Unlock MSPM0

MSPM0 team



Method 0: Make device enter BSL

- Hardware connection (based on XDS110)
- Step 0: Use a DuPont cable to connect the GND, DIO, and CLK on one side of the burner to the target board.
- Step 1: Power down the MCU (unplug the power cord of the burner).
- Step 2: Pull PA18 up. Press the PA18 button on Launchpad to ensure that the jumper cap is secure.
- Step 3: Power on the MCU (plug in the power cord of the burner).
- Step 5: Burn within 10 seconds without releasing PA18. No, look at method1.



- Hardware connection (based on XDS110)
- Step 1: Remove the jumper cap.
- Step 2: Use a DuPont cable to connect the GND, 3.3V, DIO, CLK, and RST on one side of the burner to the target board. (If using launchpad, there is no need to do Step1,2).



- Software steps (based on CCS)
 - Step1: Open Target Configurations
 - 😚 CCS_Misc Code Composer Studio Eile Edit View Navigate Project Bun Scripts Window Help Resource Explorer 100 Resource Explorer Offline Project Getting Started emp al CCS App Center GUI Composer" - 5 Project Explorer Problems Alt+Shift+Q.X Console Alt+Shift+Q.C O Advice 🏂 Debug Memory Browser IIII Registers 60 Expressions 04- Variables Alt+Shift+Q.V Disassembly Alt+Shift+Q.B Breakpoints Modules Terminal Scripting Console Target Configurations Outline Alt+Shift+Q.O Stack Usage Memory Allocation Optimizer Assistant Alt+Shift+Q.Q Other...

 Step2: Find the ccxml file for the corresponding project

type filte	text			
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✓ 😂	empty_LP_MSPN	M0G3507_no	rtos_ticlang	
~	targetConfigs	5		
	E MSPMUGS	SU/.ccxmi		
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- Software steps (based on CCS)
 - Step3: Click on launch

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* 🔁 * 1	Projects empty_LP_M targetCor	ISPM0G3507_n hfigs 0G3507.ccml	ortos_ticlang
6	<u>New Target</u>	Configuration et Configuratio	n
3	Celete Rename		Delete F2
S.	Refresh	Launch	Selected Configuration
*	Launch Sele	cted Configure	ition
	<u>S</u> et as Defau Link File To [lt <u>P</u> roject	>
	P roperties		Alt+Enter

- Step4: Show all cores

‡ Debug ×				
SPM0L1306.ccxml [Code Composer Studio - Device Debugging]				
📌 Texas Instruments XDS110 USB Debug Prob	CO N	PTEV_MOD (Disconnected - Unkr	nown)	
		Connect Target	Ctrl+Alt+C	
		Disconnect Target	Ctrl+Alt+D	
		Enable Global Breakpoints		
		Enable Halt On Reset		
		Enable OS Debugging		
		Open GEL Files View		
		Code Analysis	>	
le hal_adc.c le EM_userConfig.c le Gauge_Us	s	SoC Analysis	>	
1 #include <driver.h></driver.h>	×	Hide core(s)		
3//#define ENABLE LOW POWER		Show all cores		
4		Group core(s)		
5 extern sStatus SysStatus;		Svnc aroup core(s)		

• Software steps (based on CCS)

- Step5: Connect DAP (If not work, please choose method2)



- Step6: Mass erase



oser Studio - Device Debugging]



- Software steps (based on CCS)
 - Step7: if see this on Console interface, press the reset button of XDS110.









- Software steps (based on CCS)
 - Step8: Console prompts, click pause, click debug, and burn the code again.





- Software steps (based on CCS)
 - Step9: If this error occurs, select Force Reset while ensuring a reset connection. Successfully connected.



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- v i uart_IRDA_MSPM0L1306_nortos_ticlang [Code Composer Studio Device Debugging]
 - 🗸 🧬 Texas Instruments XDS110 USB Debug Probe/CORTEX_M0P (Suspended HW Breakpoint A Reset Occurred On The Tarc
 - main() at uart_tx_multibyte_fifo_dma_interrupts.c:67 0x000003E4
 - _c_int00_template() at boot_cortex_m.c:0 0x000009B0
 - _c_int00_noargs() at boot_cortex_m.c:86 0x00000994



- Hardware connection (based on XDS110)
- Step 1: Remove the jumper cap.
- Step 2: Use a DuPont cable to connect the GND, 3.3V, RXD, TXD, RST, and BSL on one side of the burner to the target board. If using launchpad, a jumper needs to be used to connect RXD and TXD.

	TXD	RXD	BSL
L1306	PA23	PA22	PA18
G3507	PA10	PA11	PA18





- Software steps (based on CCS)
 - Step1: Download MSPM0 SDK
 - Step2: Open this software



MSPM0 Bootloader GUI			-		\times
reOption					
Application firmware file:			Choose	.txt file	
Password file:			Choose	.txt file	
	Download	XDS110	on Launcl	hpad	
(Download: J	ust support UART with XDS110)	C Standal	one XDS11	0	
Default hardware is XDS110 on 1	Launchpad.			v	
	Clear				
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- Software steps (based on CCS)
 - Step3: Select the corresponding software firmware based on the chip used (in the input folder)

MSPM0 Bootloader GUI –	X			16.91
MoreOption				×
Application firmware file: C:/Users/a0224173/Desktop/毎日支持/12. MSPM0 applice Choose .txt file	iols_draf > BSL_GUI_Version_1 > Input	✓ Ö ,P Search	Input	
Password file: Choose .txt file)II • 🔳 (0
Download XDS110 on Launchpad	 Name 	Date modified	Туре	5
(Download: Just support UART with XDS110) C Standalone XDS110	BSL_Password32_Default.txt	7/14/2022 10:57 AM	Text Document	
This GUI is developed with Python version: 3.10.4	LP_MSPM0G3507_PB27_Toggle_demo_app.txt	7/14/2022 11:21 AM	Text Document	
Default hardware is XDS110 on Launchpad.	LP_MSPM0G3507_PB27_Toggle_demo_app2.txt	7/14/2022 11:22 AM	Text Document	
application note/Bootloader/MSPM0_BSL_Host_Demo_Tools_draft/BSL_GUI_Ve	LP_MSPM0L1306_PA13_Toggle_demo_app.txt	7/18/2022 5:12 PM	Text Document	
rsion 1/Input/LP MSPM0G3507 PB27 Toggle_demo_app.txt Error: Please choose a password file.	LP_MSPM0L1306_PA13_loggle_demo_app2.txt	7/18/2022 5:13 PM	Text Document	
Error: Password format is not correct!				
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- Software steps (based on CCS)
 - Step4: Update XDS110 firmware

MSPM0 Bootloader GUI		—		\times
MoreOption				
TXT_to_H Update XDS110 firmware n firmware file: EXE/Input/LP_MSPM0L1306_PA13_Toggle	e_demo_app.txt	Choose	.txt file	
Password file: ools/bsl/BSL_GUI_EXE/Input/BSL_Passwor	rd32_Default.txt	Choose	.txt file	
Download	XDS110 o	n Launcl	hpad	
(Download: Just support UART with XDS110)	C Standalo	ne XDS11	0	
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- Software steps (based on CCS)
 - Step5: Download firmware and unlock device



