

XGO 主控板烧录说明

Jlink

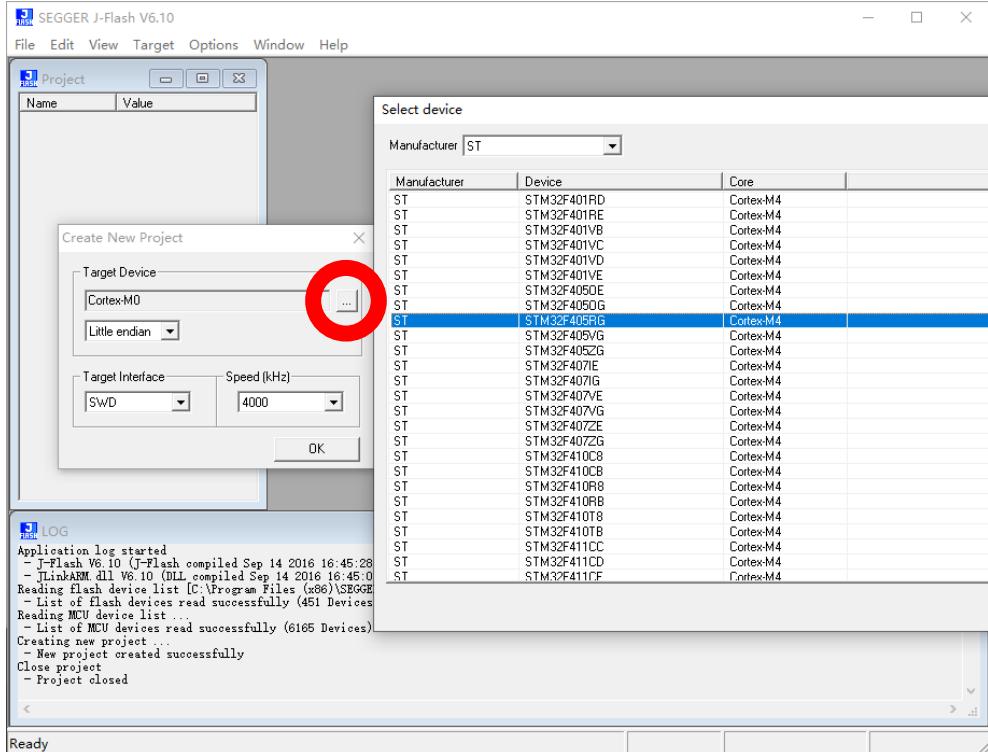
使用 J-FLASH 软件进行烧录

1、首先将 jlink 上的 3V3、SWDIO、SWCLK、GND 与主板上相对应的针脚

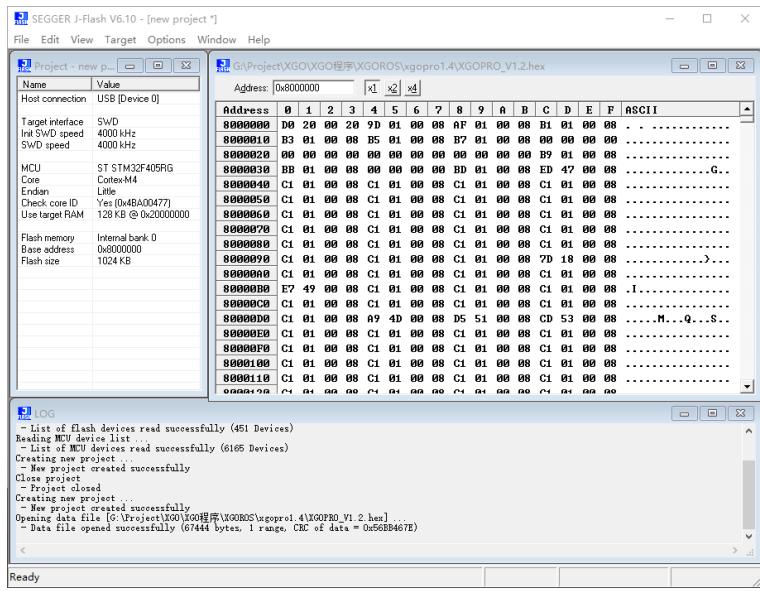
链接。注意线序！插反了有可能会烧毁芯片！



2、打开 JFLASH，新建工程，点击 Target Device 右侧按钮，在新窗口中选择 STM32F405RG 系列

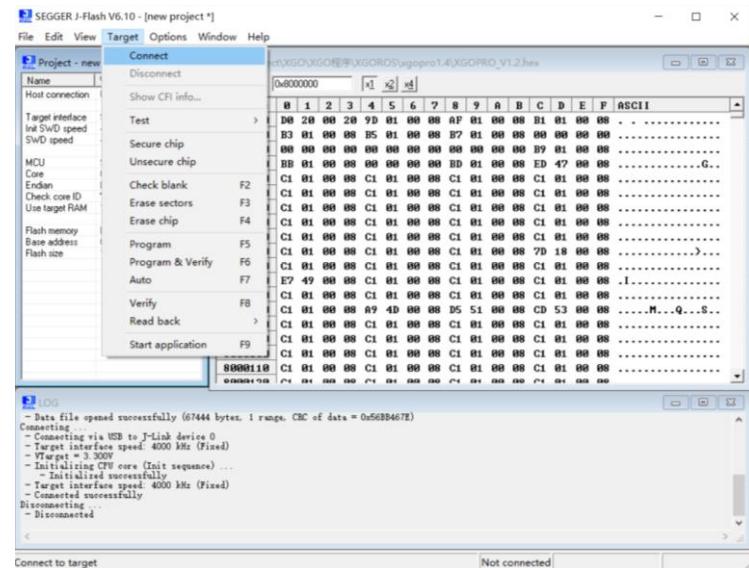


3、将 hex 文件拖入软件页面中



4、点击 Target->Connect 链接主板，若连接成功，下方会提示 Connected

Successful。若失败请检查下载工具与主板是否松动。



```

Connecting ...
- Connecting via USB to J-Link device 0
- Target interface speed: 4000 kHz (Fixed)
- VTTarget = 3.300V
- Initializing CPU core (Init sequence) ...
  - Initialized successfully
- Target interface speed: 4000 kHz (Fixed)
- Connected successfully
Disconnecting ...
Disconnected

```

5、点击 Target->Auto，完成烧录

如果没有 Auto 就 manualprogramming->Program&Verify 也可以烧录

SEGGER J-Flash V6.10 - [new project *]

File Edit View Target Options Window Help

Project - new

Connect
Disconnect
Show CFI info...
Host connection:
Target interface: SWD
Init SWD speed: 4000 kHz
SWD speed: 4000 kHz
MCU: ST STM32F405RG
Core: CortexM4
Endian: Little
Check core ID: Yes (0x4BA00477)
Use target RAM: 128 KB @ 0x20000000
Flash memory: Internal bank 0
Base address: 0x80000000
Flash size: 1024 KB

Address: 0x8000000

0 1 2 3 4 5 6 7 8 9 A B C D E F ASCII

| Address | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F | ASCII |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 0x000000 | D8 | 20 | 00 | 20 | 9D | 01 | 00 | 08 | AF | 01 | 00 | 08 | B1 | 01 | 00 | 08 | . |
| 0x000010 | B3 | 01 | 00 | 08 | B5 | 01 | 00 | 08 | B7 | 01 | 00 | 08 | 00 | 00 | 00 | 00 | . |
| 0x000020 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | BD | 01 | 00 | 08 | ED | 47 | 00 | 08 | . |
| 0x000030 | BB | 01 | 00 | 08 | 00 | 00 | 00 | 00 | BD | 01 | 00 | 08 | C1 | 01 | 00 | 08 | G. |
| 0x000040 | C1 | 01 | 00 | 08 | . |
| 0x000050 | C1 | 01 | 00 | 08 | . |
| 0x000060 | C1 | 01 | 00 | 08 | . |
| 0x000070 | C1 | 01 | 00 | 08 | . |
| 0x000080 | C1 | 01 | 00 | 08 | . |
| 0x000090 | C1 | 01 | 00 | 08 | . |

Start application F9

LOG

- ERROR: Can not connect to J-Link via USB.
- ERROR: Failed to connect.
- Could not establish a connection to the J-Link.
- Connecting...
 - Connecting via USB to J-Link device 0
 - Target interface speed: 4000 kHz (Fixed)
 - Vtarget = 3.300V
 - Initializing CPU core (Init sequence) ...
 - Initialized successfully
 - Target interface speed: 4000 kHz (Fixed)
 - Connected successfully

Erase, program and verify target

Connected Core Id: 0x2BA01477 Speed: 4000 kHz

SEGGER J-Flash V6.10 - [new project *]

File Edit View Target Options Window Help

Project - new p...

Host connection: USB [Device 0]

Target interface: SWD
Init SWD speed: 4000 kHz
SWD speed: 4000 kHz
MCU: ST STM32F405RG
Core: CortexM4
Endian: Little
Check core ID: Yes (0x4BA00477)
Use target RAM: 128 KB @ 0x20000000
Flash memory: Internal bank 0
Base address: 0x80000000
Flash size: 1024 KB

Address: 0x8000000

0 1 2 3 4 5 6 7 8 9 A B C D E F ASCII

| Address | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F | ASCII |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------|
| 0x000000 | D8 | 20 | 00 | 20 | 9D | 01 | 00 | 08 | AF | 01 | 00 | 08 | B1 | 01 | 00 | 08 | . |
| 0x000010 | B3 | 01 | 00 | 08 | B5 | 01 | 00 | 08 | B7 | 01 | 00 | 08 | 00 | 00 | 00 | 00 | . |
| 0x000020 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | BD | 01 | 00 | 08 | ED | 47 | 00 | 08 | . |
| 0x000030 | BB | 01 | 00 | 08 | 00 | 00 | 00 | 00 | BD | 01 | 00 | 08 | C1 | 01 | 00 | 08 | G. |
| 0x000040 | C1 | 01 | 00 | 08 | . |
| 0x000050 | C1 | 01 | 00 | 08 | . |
| 0x000060 | C1 | 01 | 00 | 08 | . |
| 0x000070 | C1 | 01 | 00 | 08 | . |
| 0x000080 | C1 | 01 | 00 | 08 | . |
| 0x000090 | C1 | 01 | 00 | 08 | . |

J-Flash V6.10

Target erased, programmed and verified successfully - Completed after 3.656 sec

LOG

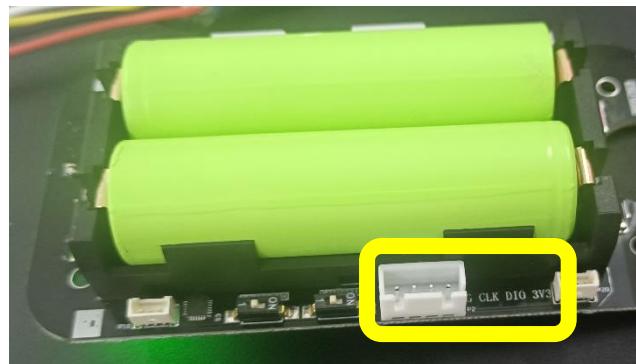
- End of flash programming
- Flash programming performed for 2 ranges (131072 bytes)
- 0x8000000 - 0x800FFFF (004 Sectors, 64 KB)
- 0x8010000 - 0x801FFFF (001 Sectors, 64 KB)
- Start of verifying flash
- End of verifying flash
- Start of restoring
- End of restoring
- Initialized CPU core (Exit sequence) ...
 - Initialized successfully
- Target erased, programmed and verified successfully - Completed after 3.656 sec

Ready

Connected Core Id: 0x2BA01477 Speed: 4000 kHz

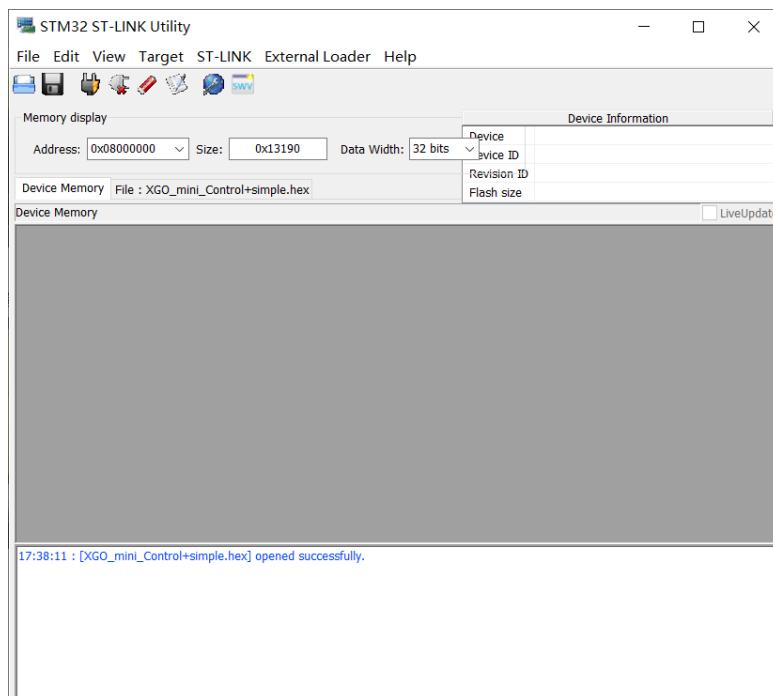
STLINK

①首先安装 ST-LINK Utility。

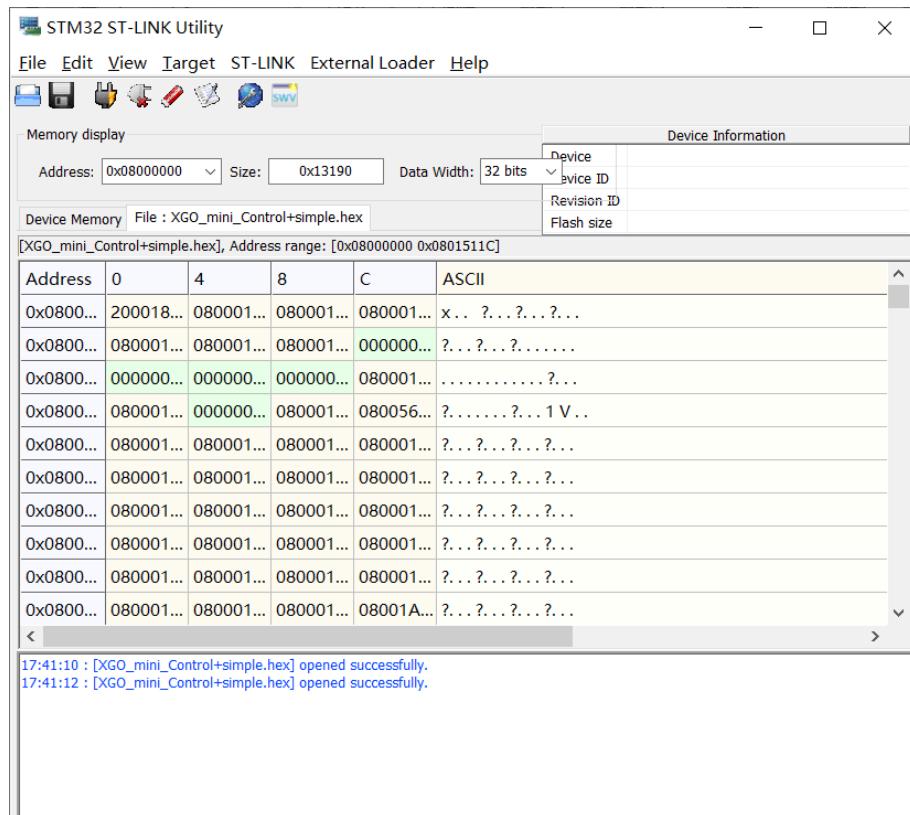


②然后将 STLINK 上的 3V3、SWDIO、SWCLK、GND 与主板上相对应的针脚链接。

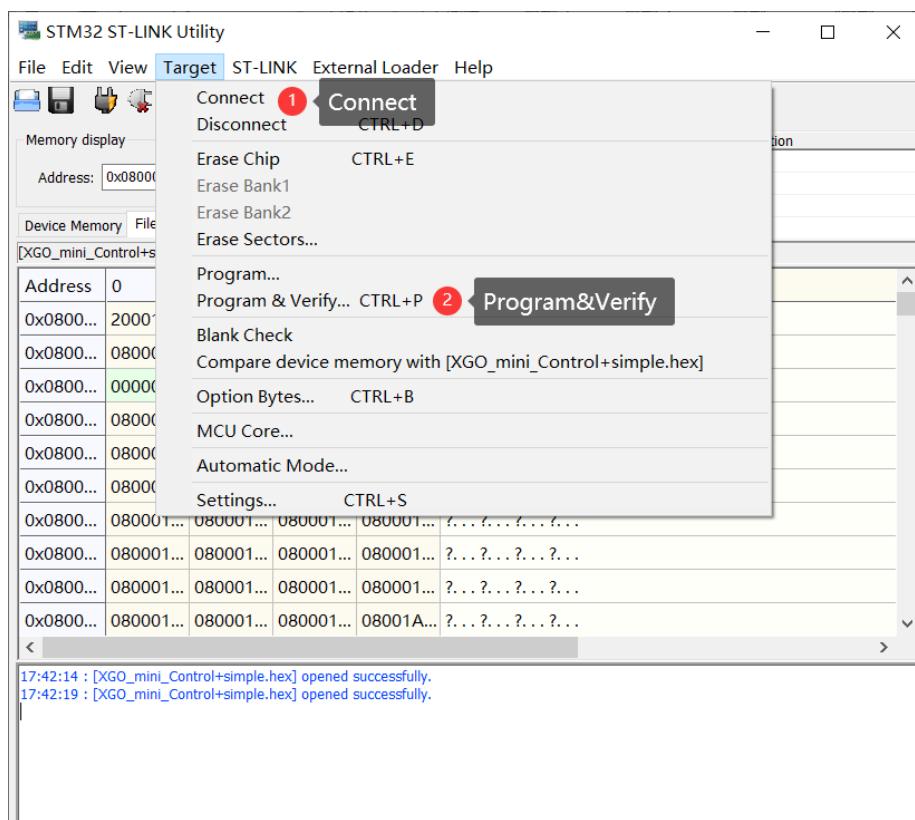
③打开 ST-LINK Utility



④将 hex 文件拖入灰色区域

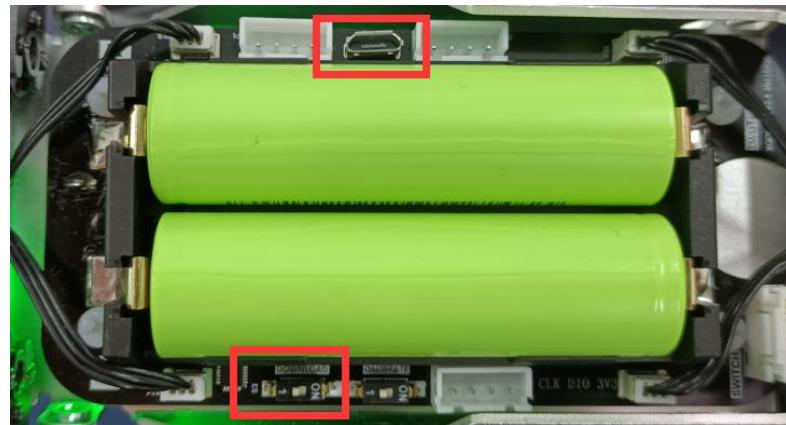


⑤在上方点击 Target -> Connect, 再点击 Target -> Program&Verify



USB 烧录指南

- ①拆下外壳，但不要拔掉开关
- ②把下载拨码拨到 ON 的位置，插上 USB 数据线与电脑连接



- ③打开 FLYMCU，操作如下图所示



- ④装好外壳
- ⑤使用 USB 烧录需要进行标定