

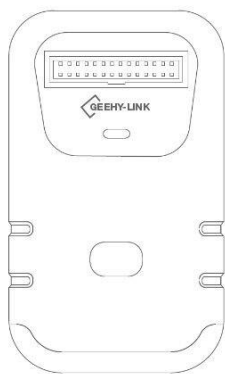
User Manual

GEEHY-LINK

Version: V1.2

1. Overview

GEEHY-LINK(Figure 1) is an all-in-one emulator and programmer for online debugging and emulation of APM32 full series MCUs under Keil IDE. It supports full-speed operation, single-step debugging, breakpoint setting, and other debugging methods.



(Figure 1)

TVCC	1 . . 2	TVCC
TRST	3 . . 4	UART-RX
TDI	5 . . 6	UART-TX
TMS/SWIO	7 . . 8	BOOT0
TCK/SWCLK	9 . . 10	NC
NC	11 . . 12	GND
TDO	13 . . 14	NC
RESET	15 . . 16	KEY
NC	17 . . 18	GND
NC	19 . . 20	GND

(Figure 2)

2. Port Description

GEEHY-LINK provides a 20PIN port for customer use. The customer can connect to the target board through the port to complete the corresponding operation. The number and definition of the 20 pin port are shown in Figure 2.

3. Performance

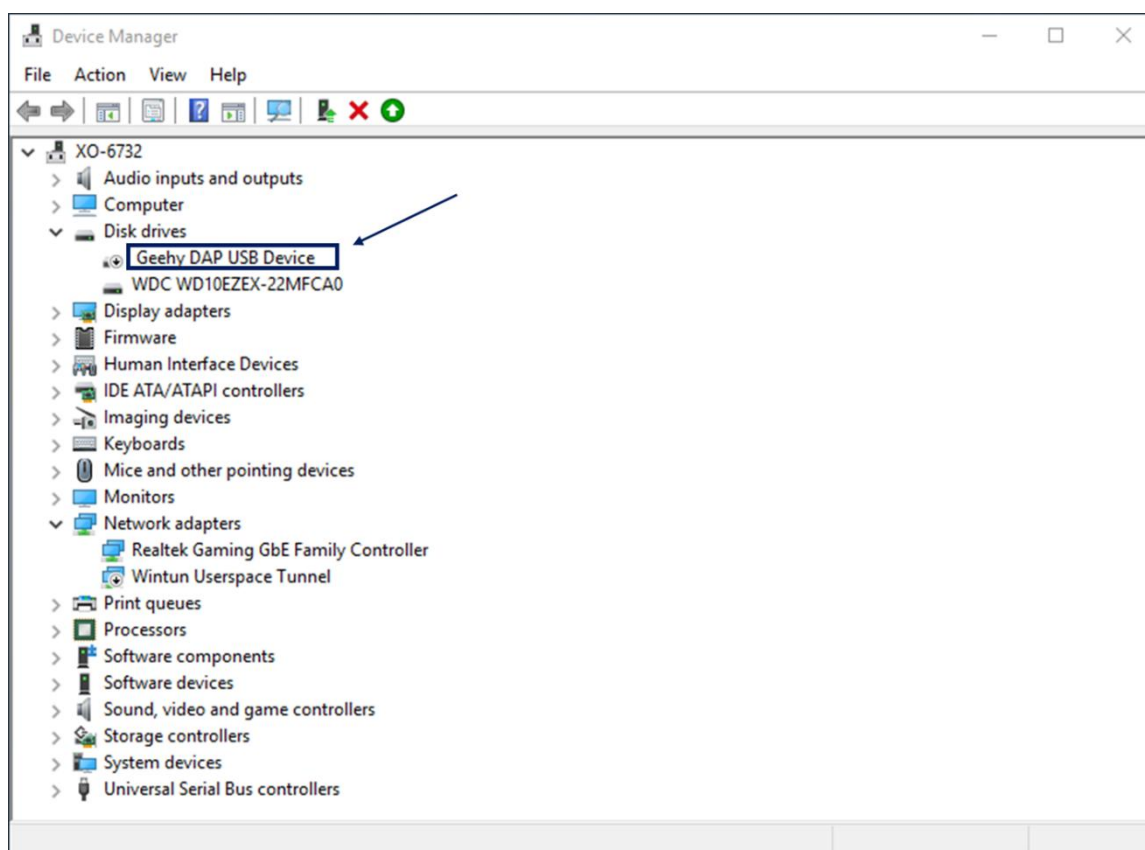
- Support Windows7/8/10 without drives
- Support APM32 full series MCU programming
- Support both SWD and JTAG programming
- Power target board via a control button
- High-speed USB provides a power supply

4. Electrical Parameters

- Input voltage: 5V Input current $\geq$ 500mA
- Output voltage: 3.3V Output current $\leq$ 350mA

5. Instruction

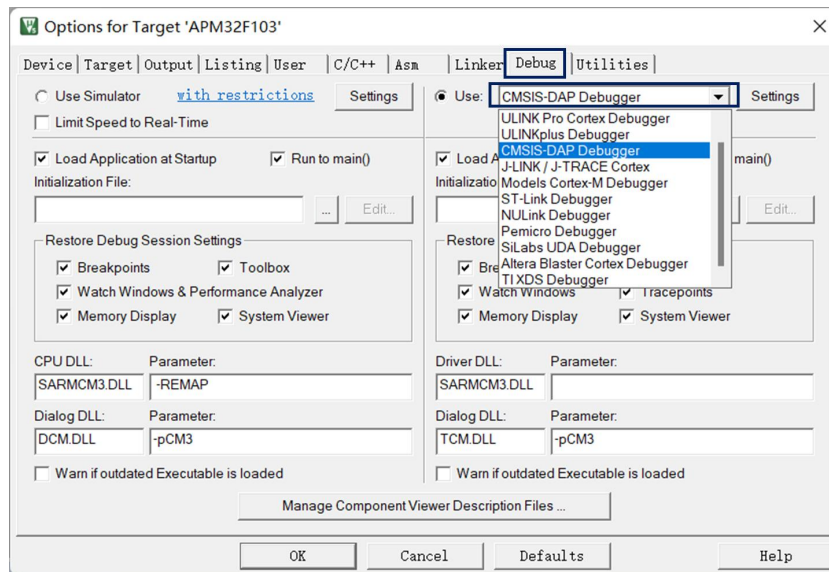
- 1) Connect GEEHY-LINK to the computer with a USB cable and the Device Manager will appear on Geehy DAP USB Device as shown in Figure3:



(Figure 3)

- 2) The power supply of the target board can be controlled by the keys on the tool. The tool is not powered in the default state. Press and hold the button for 3s, the red light will be on to power the target board; Press and hold the button again for 3s, the red light will be off to stop the power supply.
- 3) Choose to use SWD or JTAG on Keil.

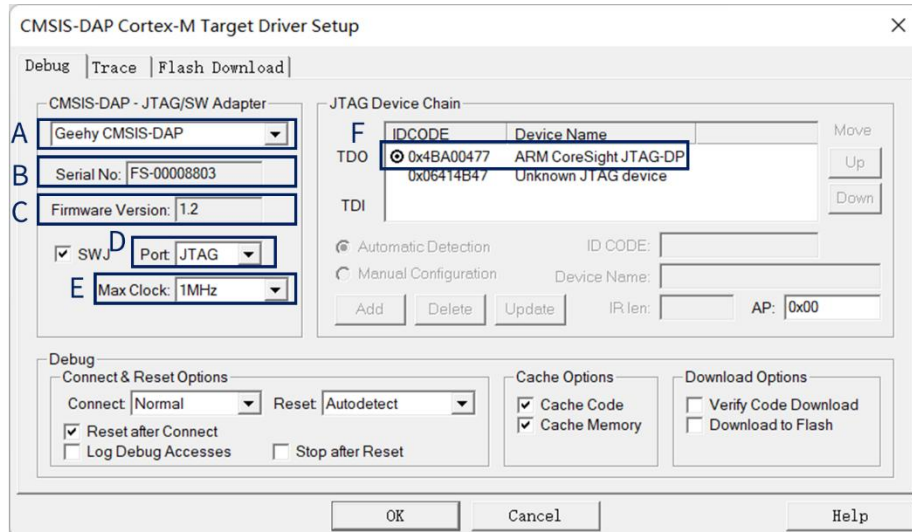
- a) Click “Debug” on the “Options for Target”  interface and then select “CMSIS-DAP Debugger” as shown in Figure 4:



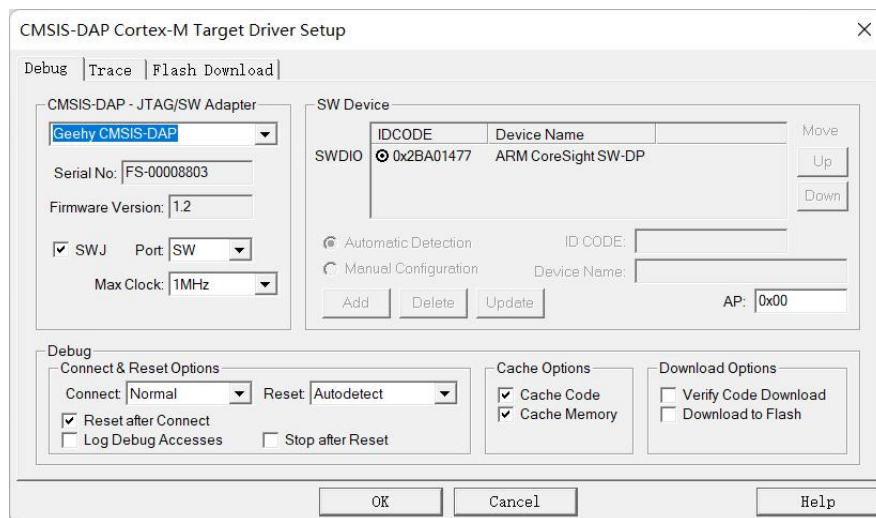
(Figure 4)

- b) Click “Settings” to select mode(SWD or JTAG) and frequency, as shown in Figures 5 and 6:

- A : Emulator name
- B : Emulator serial number
- C : Emulator firmware version
- D : SWD and JTAG selection (only Keil version V5.22 or above supports JTAG)
- E : Maximum frequency: 10M
- F : IDCODE is displayed after a successful connection to the target board.

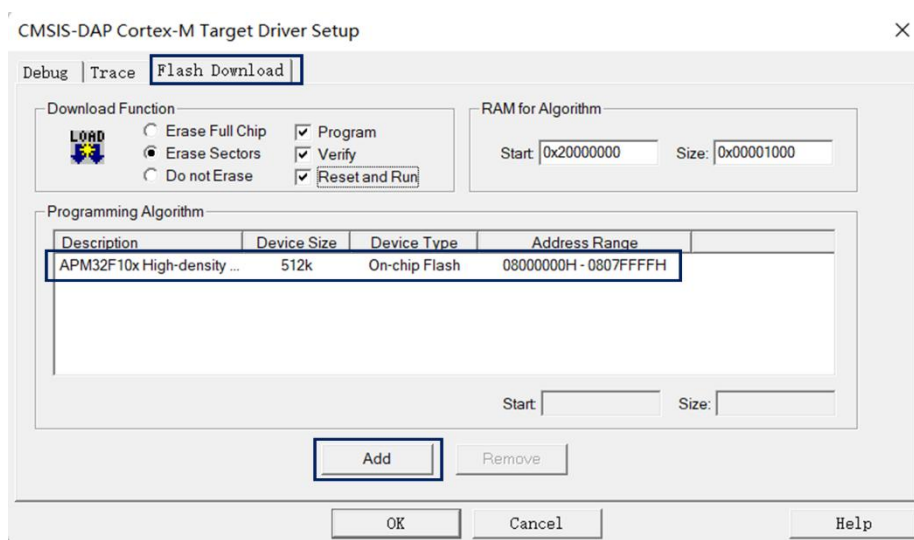


(Figure 5)



(Figure 6)

- 4) Enter the "Flash Download" interface and select "Programming Algorithm". Click the "Add" button and add the corresponding Flash, as shown in Figure 7.



(Figure 7)