

# Guide for Unlocking STM32 Chip on Ebyte -SC Series Test Board



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# 1. Chip locked status

## 1.1 Error display

Use ST-Link to connect the chip and burn the program. If the two situations shown in Figure 1 appear first, followed by the situation shown in Figure 2, it means that the chip is locked. Please follow the steps below to unlock it.

	Debu	15 ···* 16 ···*/ 17 ···*/ 18 /*·USER·CODE·EN 19 /*·Includes· 20 #include_"main ugger - Cortex-M Error Elash Timeout. Reset the Target a	*************************************	******
E Project	tes			
Build Output				
Contents mismatch at: 0800010FH Contents mismatch at: 08000110H Contents mismatch at: 08000111H Contents mismatch at: 08000112H Contents mismatch at: 08000113H Too many errors to display ! Error: Flash Download failed - Flash Load finished at 16:36:32 Load "project\\project.axf" Erase Failed! Error: Flash Download failed - Flash Load finished at 16:40:24 Load "project\\project.axf"	(Flash=08H (Flash=BBH (Flash=01H (Flash=00H (Flash=08H "Cortex-M3"	Required=E7H) ! Required=FEH) ! Required=E7H) ! Required=FEH) ! Required=E7H) !		
<				
Erase: 08000000H				



# 2. Software Download

#### 2.1 Installing the Software

The software download link:

https://www.st.com/en/development-tools/stsw-link004.html.

Follow the default steps to install it.

## 2.2 Open the program

If the program is installed in the default path, the program location should be

C:\Program Files (x86)\STMicroelectronics\STM32 ST-LINK Utility\ST-LINK Utility

The steps to open the program are:

1. Open the computer file, enter the address <u>C:\Program Files (x86)\STMicroelectronics\STM32</u> <u>ST-LINK Utility\ST-LINK Utility in the search box</u>, and press Enter to enter this folder, as shown in Figure 3. Double-click the "STM32 ST-LINK Utility.exe " program to enter the program page, as shown in Figure 4.

	es (x86) → STMicroelecti	ronics → STM32 ST-	LINK Utility →	ST-LINK Utility →
名称 ^	修改日期	类型	大小	
ExternalLoader	2024/9/3 15:13	文件夹		
- FlashLoader	2024/9/3 15:13	文件夹		
📓 advapi32.dll	2020/9/23 12:36	应用程序扩展	603 KB	
🗟 comctl32.dll	2020/9/23 12:36	应用程序扩展	603 KB	
ST-LINK_CLI.exe	2020/9/23 12:37	应用程序	406 KB	
📣 ST-LinkUpgrade.exe	2020/9/23 12:37	应用程序	979 KB	
STLinkUSBDriver.dll	2020/9/23 12:37	应用程序扩展	100 KB	
📟 STM32 ST-LINK Utility.exe	2020/9/23 12:37	应用程序	864 KB	
🔤 Windows 8 Compatibility Resolver.bat	2020/9/23 12:37	Windows 批处理	1 KB	

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Address: [bu00000000 v Sze: ] 338523 Data Width: 32 bits v herke Memory   Brary File vice Memory	Device ID Revision ID Flash size
Company days     Company days	Device Device ID Revision ID Flash size

## 3. Unlocking steps

#### 3.1 Detailed steps

In the software, follow the steps shown in Figure 5, first click Step 1, then click Step 2.

After entering, the page shown in Figure 6 appears. Step 1 displays the information of the MCU. Make sure it can be displayed normally. Step 2 changes "Enabled" to " Disabled ", then follow step 3 and click "Apply".

Finally, it will appear as shown in Figure 7, indicating that the unlocking is successful, and then the burning can be carried out normally.

👼 STM32 ST-LINK U	ility					-	-		×
File Edit View Tar	rget ST-LINK Externa	Loader Help							
Memory display Address: 0x0800 Device Memory Bin Device Memory	Connect Disconnect Erase Chip Erase Bank1 Erase Bank2 Erase Sectors Program Program & Verify Blank Check Memory Checksum Target memory comp.	CTRL+D CTRL+E CTRL+P	~	Device Device ID Revision ID Flash size				LiveU	pdate_
	Option Bytes	CTRL+B							
2	MCU Core Automatic Mode Settings								
Disconnected		Device ID :			Core State : No Men	nory Loaded	1		

File       Edit       Yew       Target       ST-LINK: External Loader       jelp         File       Yew	ng STM32 ST-LINK Utility		- 🗆 🗙	Option Bytes			×
Image: State address       Size: State address	File Edit View Target ST-LINK External Loader Help			Read Out Protection	BORLev	el	
Memory digits///       Device STM33F Block Medum density       Perice Display	😑 🖥 🖕 🌾 🔗 🧐 📾			Enabled	2	VUr	iavailable 🗸
Text at least of graph Pie       Device Remory         Device Remory       Device Remory         Device Remory       Graph Pie         Device Remory	Memory display Address: [0x0800000 v Size: 0x1000 Data Width: 32 bits v	Device STM32F10xx Medium-density Device ID 0x410 Revision ID Rev X Flash size Unknown		User configuration op IWDG_STOP WWDG_SW nSRAM_Parity SRAM2_RST	ion byte IWDG_STDBY IWDG_ULP FZ_IWDG_STOP FZ_IWDG_STDBY	nBoot0 nBoot1 nDB00T nDBANK	n800T0 B00T1 nBFB2 n800T_SEL
Product weakly  Product weakl	Device Memory Binary Hie		LiveUpdate	SRAM2_PE	PCROP_RDP	DB1M	DUALBANK
1       Page       Start adders:       Start	Device Memory			nRST_SHDW nRST_STOP nRST_STDBY NRST_MODE	nBoot0_SW_Cfg nSWB00T0 VDDA_Monitor	SDADC12_V	_ BOREN DD_Monitor
Security option fyte:     Security option fyte:     Security option fyte:     Security option fyte:     Bool dates: golds byte:     Bool toon (H)     Bool toon (H)     Dool too (H)     Dool too (H)     Bool toon (H)     Dool too (H)     Dool too (H)     Page     Stat addes: Size Protection     Page     Stat addes: Size     Nertection     Page     Stat addes: Size     State Size     State Size     Nertection     Page     State Size     State Size     Nertection     Page     Sta				NHST_MODE	Unavaliable		
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0x08000020	FFFFFFF	FFFFFFF	FFFFFFF	FFFFFFF				
0x08000030	FFFFFFF	FFFFFFF	FFFFFFF	FFFFFFF				
0x08000040	FFFFFFF	FFFFFFF	FFFFFFF	FFFFFFF				
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