# **Software Instructions for MicroBCI**

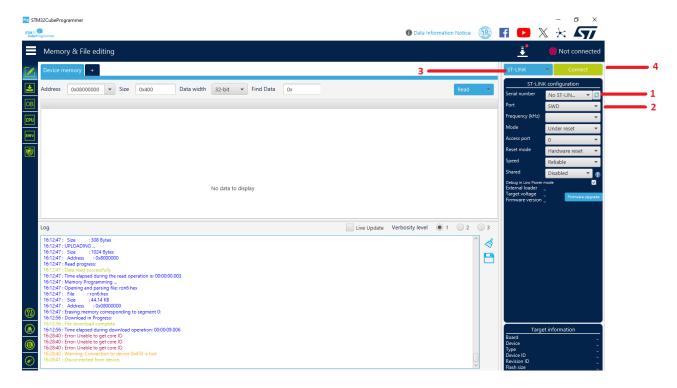


- 1. Connect Nucleo Board via micro USB (right USB port)
- 2. Install Software M32CubeProgrammer for Windows 64

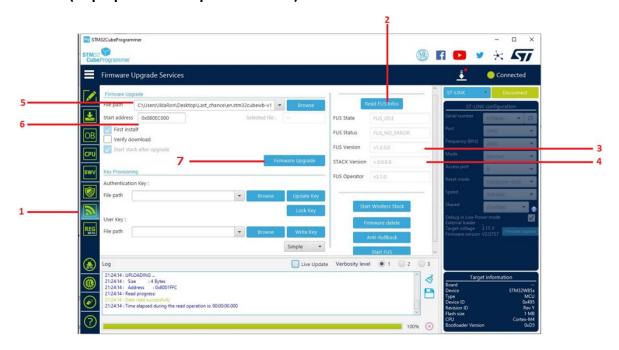
Software can be uploaded via the Official website of STM32 https://www.st.com/en/development-tools/stm32cubeprog.html

## 3. STM32CubeProgrammer

- 1 The ST-Link should be recognized (if not need to check drivers)
- 2 Port Should be **SWD**
- 3 ST-Link should be choose here
- 4 Connect device



## 4. Upload Stack (to prepare Board operate via BLE)



- 1 Open FUSE window in STM32CubeProgrammer
- 2 Read FUS Infos
- 3 Confirm Version of FUS version (v1.2.0.0 or V1.3.00)
- 4 Confirm that device has Stack Version (not 0.0.0.0)
- 5 Browse and indicate Path for Stack <a href="mailto:stack\_full\_fw.bin">stm32wb5x\_BLE\_Stack\_full\_fw.bin</a>

File location – https://github.com/pieegclub/MicroBCI/blob/main/Framework/stm32wb5x\_BLE\_Stack\_full\_fw.bin

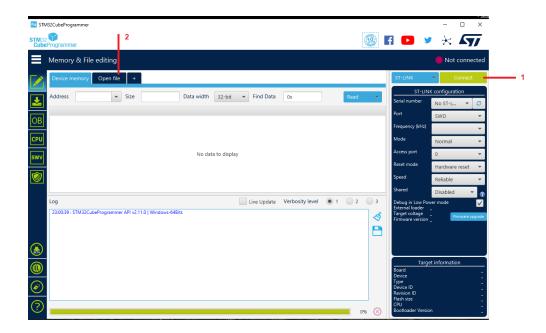
6 – Write address 0x080CE000

## 5. Upload Hex. File 1.Micro\_BCI.hex

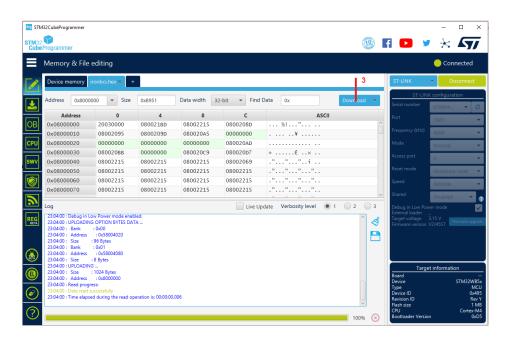
File from GitHub

https://github.com/pieeg-club/MicroBCI/blob/main/Framework/Micro\_BCI.hex

- 1 Connect software to device
- 2 Open Hex file (Location of .hex file)



3 – Upload .hex file to device



### 1. Test device

**Install Mobile App for android SDK or Python SDK** 

Mobile SDK https://github.com/pieeg-club/MicroBCI/tree/main/Mobile\_SDK Python SDK https://github.com/pieeg-club/MicroBCI/tree/main/SDK/GUI