

GigaDevice MCU Team	Version	8 Pages
	English V 1.0	
	Name : GigaDevice MCU ISP Programmer User Manual	

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Directory

GigaDevice MCU ISP Programmer User Manual	1
1. Introduction	3
1.1 Purpose	3
1.2 Target Customers	3
1.3 Jargon and Contraction	3
2. The Sketch of ISP Programmer	3
2.1 Application	3
2.2 Running.....	4
2.3 Configuration.....	4
3. Using Details	4
3.1 Installment	4
3.2 Flowchart of Operation.....	5

1. Introduction

This user manual describes an application used to operate the flash or config GigaDevice MCUs with available USART peripheral. ISP programmer is a tool for the user to use MCUs with UI easily.

With ISP programmer, user can download the application program to the internal flash memory or secure chip and so on.

1.1 Purpose

Besides a perfect stage for users to download application program easily, ISP programmer also aims to provide wonderful and creative experience. The description was edited for a better service.

1.2 Target Customers

ISP programmer was developed for users who need download application program UI.

1.3 Jargon and Contraction

- **ISP:** ISP is short for In System Program, which means users can download codes without removes MCU from the PCB.
- **USART :** Universal Synchronous Asynchronous Receiver Transmitter. It is a full-duplex synchronous/asynchronous serial transceiver module, the interface is a highly flexible serial communication equipment.

2. The Sketch of ISP Programmer

2.1 Application

ISP Programmer is n application used to operate the flash or config GigaDevice MCUs convenient.

2.2 Running

This software is running on PC and compatible computers, and on platforms of WINDOWS. There's no need to setup the software, the only thing you need to do is to click the icon to operate the software.

2.3 Configuration

Software Requirements : Chinese or English Windows XP, Windows 7 and advanced operation systems.

Hardware Requirements: Available com port.

3. Using Details

3.1 Installment

If you want to use this software, you shouldn't worry about the installment. It is very easy for everyone. When you get the document, you just have to decompress the document, and find out the document named GD32 MCU ISP Programmer.exe (As shown in chart 1) and place it in a file for your convenience. Then click the icon, open it and you are welcome to run it.

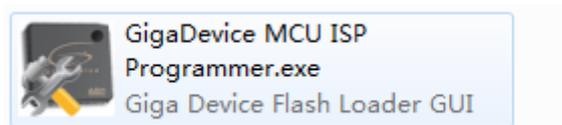


Chart 1

3.2 Flowchart of Operation

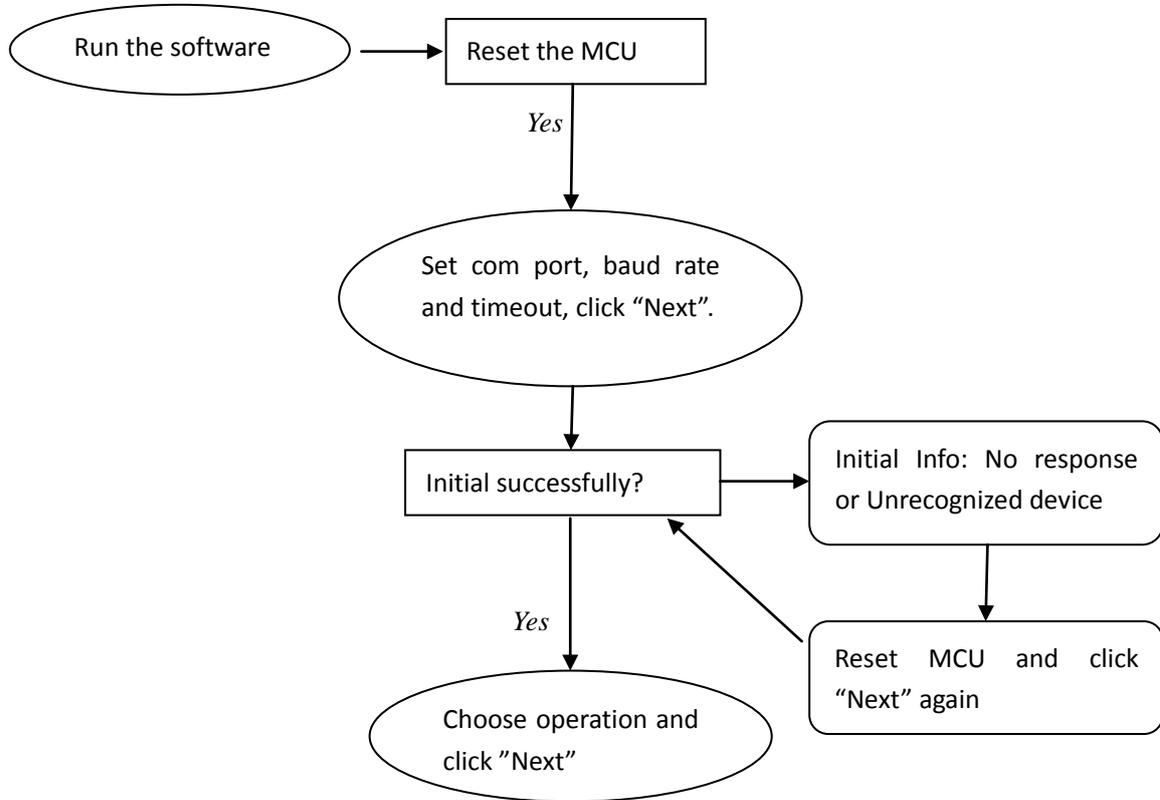


Chart 2

3.2.1 Readout Protection status

Chart 3 shows the readout protection status, user needs to click “Remove Protection” first if the MCU is set readout protection, then wait for MCU removing protection to do the next.



Chart 3

3.2.2 Flash Detail and Bootloader version

This page shows the Flash status and part No. (As shown in chart 4).

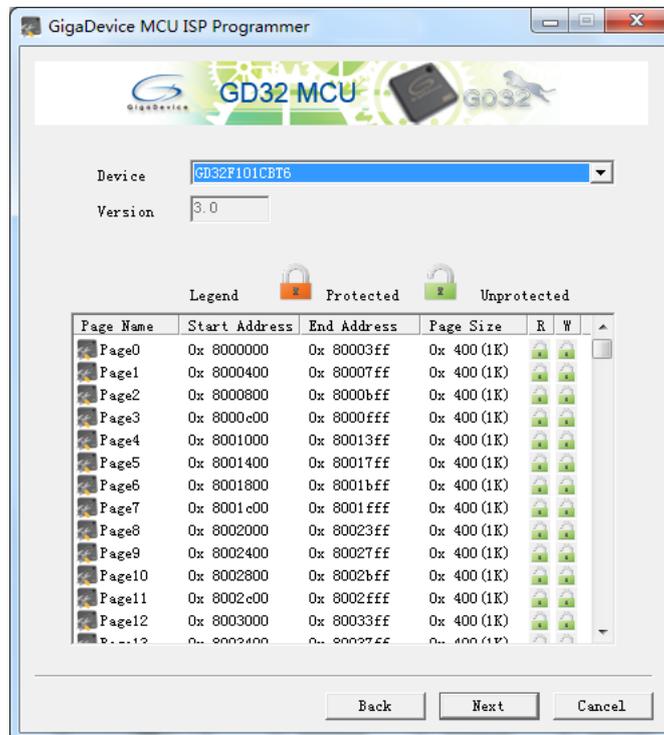


Chart 4

3.2.3 Operation Selection

This page includes erase flash, download and upload from flash and config option bytes (As shown in chart 5).

Option “All” can erase all the flash, option “Page Selection” can erase pages which user selected.

Option “Download to Device” allow user to download bin or hex file to MCU. “Optimize” can remove 0xFF at the end of the file. “Download option bytes file” can config option bytes after download app file if user has a 16 bytes option bytes file, just like set readout protection or write protection and so on which function can be configed in option bytes.

Option “Upload from Device” allow user to read data from MCU and save as a bin or hex file.

Option “Enable/Disable Flash Protection” allow user to set/remove read protection or write protection.

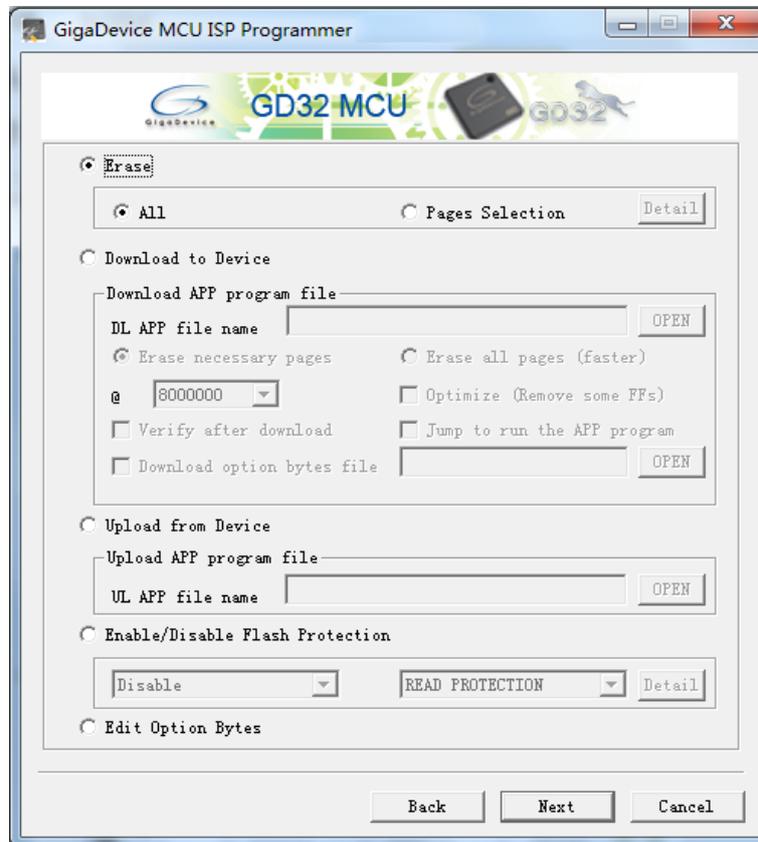


Chart 5

3.2.4 Config Option Bytes

This page allow user to config option bytes with UI(As shown in chart 6).

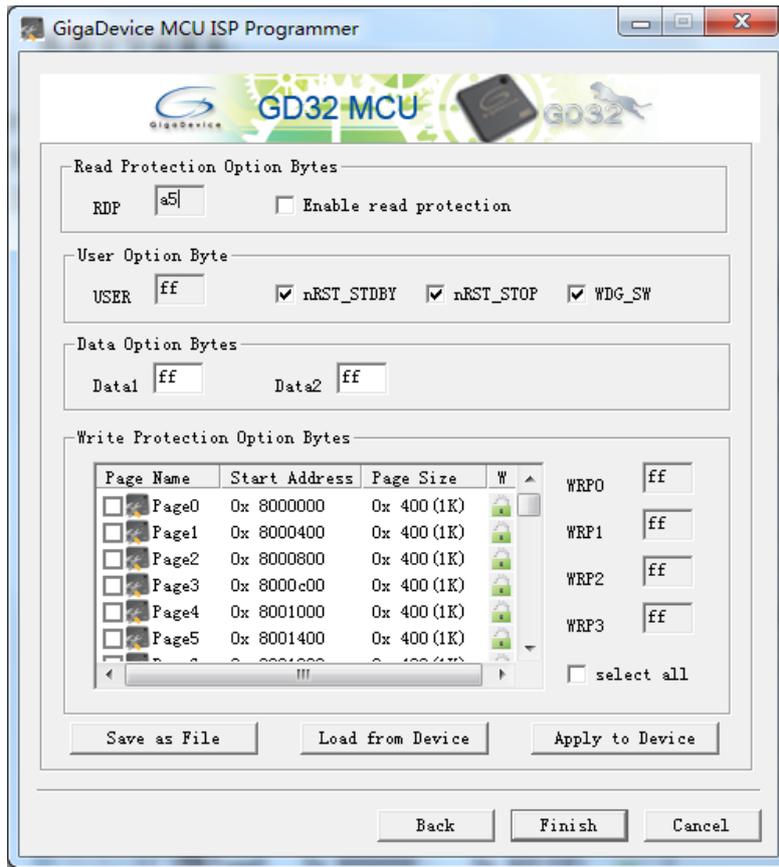


Chart 6