四合一电调BL_S固件烧录教程

前期准备

1.硬件方面

贴片完成的电调*1 (先将控制板烧录完成,再焊接到功率板上)

C2下载器*1 (下载器购买链接C8051F仿真器 usb仿真器 JTAG/C2 下载线 U-EC5 ML-EC3 EC6-淘宝网 (taobao.com))

1.27mm间距烧录探针*1(没有也可以直接焊接线材)

可调直流稳压电源*1

杜邦线若干

2.软件方面

固件烧录上位机: Flash Programming Utility

固件本体: J_H_30_REV16_7.HEX

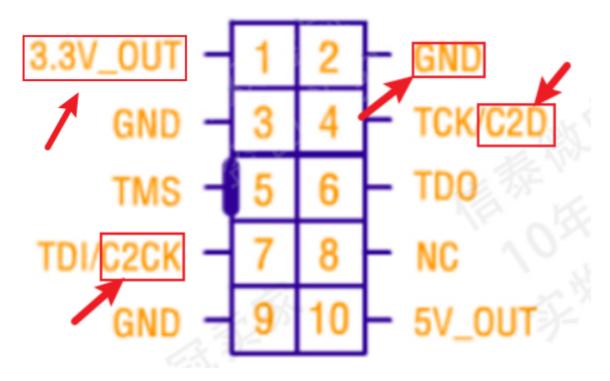
调参工具: BLHeliSuite (安装包自行寻找,任选其一)

ESC - Configurator (https://esc-configurator.com)

开始烧录

1.首先先进行硬件方面的连接

使用4根杜邦线分别连接C2下载器的C2CK(即C2K)和C2D端子,以及3.3V和GND供电,另一段连接烧录探针(注意烧录器的缺口朝向,该图所示为下载器端口面向操作者)

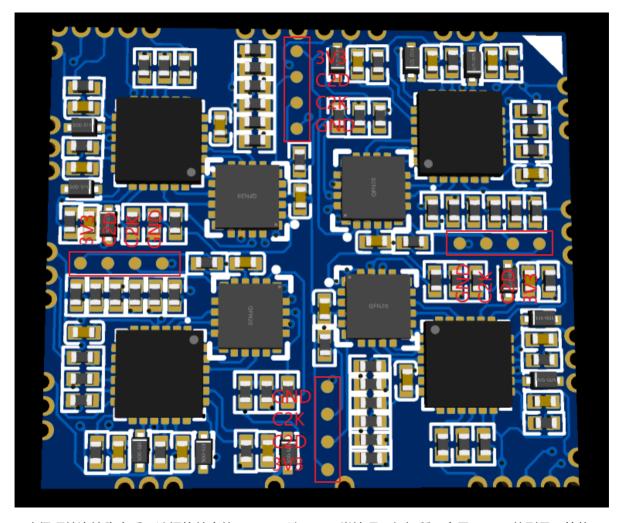


2.连接下载器到电脑,并安装Flash Programming Utility(software文件夹中的utildll.exe)

安装完成后打开软件,正常情况下软件会自动识别到C2下载器并显示如图所示的Adaptation Selection中的下载器ID,如果没有,则按照下图操作:

Silicon Laboratories Flash Utility	×
Set Memory Flash Erase Multi-device JTAG Programming	
Connect/Disconnect Download Hex File/Go/Stop Get Memory	
Debug Interface	
○ JTAG	
Debug Adapter 3	
© EC2 Serial Adapter © USB Debug Adapter	
COM Port: COM1 Adapter Selection: EC600MCU123 4	
Baud Rate: Power target after disconnect Note: Toolstick devices do not support the power	
Enumerate USB	
2	
☐ Disable Dialogs on Connect and Disconnect Connect	
Programming DLL Version: 4.85.00	
EC2 Serial Adapter Firmware Version:	
USB Debug Adapter Firmware Version:	
USBHID.DLL Version 1.9.1.0	
Device Name:	
Device Revision:	
取消	

3.下载器确认软件能够正常识别到后,使用烧录探针接触PCB上的相应触点(或者直接焊接线材到触点上),如图中红框所标注。(如果探针接触不良的情况下请选择焊接触点进行连接)



4.确保硬件连接稳定后,选择软件中的Connect 选项,正常情况下红框所示会显示MCU的型号ID等信息,代表通信正常。然后选择跳转下载页面。

Silicon Laboratories Flash Utility	×
Set Memory Flash Erase Multi-device JTAG Programming	
Connect/Disconnect Download Hex File/Go/Stop Get Memory	
Debug Interface	
○ JTAG	
Debug Adapter	
© EC2 Serial Adapter	
COM Port: COM1 ▼ Adapter Selection: EC600MCU123 ▼	
Baud Rate: Power target after disconnect Note: Toolstick devices do not support the power	
Enumerate USB	
☐ Disable Dialogs on Connect and Disconnect	
Programming DLL Version: 4.85.00	
EC2 Serial Adapter Firmware Version:	
USB Debug Adapter Firmware Version:	
USBHID.DLL Version 1.9.1.0	
Device Name:	
Device Revision:	
取消	

5.在该页面选择Browse选项,打开文件夹后选取相应固件(software文件夹中的 J_H_30_REV16_7.HEX)后选择Download选项,正常情况下等待进度条加载完成既可。依次给4个MCU重复上述(3-5步骤)

Silicon Laboratories Flash Utility			×
Set Memory Flash Erase Connect/Disconnect Download	Multi-device J d Hex File/Go/Stop	Get Memory	
Download Filename	Browse	Download	
		Verify Download	
Tout file start address (UEV)	2	Go	
Text file start address (HEX)			
☐ Disable Dialogs on Download ☐ Erase all Code Space before download	1		
Lock Code Space after download	•		
	Hosa		
	取消		

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