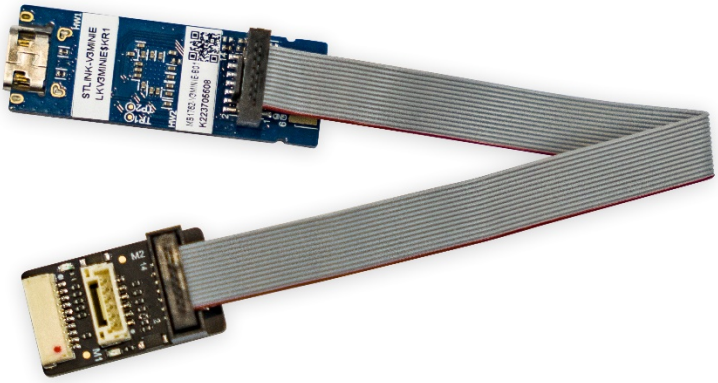
C-ADB debug adapter

user manual

May 31,2023



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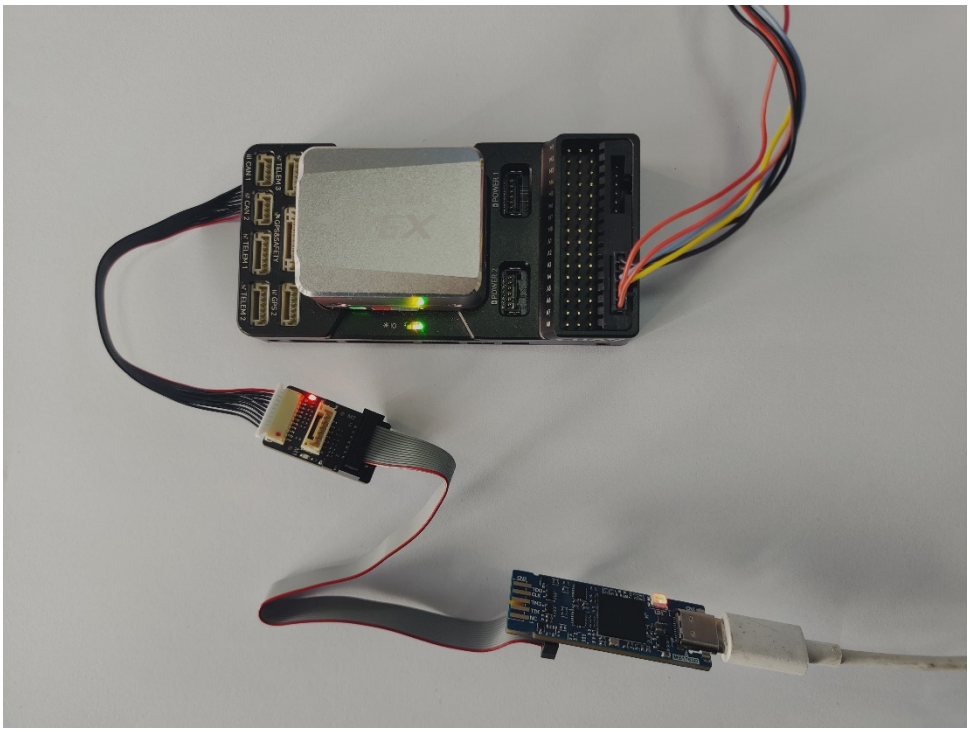
一、 Overview

C-ADB is a debugging adapter designed for the secondary development and debugging of Pixahwk and CUV series flight controllers. Internal integrated JTAG SWD and SERIAL interfaces are used for device firmware development and debugging. Provide 10pin debugging interface of Pixhawk standard and DSU interface of CUAV standard.

C-ADB is matched with STLINK-V3MINI module, no complicated wiring is required, plug and play, quick start for secondary development and debugging.

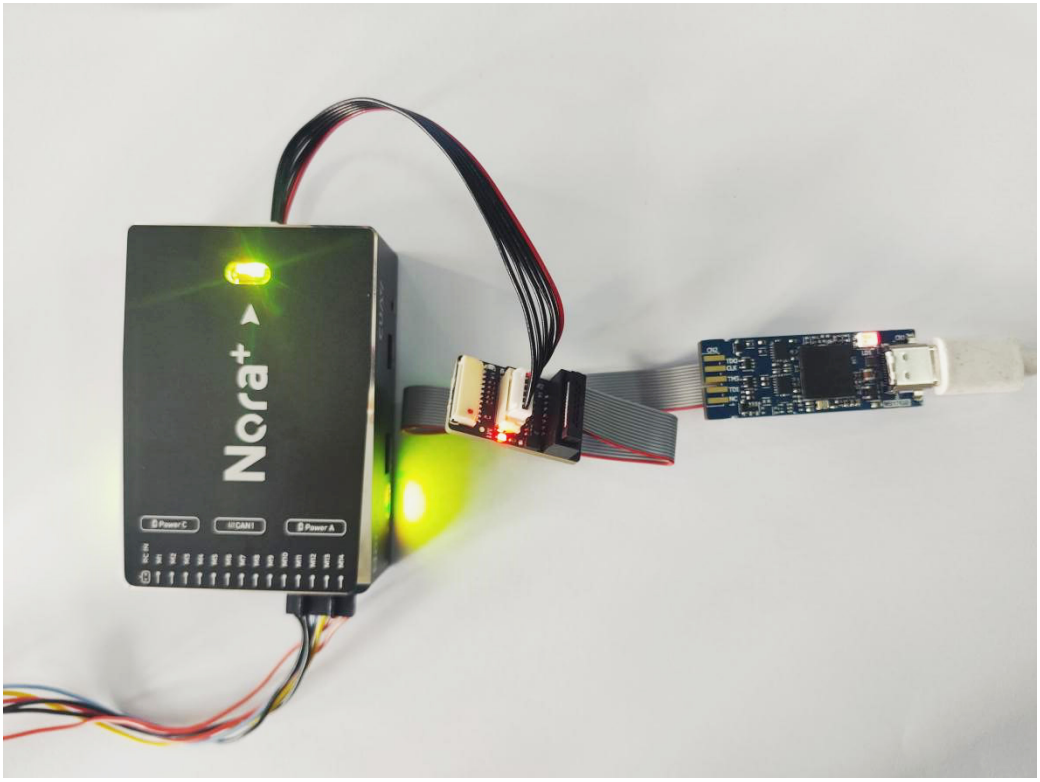
二、 Hardware connection

Depending on the debug standard interface of the connected device, the connection method is different.



Connection to Pixhawk standard debug interface device

- The debug cable is connected to the C-ADB small board and the debug interface of the Pixhawk series flight controller
- Use STLiink v3 mini to connect to the computer
- Power the device



CUAV standard DSU interface standard equipment connection

- The debug cable is connected to the C-ADB small board and the DSU interface of the DSU interface standard equipment

- Connect STLiink v3 mini to computer with USB cable

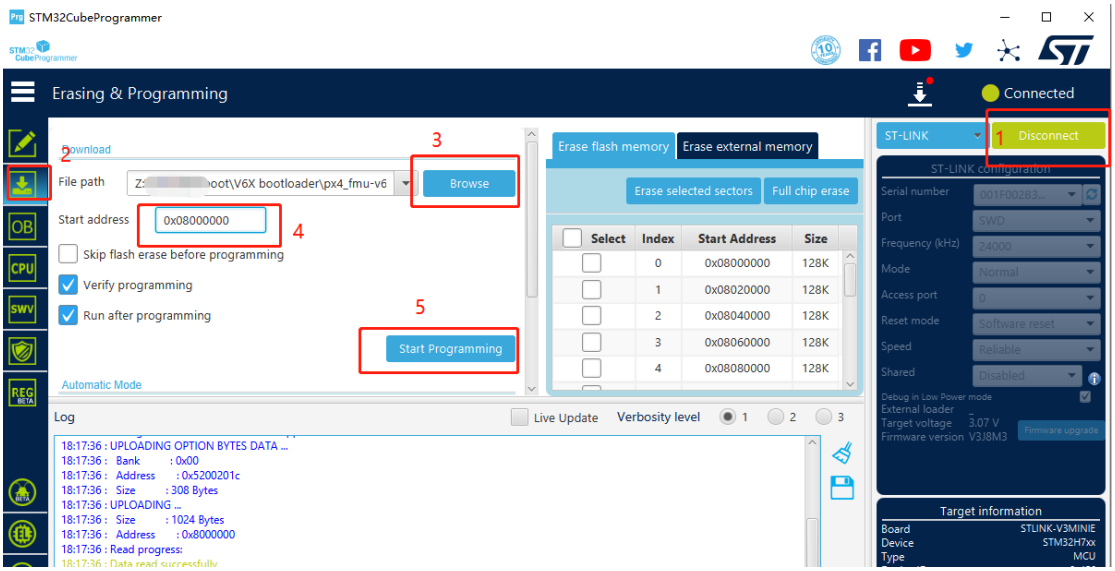
- Power the device

三、 Use guide

Load firmware/bootloader

Take loading Pixhawk v6x bootlader as an example.

After the hardware is connected, Open the STM32CubeProgrammer



- Select the connection method ST-LINK

- Click: “Connect”

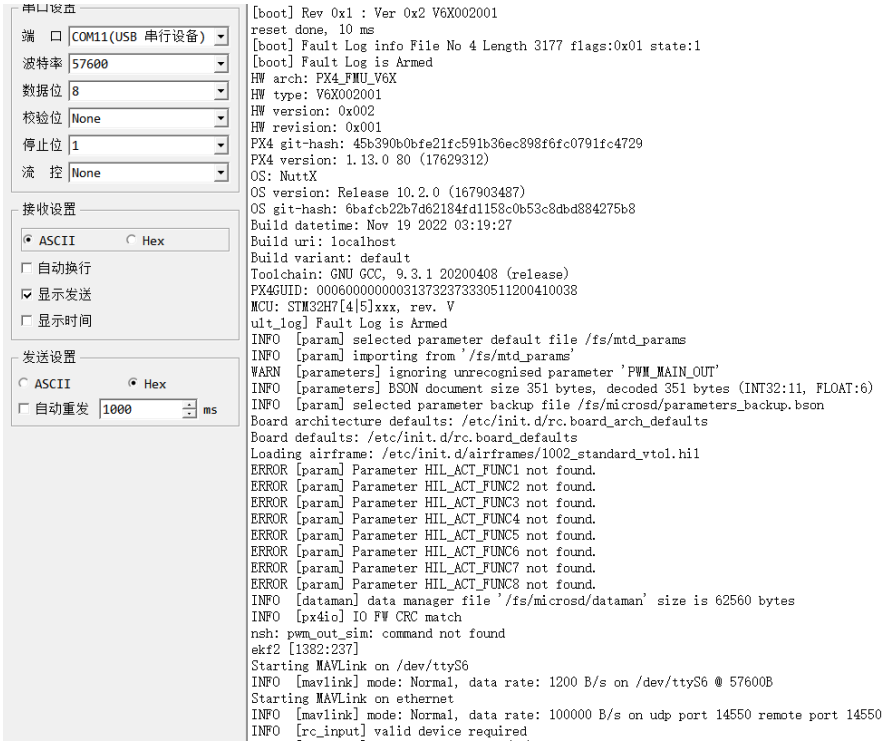
- Get CPU information details

- Click on 'Browse' to select the file

- Initially the address is 0x08000000

- Click "start Programming" to write the bootloader file to the device.

Print debug information



After connecting the hardware, set the port and baud rate, start the device, and the serial

port debugging tool can output debugging information and send debugging instructions.

四、 Product list

- STLINKV3 MINI*1
- C-ADB*1
- SC Cable*1
- Debug Cable*1
- Dsu Cable*1

五、 Product parameters

Name	C-ADB
Power	Debug:3.3V DSU:5V(Convert 5V to 3.3v)
Port	Pixhawk 10Pin Debug port DSU 6Pin Debug port