

Write firmware

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1. Download the Flash tool
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4. Flashing completed

Note: The microROS control board has been burned with factory firmware before leaving the factory. If you have not burned other firmware before, you do not need to burn the factory firmware again.

The factory firmware of the microROS control board only provides bin files for burning, and does not provide program source code.

1. Download the Flash tool

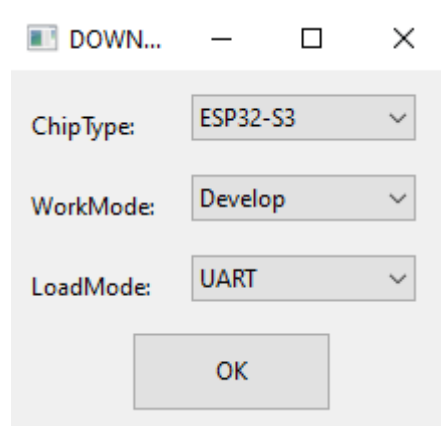
Download URL:

<https://www.espressif.com.cn/en/support/download/other-tools>

Flash Download Tools

<input type="checkbox"/>	Title	Platform	Version	Release Date ▾	Download
<input type="checkbox"/>	+ Flash Download Tools	Windows PC	V3.9.5	2023.06.12	

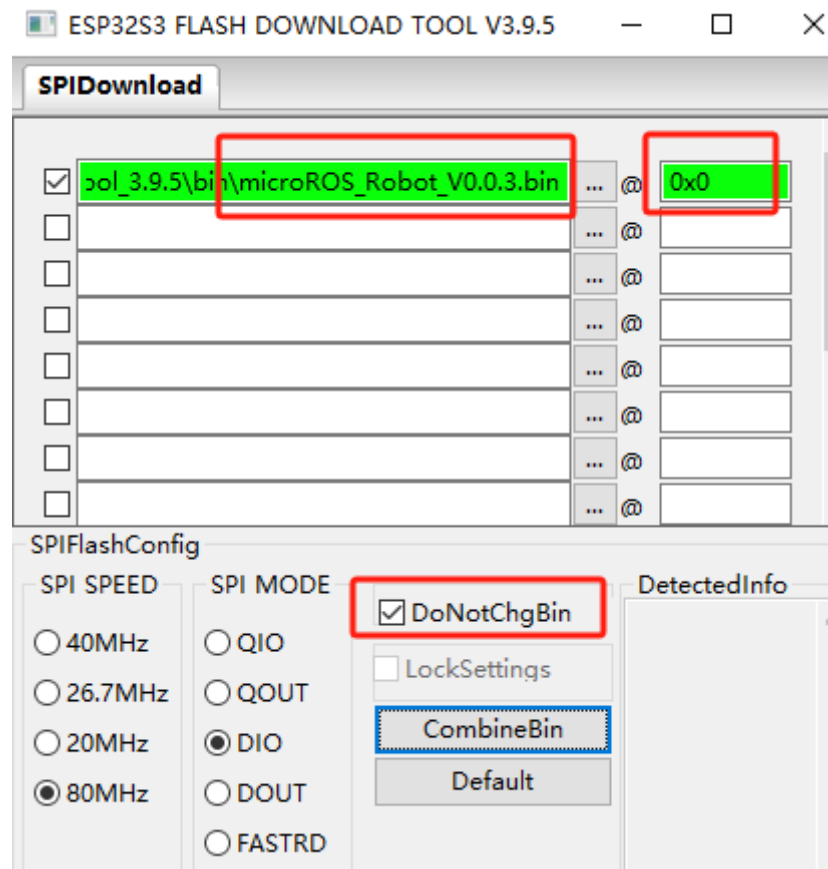
Unzip to get flash_download_tool, double-click to open it. As shown in the figure below, select the serial port to burn ESP32-S3. Click OK to open the burning tool.



2. Configure the burning tool

In 'SPIDownload', select the firmware microROS_Robot_Vx.x.x.bin to be burned to ESP32S3, where Vx.x.x is the firmware version number, enter 0x0 for the firmware address, check DoNotChgBin, and then select the connected COM port. Keep other configurations as default.

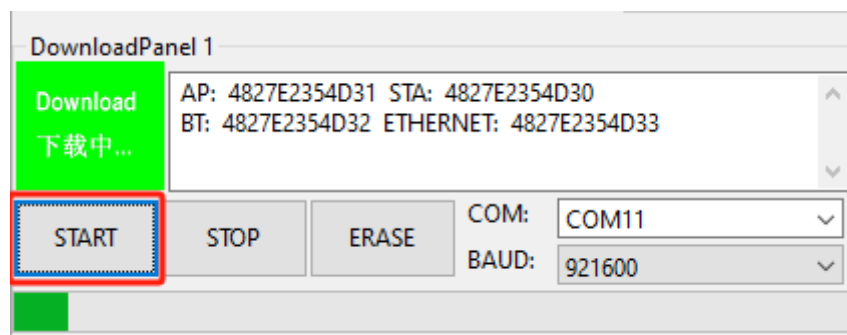
Firmware name	Firmware address	Remark
microROS_Robot_Vx.x.x.bin	0x0	function file



3. Start writing firmware

Click the Start button and the tool will automatically start burning firmware.

Note: If the firmware burning does not start automatically, please press and hold the boot0 key first, then press the reset button, release the boot0 key, and enter the burning mode manually.



4. Flashing completed

After the download is completed, a blue FINISH logo will appear. At this time, power off and restart the microcontroller or press the reset button to start the program.

DownloadPanel 1

FINISH
完成

AP: 4827E2354D31 STA: 4827E2354D30
BT: 4827E2354D32 ETHERNET: 4827E2354D33

START

STOP

ERASE

COM:

COM11

BAUD:

921600