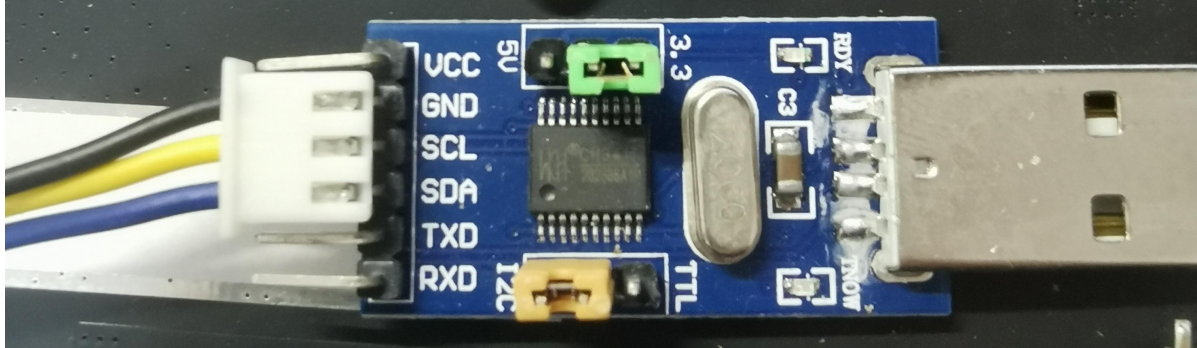


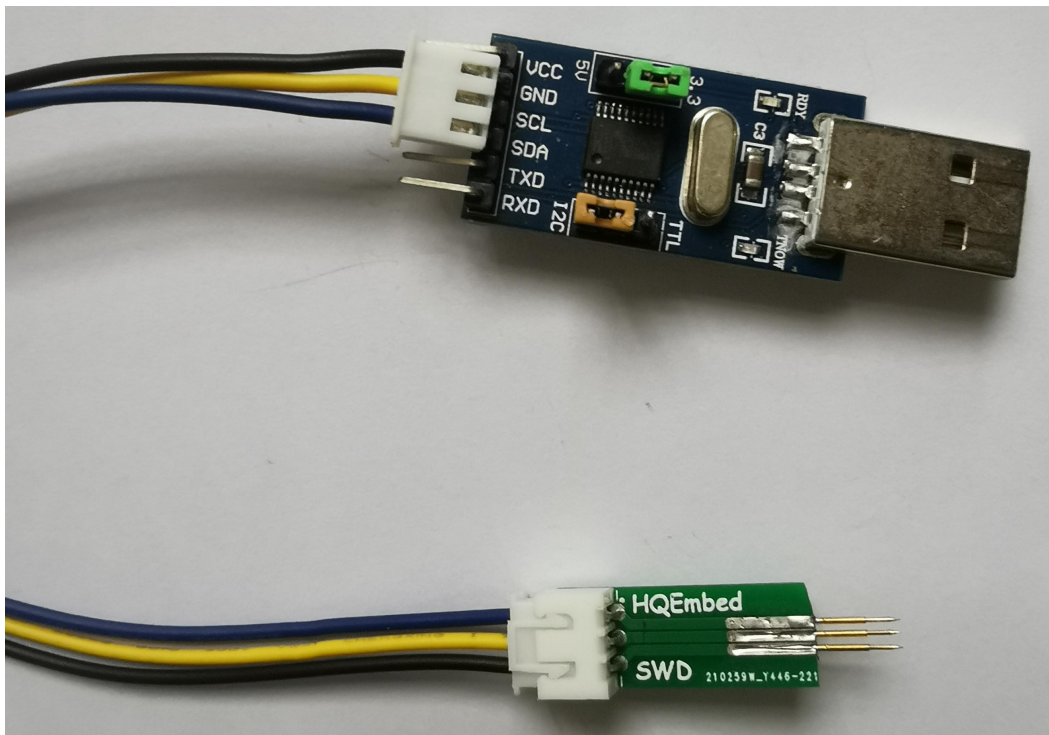
ElecLab Display Firmware Update Guide

Items to prepare:

- Windows PC
- LT1605_I2C2SPI_V2_100k.exe(From LT6911_download_tool.rar)/
Upgrade_Flash_For_Application.exe(From LONTIUM_download_tool.rar)
- USB to IIC board(CH341),For example:



- XH2.54 3P cable
- MX1.27 3P programming probe (can be made using MX1.27_Probe_3P_Gerber file)



- ElecLab 7.84"/8.8"/10.1"/10.3" (LT6911C)HDMI display
- USB Type-c cable

1. Download the upgrade tools and firmware from github

https://github.com/eleclab-rpi/Display_Firmware/tree/main/HDMI_101_2560x1600

Display_Firmware / HDMI_101_2560x1600 /	
eleclab-rpi Create LONTIUM_download_tool.rar	
Name	Last commit message
..	
CH341_USB_IIC_Driver	add 10.1 2560x1600
Eleclab LT6911C Firmware Update Guide.pdf	Create Eleclab LT6911C Firmware Update Guide.pdf
LONTIUM_download_tool.rar	Create LONTIUM_download_tool.rar
LT6911_BH112HD_FL7707_COPY_MODE_RPI5_Bookworm.hex	add 8.8 10.1 11.26 inch firmware
LT6911_HSD088IPW1_COPY_MODE_RPI5_Bookworm.hex	add 8.8 10.1 11.26 inch firmware
LT6911_LQ101R1SX01A_RPI5_Bookworm.hex	add 8.8 10.1 11.26 inch firmware
LT6911_download_tool.rar	add 10.1 2560x1600
MX1.27_Probe_3P_Gerber.rar	Create MX1.27_Probe_3P_Gerber.rar

2. Unzip LT6911_download_tool.rar/LONTIUM_download_tool.rar

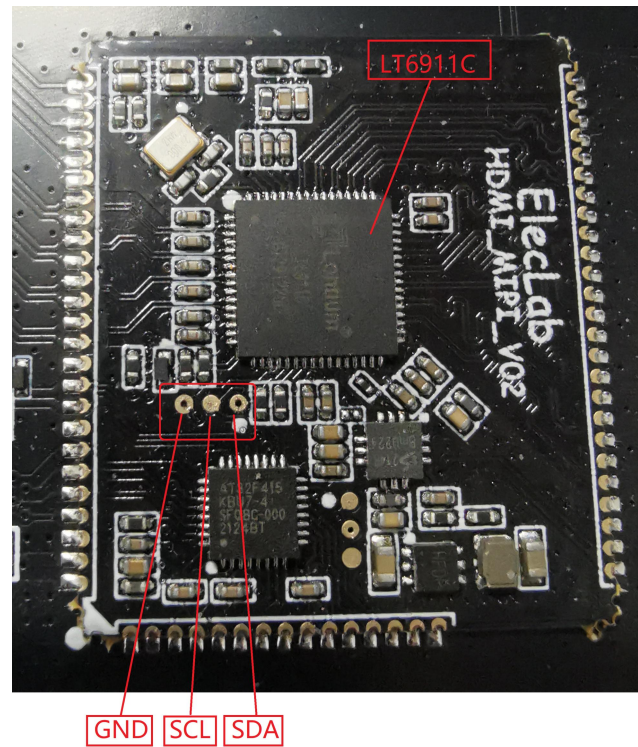


3. Install CH341 i2c_driver.exe



4.Preparation

1. Power the display using the USB Type-c cable
2. Connect CH341 USB2IIC board to PC
3. Use a probe or directly solder a 3P cable to the 3P MX1.27 test point of the LT6911C.



4. Open





LT1605_I2C2SPI_V2_100k.exe/Upgrade_Flash_For_Application.exe on PC.

The screenshot displays the LT1605 software interface with the following components and annotations:

- Top Bar:** Contains icons for "数据文件" (Data File), "烧写" (Burn), "读取" (Read), "擦除" (Erase), and "BLOCK擦除" (Block Erase). Red boxes highlight the "数据文件" and "烧写" icons.
- Data File Path:** The path is set to "D:\LT1605\LT1605_0784_400x1280_BK_ONLY2560x1600\Keil_51\Objects\LT1605_LQ101R1SX01A_RPI5_Bookworm.hex". A red box highlights this path.
- Parameter Configuration:** Includes fields for "配置寄存器" (0x51), "SPI_LEN" (15), "烧写设置" (Burn Settings), "起始地址" (Start Address, 0x000000), "读取设置" (Read Settings), "起始地址" (Start Address, 0x000000), "数据长度" (Data Length, 256), and "擦除起始地址" (Erase Start Address, 0x000000).
- Data Display:** A table showing hexadecimal data values. A red arrow points from the "烧写" icon to this section.
- Log Display:** A text area showing the progress of the burning process. A red box highlights the final status "成功" (Success). A red arrow points from the "烧写" icon to this log area.
- Status Bar:** At the bottom, it shows "烧写FLASH数据..完成" (Flash data burning completed), "I2C已连接" (I2C connected), "龙迅半导体 (合肥) 股份有限公司" (Longxin Semiconductor (Hefei) Co., Ltd.), and "Version 1.00". A red box highlights the "I2C已连接" status.
- Annotations:** Red boxes and arrows at the bottom provide context for the steps shown in the software:
 - "Select Firmware" points to the "数据文件" icon.
 - "Burning firmware" points to the "烧写" icon.
 - "USB2IIC tool CH341 connected" points to the "I2C已连接" status.
 - "Burning and verification successful" points to the "成功" status in the log.

Upgrade_Flash_For_Application

Chip: LT6911/B/C Device Addr: 0x ☐ Customize

Data File: F:\MCU_FPGA\LT6911\LT6911_0784_400x1280_BK_ONLY2560x1600\Keil_51\Objects\LT6911_LQ101R1SX01A_RPI5_Bookworm.hex

Parameters

Read Parameter

Start Addr: 0x 000000

Length: 256

Checksum: 0x149F84

Data Display

00000000	02	23	24	E7	09	F6	08	DF	FA	80	46	E7	09	F2	08	DF
00000010	FA	80	3E	88	82	8C	83	E7	09	F0	A3	DF	FA	80	32	E3
00000020	09	F6	08	DF	FA	80	78	E3	09	F2	08	DF	FA	80	70	88
00000030	82	8C	83	E3	09	F0	A3	DF	FA	80	64	89	82	8A	83	E0
00000040	A3	F6	08	DF	FA	80	58	89	82	8A	83	E0	A3	F2	08	DF
00000050	FA	80	4C	80	D2	80	FA	80	C6	80	D4	80	69	80	F2	80
00000060	33	80	10	80	A6	80	EA	80	9A	80	A8	80	DA	80	E2	80
00000070	CA	80	33	89	82	8A	83	EC	FA	E4	93	A3	C8	C5	82	C8
00000080	CC	C5	83	CC	F0	A3	C8	C5	82	C8	CC	C5	83	CC	DF	E9
00000090	DE	E7	80	0D	89	82	8A	83	E4	93	A3	F6	08	DF	F9	EC
000000A0	FA	A9	F0	ED	FB	22	89	82	8A	83	EC	FA	E0	A3	C8	C5
000000B0	82	C8	CC	C5	83	CC	F0	A3	C8	C5	82	C8	CC	C5	83	CC
000000C0	DF	EA	DE	E8	80	DB	89	82	8A	83	E4	93	A3	F2	08	DF
000000D0	F9	80	CC	88	F0	EF	60	01	0E	4E	60	C3	88	F0	ED	24
000000E0	02	B4	04	00	50	B9	F5	82	EB	24	02	B4	04	00	50	AF
000000F0	23	23	45	82	23	90	00	53	73	BB	01	06	89	82	8A	83
00000100	E0	22	50	02	E7	22	BB	FE	02	E3	22	89	82	8A	83	E4
00000110	93	22	BB	01	0C	E5	82	29	F5	82	E5	83	3A	F5	83	E0
00000120	22	50	06	E9	25	82	F8	E6	22	BB	FE	06	E9	25	82	F8

Log Display

Open Data File. Done! Compare the Data ... Succeed! Prog Flash Data ... Succeed!

Clear

Ready... I2C ON-LINE Lontium Semiconduct Version 2.00