

FAQ0098

Frequently Asked Questions

AT-Link/AT-Link-Pro Features

Questions: AT-Link/AT-Link-Pro features

Answer:

Note: For full details on AT-Link/AT-Link-Pro, please refer to ICP and AT-Link user manuals available from ARTERY official website.

AT-Link/AT-Link-Pro main features:

- 1. Support online debugging, online and offline code download
- 2. Store up to 16 offline codes, 1/2/4/8/16 (number of area) configurable

For example, if there are multiple codes to program during production, users just need activate the to-be-programmed codes without the need of reloading operation.

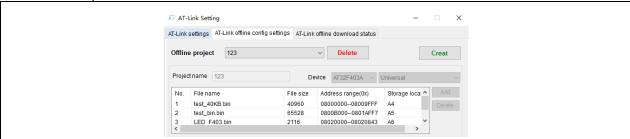


3. AT-Link-Pro comes with a touch screen through which users can activate code and change machine interfaces by touching operation



4. It supports downloading several codes, and saving up to 5 codes, in a single operation

For example, it is possible to programming IAP, APP and user system data simultaneously to save time; IAP represents user-developed Bootloader.

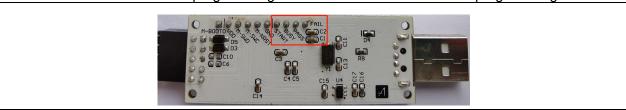




5. Users can set security library (sLib) in AT32 MCU to protect core algorithms

For sLib user guide, please visit and download it in ARTERY official website.

6. AT-Link/AT-Link-Pro offers machine programming control interfaces for auto code programming

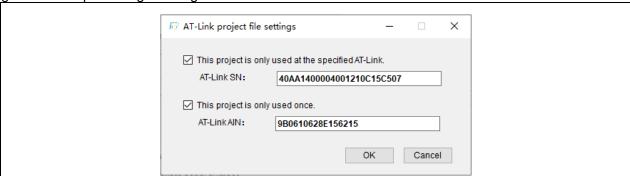


- 7. AT-Link/AT-Link-Pro supports button-free offline download, without the need of pressing button for each download, as its programming interfaces can be connected to MCU for auto downloading.
- 8. This tool, together with Hex encryption function of AT32 MCU, can achieve encrypted transfer for offline download.



9. It offers an option "This project is only used once", meaning that a file is only applicable to a given programmer and can only be used one time.

When using ARTERY ICP to generate an encrypted benc/henc/senc from original bin/hex/srec, users can choose "This project is only used at the specified AT-Link", each AT-LINK has its unique serial number. This feature is very useful when a developer and factory are located in different locations, as this function saves time of loading code while protecting code against disclosure.



10. It supports two interfaces, SWD and ISP, for download,

ISP uses UART and bootloader embedded in MCU for programming, and BOOT0 must be set high when programming.

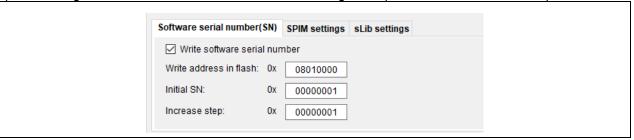


11. It supports programming external memoery, such as SPIM Flash.

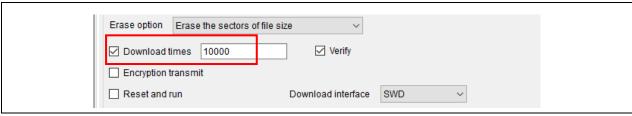
| Software serial number | r(SN) SPIM settings | sLib settings |
|------------------------|---------------------------------------|---------------------------------------------------------|
| SPIM size: | W25Q128V V 16MB V (0x) 00000000 | Remap0 (Use PA11/PA12 pins) Remap1 (Use PB10/PB11 pins) |



12. It supports writing serial number in blank Flash area, offering a unique serial number to each product.



13. Download times are settable.



Type: Development tool

Applicable products: AT32 Family **Main function:** AT-Link, AT-Link-Pro

Other function: None



Document revision history

| Date | Revision | Changes |
|------------|----------|-----------------|
| 2022.2.24 | 2.0.0 | Initial release |
| 2022.12.28 | 2.0.1 | Update figures |



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