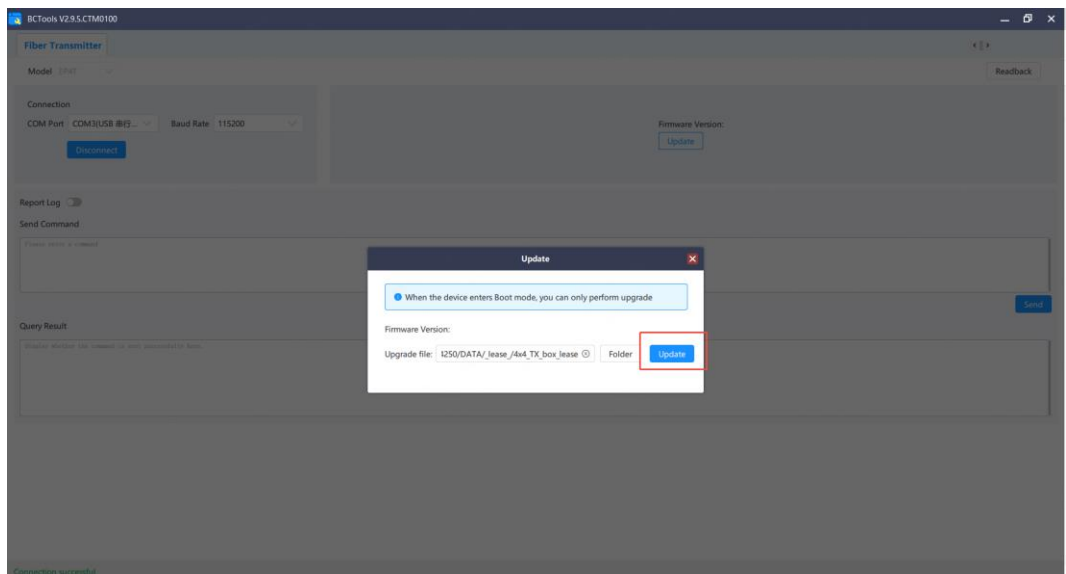
Step 4 Click **Update**, then browse and select the firmware package path in the pop-up window.

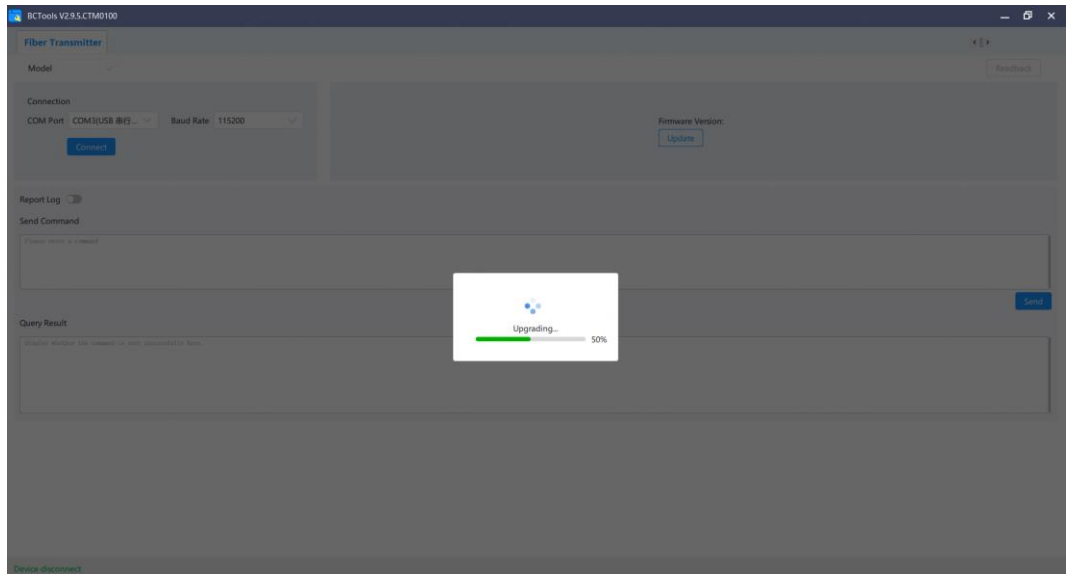


Step 5 Navigate to the following update package path of either 4x4\_TX\_box\_lease or 4x4\_TX\_box and click **Select Folder**.



Step 6 Click **Update** and wait for the progress bar to complete.

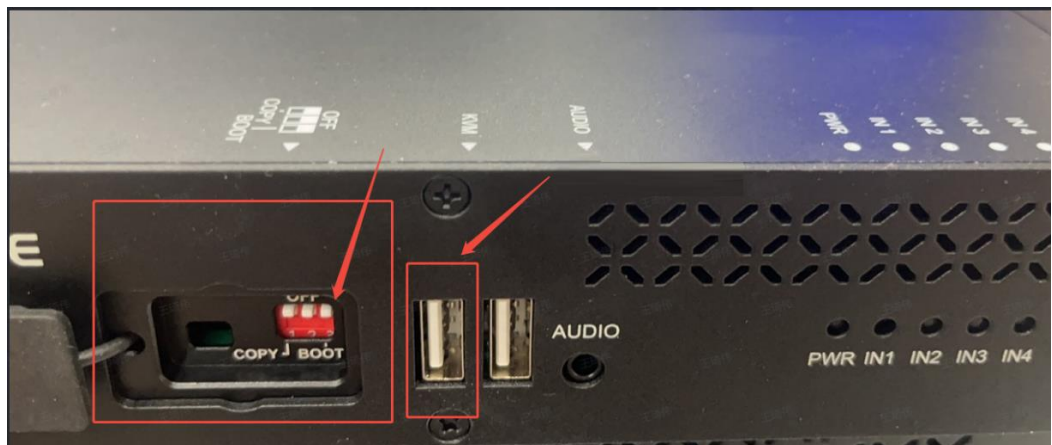




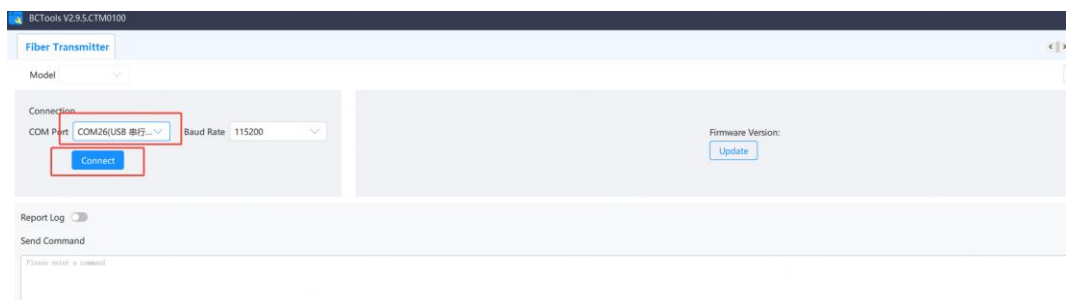
### 3.2.2 4x4Rx Card

Use BCTools to update the overall device firmware.

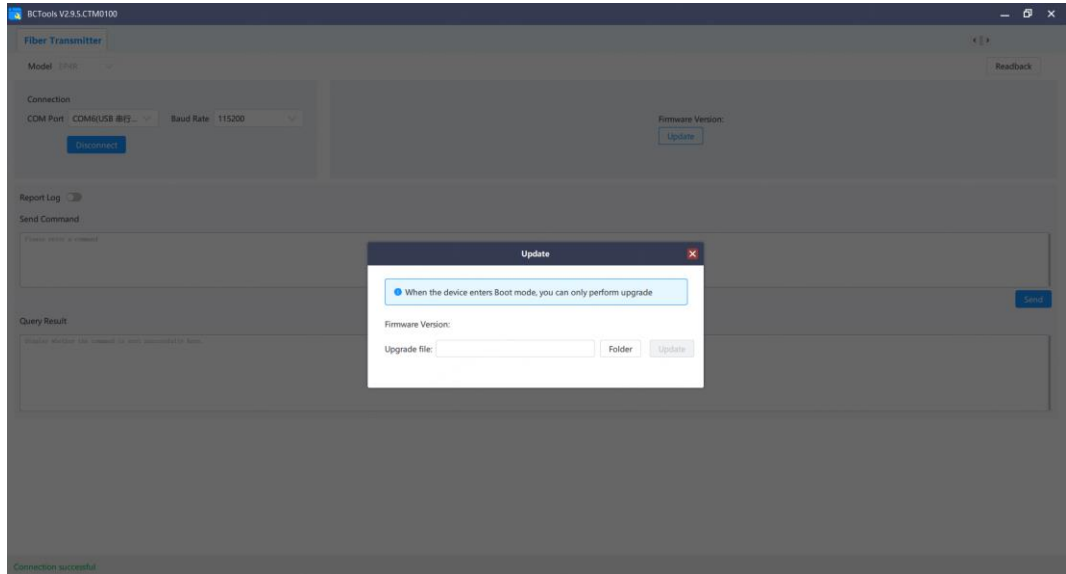
- Step 1 Enter the boot mode by toggling the boot switch to the ON position (the diagram shows the default OFF state).
- Step 2 Power on the device, and connect the left type-A USB to the computer used for the update. **Ensure it is disconnected when powering down.**



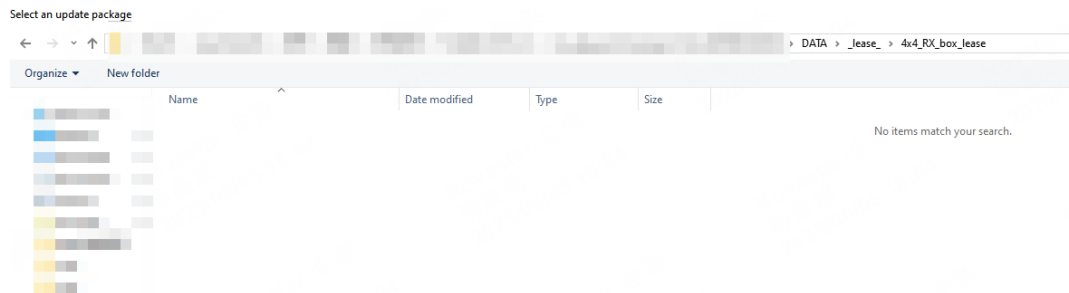
- Step 3 Select the port number from the **COM Port** drop-down list in the software, and click **Connect**.



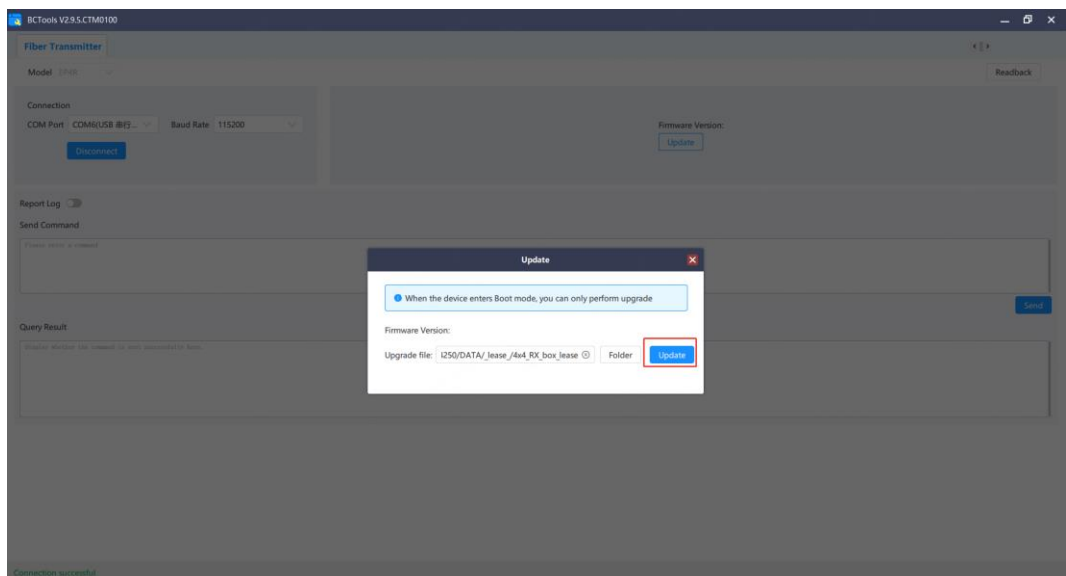
Step 4 Click **Update**, then browse and select the firmware package path in the pop-up window.

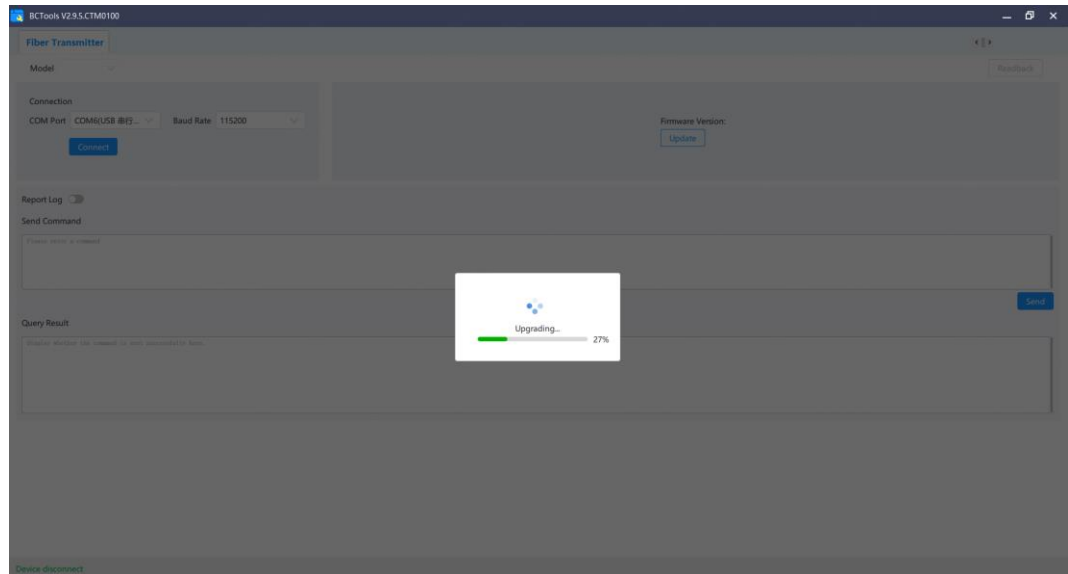


Step 5 Navigate to the following update package path of either 4x4\_RX\_box\_lease or 4x4\_RX\_box and click **Select Folder**.



Step 6 Click **Update** and wait for the progress bar to complete.

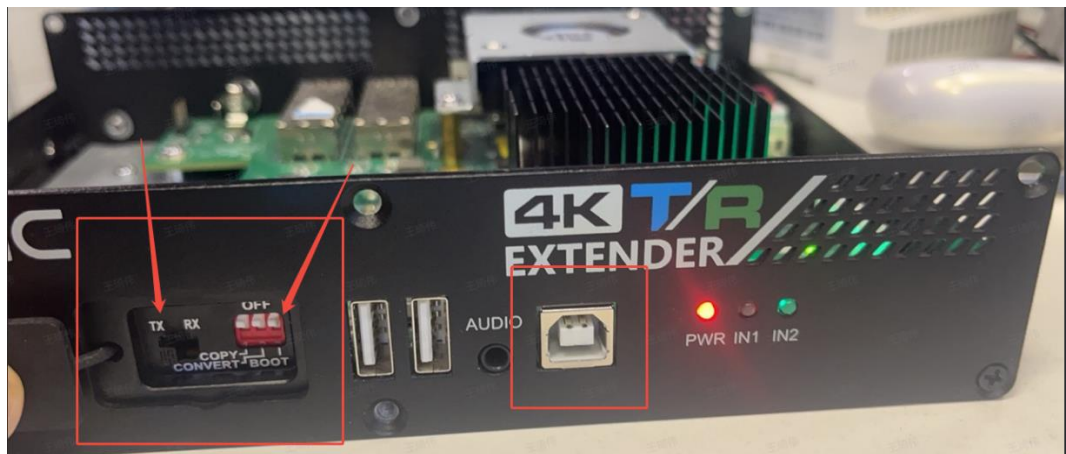




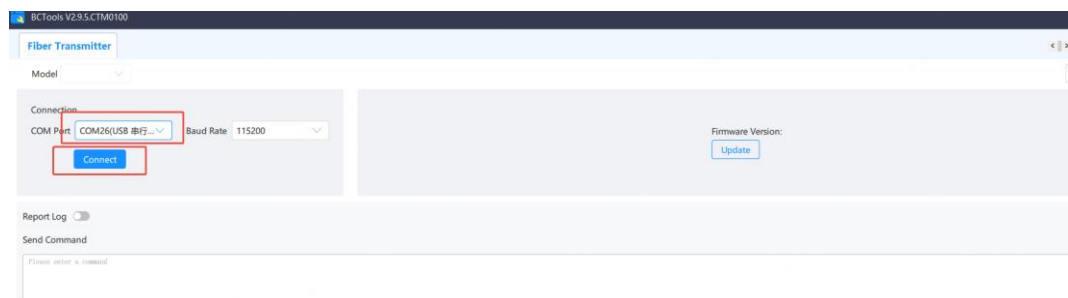
### 3.2.3 2x2 Card

Use BCTools to update the overall device firmware.

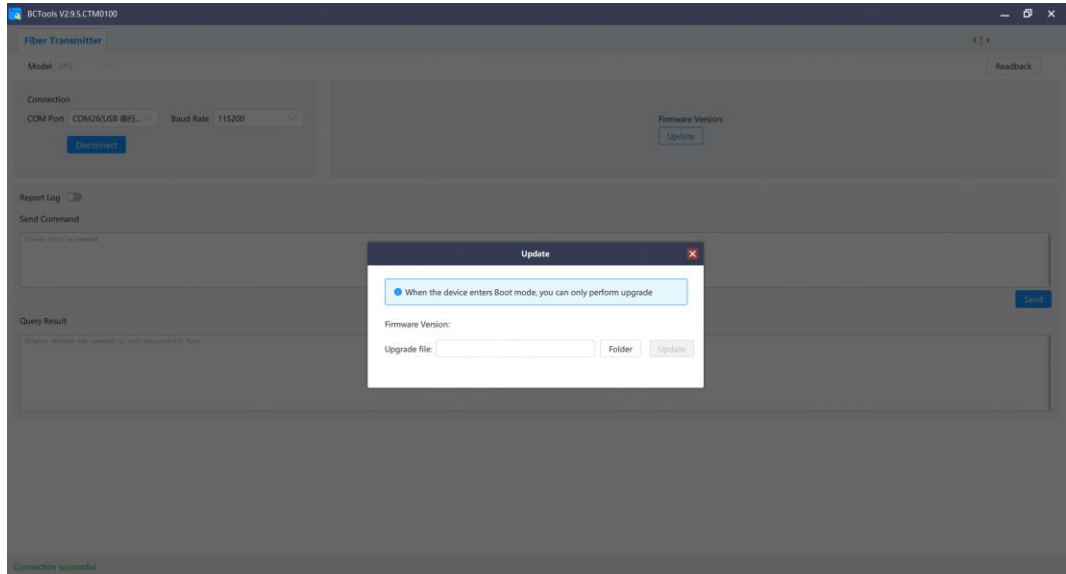
- Step 1 Enter the boot mode by toggling the mode switch to TX and toggling the boot switch to the ON position (the diagram shows the default OFF state).
- Step 2 Power on the device, and connect the type-B USB to the computer used for the update. **Ensure the type-A USB remains disconnected during the process.**



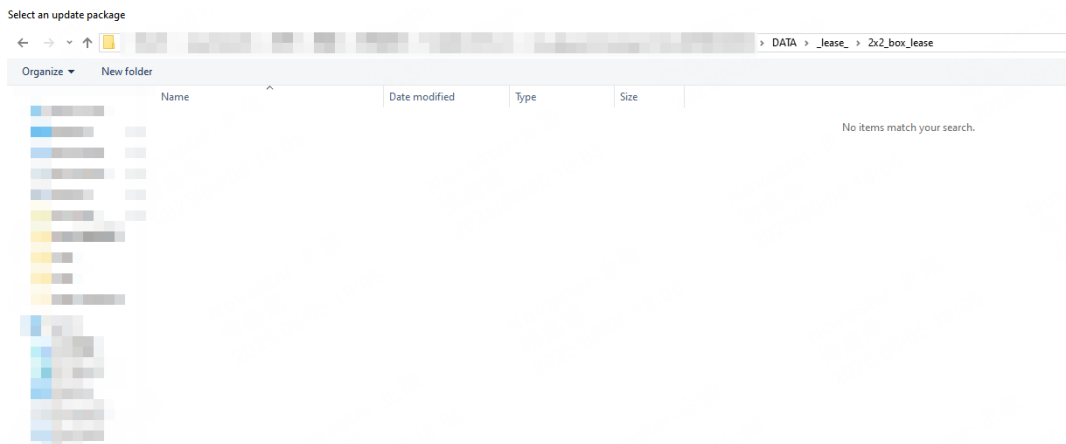
- Step 3 Select the port number from the **COM Port** drop-down list in the software, and click **Connect**.



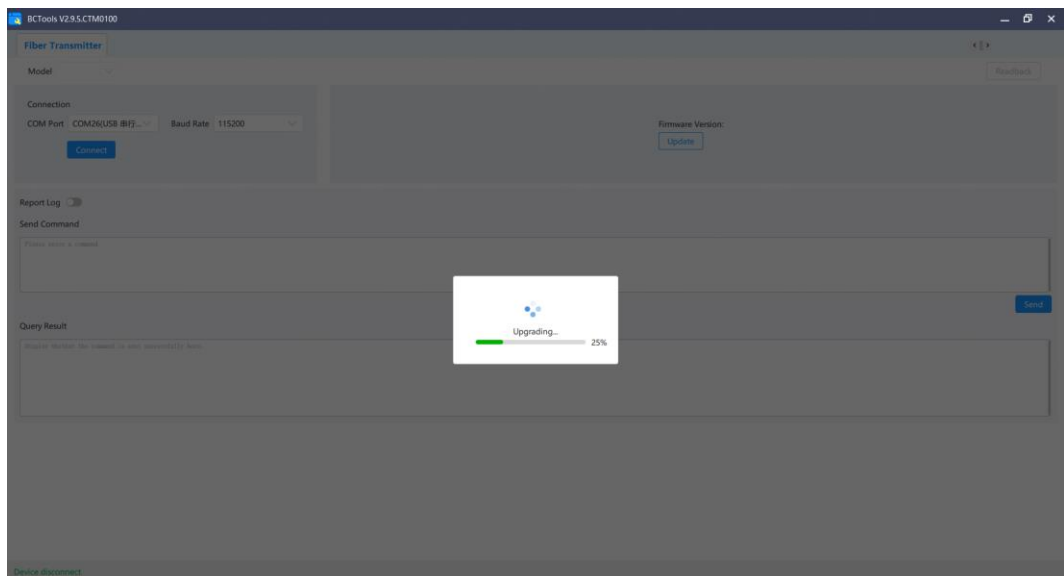
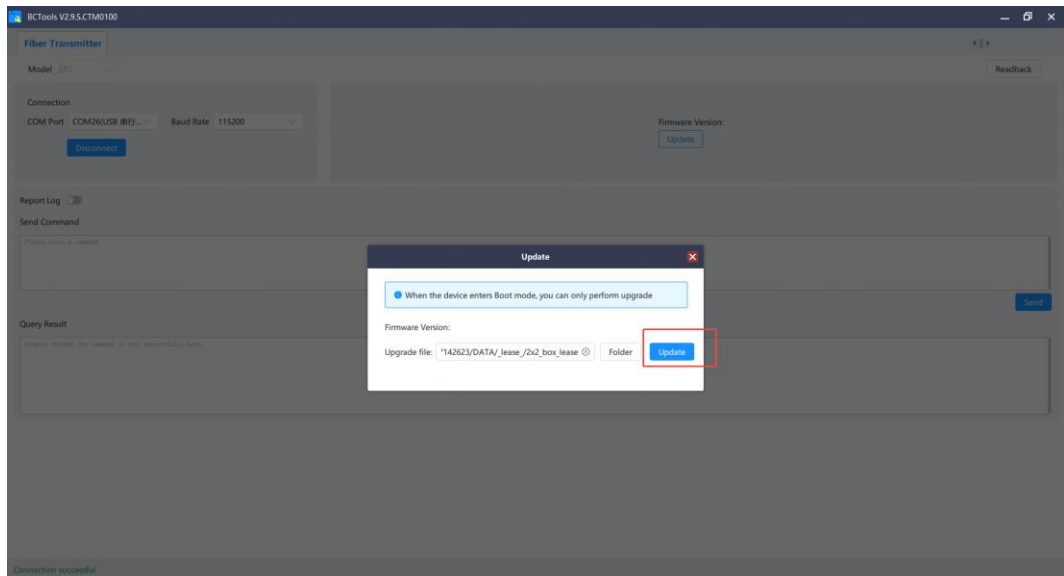
Step 4 Click **Update**, then browse and select the firmware package path in the pop-up window.



Step 5 Navigate to the following update package path of either 2x2\_box or 2x2\_box\_lease and click **Select Folder**.



Step 6 Click **Update** and wait for the progress bar to complete.

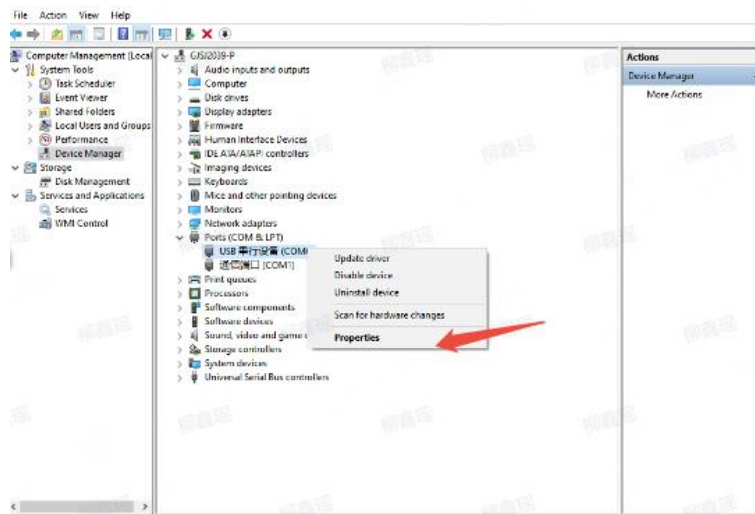


# 4 Modify COM Port Number

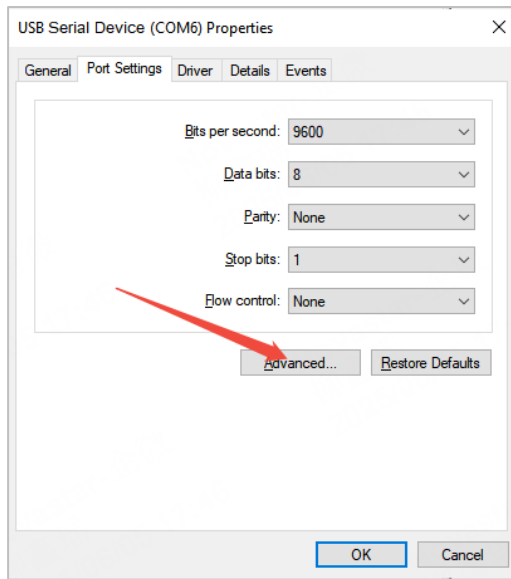
If you encounter an update failure caused by COM port conflicts, perform the following steps; otherwise, skip.

## Operating Procedure

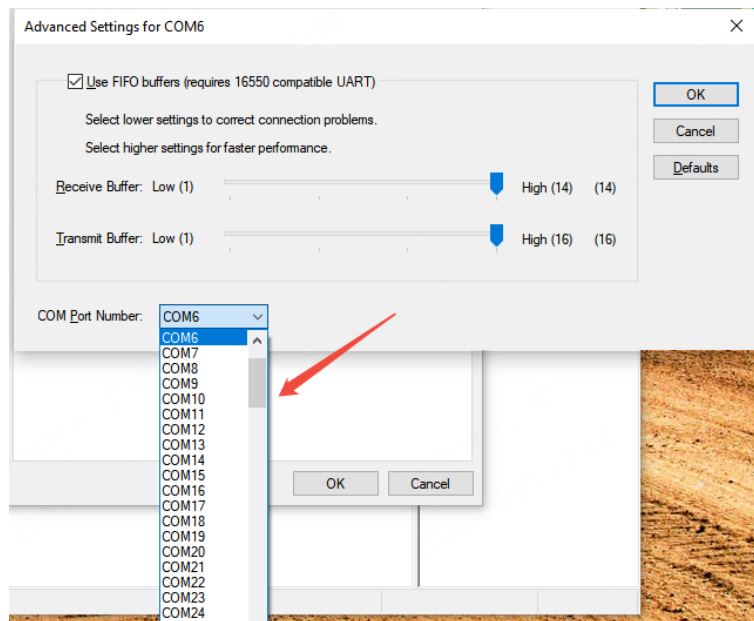
Step 1 In **Device Manager**, right click the target serial port and select **Properties**.



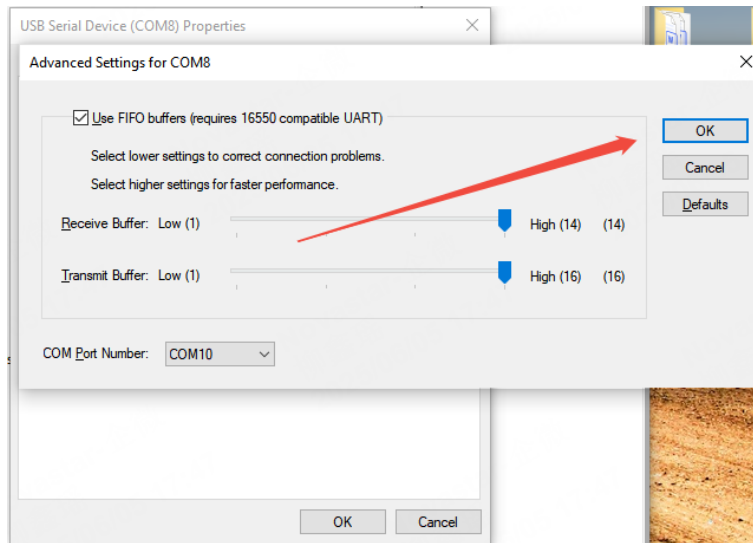
Step 2 In the **Properties** dialog, click **Advanced**.



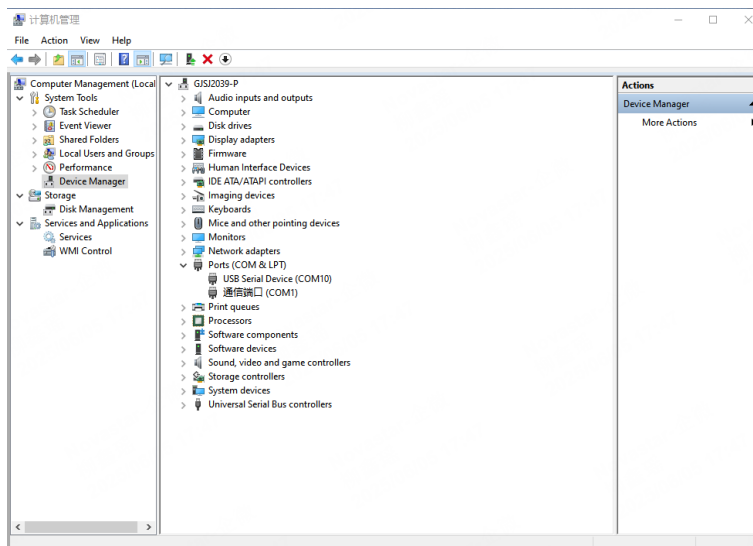
Step 3 In the **COM Port Number** section, select the desired COM port number.



Step 4 Click **OK**.



Step 5 Return to the **Device Manager** interface to confirm that COM3 has changed to COM10.



# 5 Distinguish Different Boot Versions

## EP4

If the device was sampled between January 1 and March 20, 2025, and the firmware version is V1.1.0, the corresponding boot version is V1.1.0.0. This boot version does not support automatic model detection. Please use it in conjunction with BCTools V2.9.2.

If the device was sampled or sold after March 20, 2025, and the firmware version is V1.2.0 or later, the corresponding boot version is V1.2.0.0. This boot version supports automatic model detection. Please use it with BCTools V2.9.5, V2.9.5.CTM0100 (custom version), or later.

## EP2

The boot version is V1.2.0.0, supporting automatic model detection. Please use it with BCTools V2.9.5, V2.9.5.CTM0100 (custom version), or later.

## How to check device boot version with BCTools

Enter the boot mode. Connect BCTools to the corresponding device and click **Readback** to view the current boot version above the **Update** button.

