

UM1508 User manual

Programming PY32™ using JFlash Software

Preface

This document describes the installation and use of the JFlash software. This software allows downloading FLASH and OPTION for PY32 microcontrollers by installing plug-ins and working with J-LINK or other DAP-LINK emulators. It supports Program, Erase, Verify, Blank Check, etc.

Table 1: Applicable products

Туре	Product Line				
	py32c610,	py32c611,	py32c640,	py32c641,	py32c670,
Micro controller series	py32f001,	py32f002a,	py32f002b,	py32f003,	py32f030,
	py32f031,	py32f040,	py32f071,	py32f072,	py32f303,
	py32f403, py32l020, py32m010, py32m030, py32m070				

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Software Installation UM1508

1 Software Installation

1.1 Download Software

Download links: SEGGER - The Embedded Experts - Downloads - Flasher

1.2 Installation Software

 $Double\text{-}click\ Flasher_Windows_V766b_x86_64. exe\ and\ follow\ the\ installation\ wizard\ prompts\ to\ complete\ the\ installation.$

1.3 Installing plug-ins

Figure 1.3-1. Unpacking PY32_JFlash_Plugin.rar

	修改日期	类型	大小
Devices	2023/6/27 10:47	文件夹	
JLinkDevices.xml	2023/6/27 10:42	XML 源文件	24 KB
readme.txt	2023/6/27 10:47	文本文档	1 KB

Figure 1.3-2. Copy all files (folders) after unpacking to the JFlash installation directory

	m Files > SEGGER > JLink		
	修改日期	类型	大小
Devices	2023/4/7 17:46	文件夹	
📙 Doc	2023/4/7 17:45	文件夹	
ETC	2023/4/7 17:45	文件夹	
Firmwares	2023/4/7 17:45	文件夹	
GDBServer	2023/4/7 17:45	文件夹	
RDDI	2023/4/7 17:45	文件夹	
Samples	2023/4/7 17:45	文件夹	
USBDriver	2023/4/7 17:45	文件夹	
<mark>⊪</mark> JFlash.exe	2023/3/9 23:30	应用程序	1,600 KB

Hardware Connection UM1508

2 Hardware Connection

Table 2 - 1. J-LINK Connection Schematic

J-LINK	MCU
VCC	VDD
TMS/SWDIO	PA13(SWDIO)
GND	VSS
TCK/SWCLK	PA14(SWCLK)

3 Software Use

3.1 New Construction

Figure 3.1-1. Create new project dialog box click "..." button

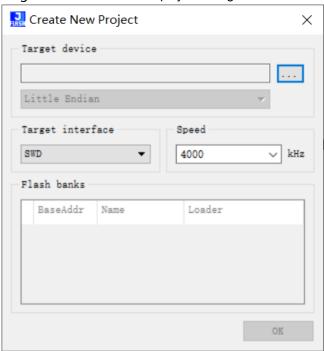
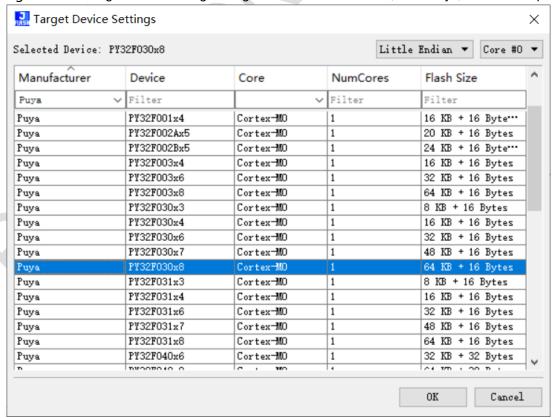


Figure 3.1-2. Target Device Settings dialog boxManufacturer column, enter Puya, select the chip model



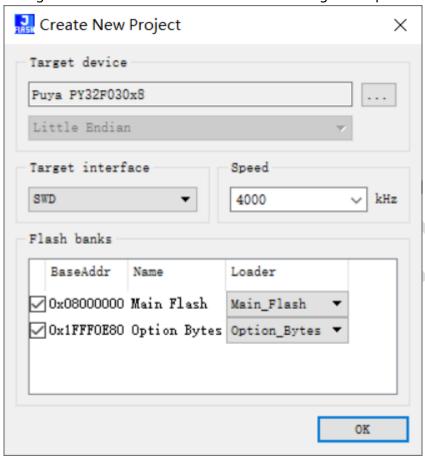
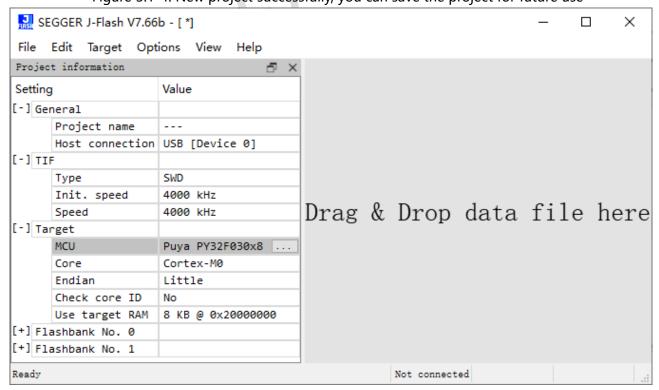


Figure 3.1-3. Click the OK button after selecting the chip model

Figure 3.1-4. New project successfully, you can save the project for future use



3.2 File menu bar

Figure 3.2-1. File menu bar

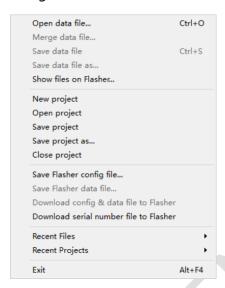


Table 3.2-1. Explanation of File menu bar terms

Name	Function	
Open data file	Open data file	
Merge data file	Merge data files	
Save data file	Save data file	
Save data file as	Save data file as a separate file	
New project	New Construction	
Open project	Open Project	
Save project	Preservation Project	
Save project as	Save Project	
Close project	Close the project	

3.3 Target menu bar

Figure 3.3-1. Target menu bar

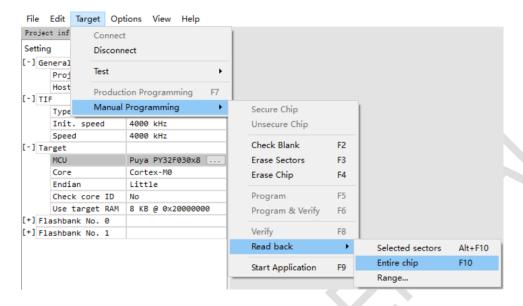
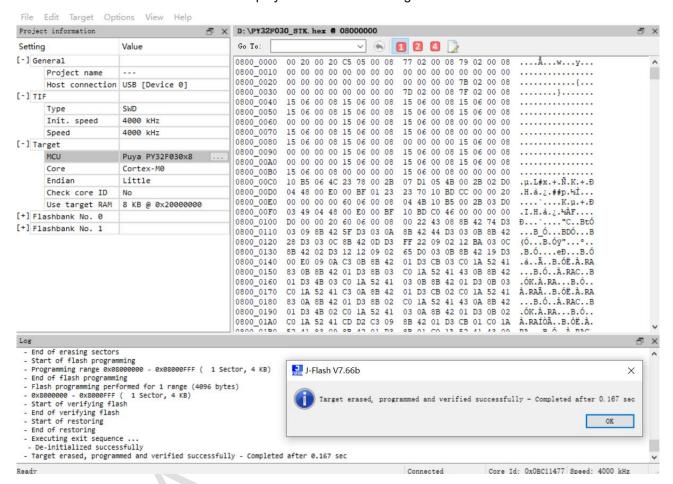


Table 3.3-1. Target menu bar terminology explanation

3 3 1			
Function			
Connecting the target chip			
Disconnection			
Mass production programming (perform erase,			
program, and verify in sequence)			
Chakung			
Erase by sector			
Erase full film			
Programming			
Programming & Calibration			
Calibration			
Read data from the selected sector			
Read full slice data			
Read data from the selected area			
Running applications			

- 3.4 Main Flash Programming
- File menu bar Open data file...opens the compiled data file
- Click on Production Programming in the Target menu bar to start the Main Flash programming.
- A success message pops up when the programming is completed, and the log window displays the success message.

Figure 3.4-1. The success message box pops up when programming is completed, and the log window displays the success message.



- 3.5 Option Byte Programming
- Use PY32OptionBytesConfig software to configure the option and save it as a *.bin format file
- File menu bar Open data file...open the data file you just saved
- Click on Production Programming in the Target menu bar to start executing option byte programming
- A success message pops up when the programming is completed, and the log window displays the success message.

Figure 3.4-1. Using PY32OptionBytesConfig to configure option to be saved as a *.bin format file

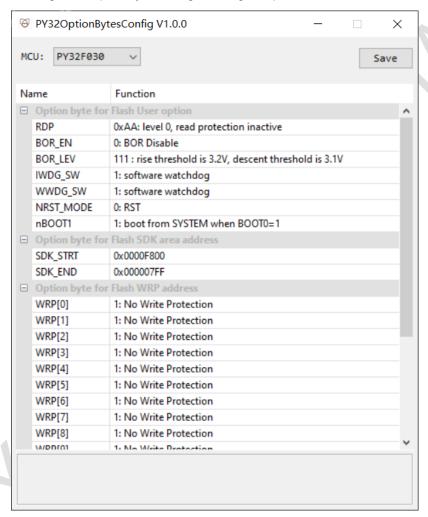
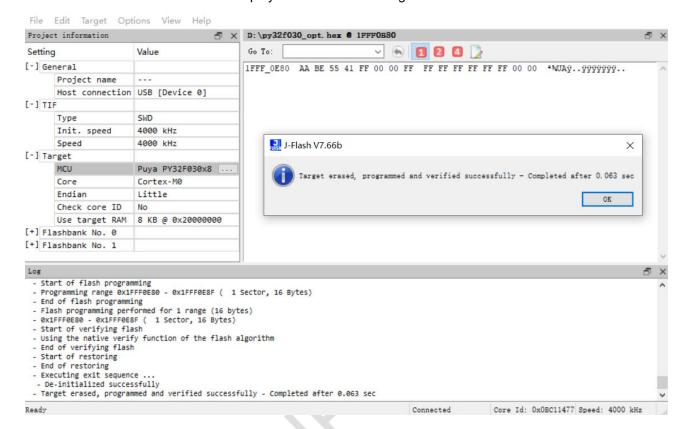


Figure 3.4-2. A success message pops up when programming is completed, and the log window displays the success message.



Version History UM1508

4 Version History

Versions	Date	Update Record
V1.0	2023.6.27	First Edition



Puya Semiconductor Co., Ltd.

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