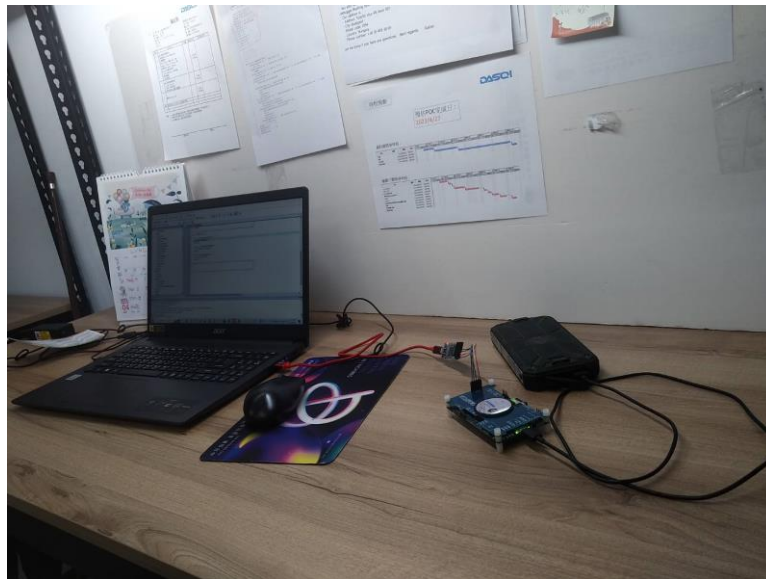
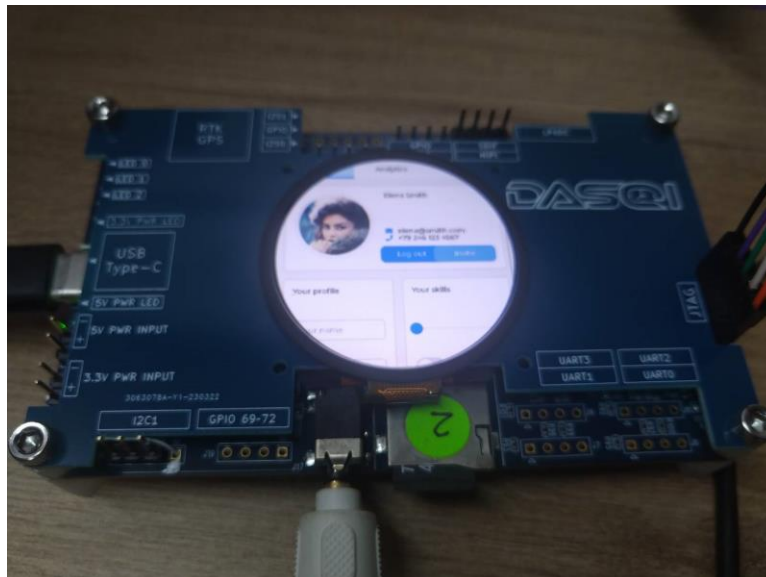


user_guide_to_compiler_n_load_uvision (DASQI Apollo4 Blue plus PCBA EVB board)

(DASQI Apollo4 Blue plus PCBA EVB board)



Run LVGL lv_demo_widgets()



Index :

001 To get the lv_demo_music() certified software from LVGL office web site.

002 To install the ARM keil-uvision V5.29 into windows 10 notebook .

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005 To open the lcd project to run lv_music_demo()

006 To compiler the project in the keil-uvision 5.29

007 To load the project in the keil-uvision 5.29

008 To setup the hardware test environment of DASQI Apollo4 BLE plus board

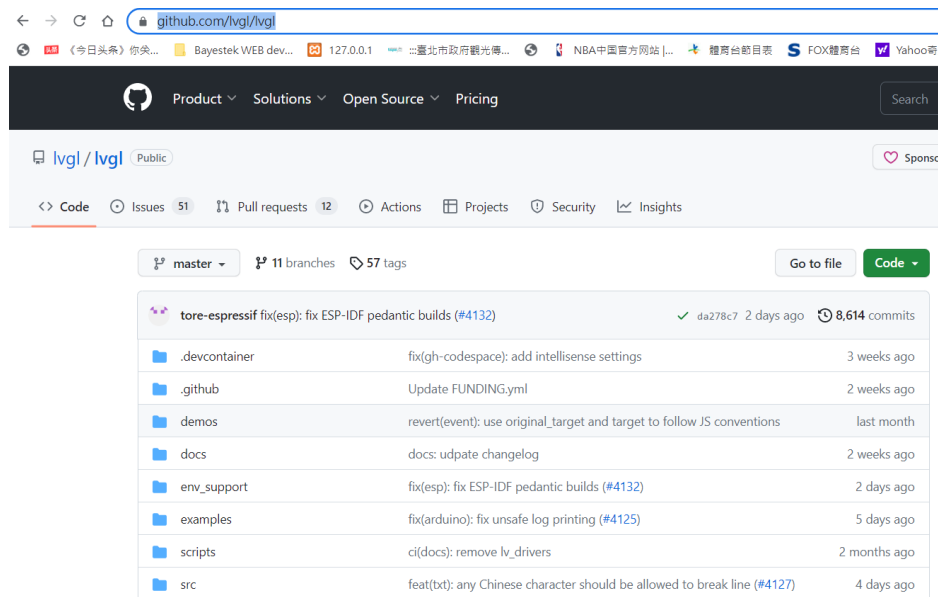
009 To run lv_music_demo() in the DASQI Apollo4 BLE plus board

010 To flash the binary code by using SEGGER J-Flash Lite V7.86h

001 To get the lv_demo_music() certified software from LVGL office web site.

1. Using google chrome browser to keyin URL web site

<https://github.com/lvgl/lvgl> , you can see the LVGL music demo software code, as following :



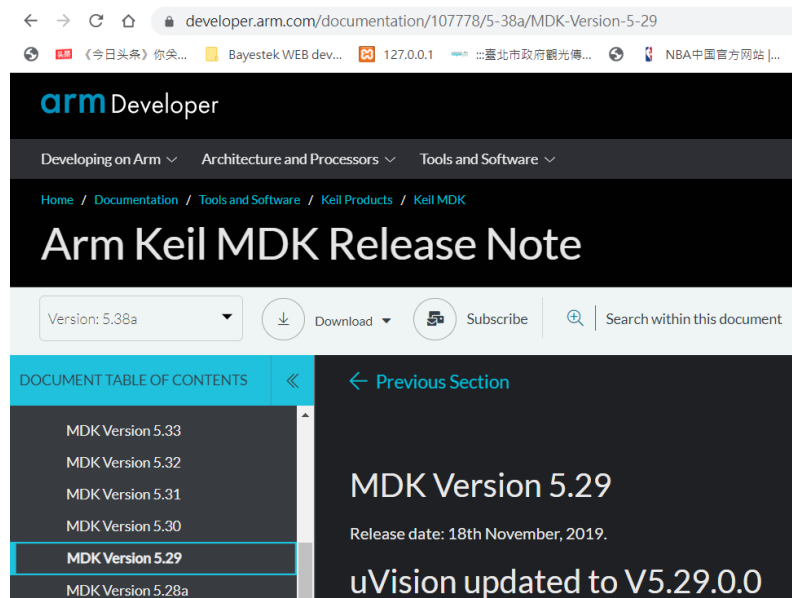
Download as zip , and unzip into computer (windows) , under the directory in drive C: , C:\Keil_v5\ARM\PACK\lvgl_8_3\lvgl-release-v8.3 , as following :

ARM > PACK > lvgl_8_3 > lvgl-release-v8.3					搜尋 lvgl-release-v8.3	
名稱	修改日期	類型	大小			
✦ .github	2023/4/13 上午 10:50	檔案資料夾				
✦ demos	2023/4/13 上午 10:50	檔案資料夾				
✦ docs	2023/4/13 上午 10:50	檔案資料夾				
✦ env_support	2023/4/13 上午 10:50	檔案資料夾				
✦ examples	2023/4/13 上午 10:50	檔案資料夾				
scripts	2023/4/13 上午 10:50	檔案資料夾				
src	2023/4/13 上午 10:50	檔案資料夾				
tests	2023/4/13 上午 10:50	檔案資料夾				
! .codecov.yml	2023/2/21 上午 04:05	Yaml 來源檔案	1	KB		
⚙ .editorconfig	2023/2/21 上午 04:05	Editor Config 來...	1	KB		
- Perso .gitignore	2023/2/21 上午 04:05	文字文件	1	KB		
! .pre-commit-config.yaml	2023/2/21 上午 04:05	Yaml 來源檔案	1	KB		
CMakeLists.txt	2023/2/21 上午 04:05	文字文件	1	KB		
component.mk	2023/2/21 上午 04:05	Makefile 來源檔案	2	KB		
! idf_component.yml	2023/2/21 上午 04:05	Yaml 來源檔案	1	KB		
Kconfig	2023/2/21 上午 04:05	檔案	42	KB		
library.json	2023/2/21 上午 04:05	JSON 來源檔案	1	KB		
library.properties	2023/2/21 上午 04:05	Properties 來源檔...	1	KB		
LICENCE.txt	2023/2/21 上午 04:05	文字文件	2	KB		
lv_conf_template.h	2023/2/21 上午 04:05	C Header 來源檔案	26	KB		
(C:) lvgl.h	2023/2/21 上午 04:05	C Header 來源檔案	3	KB		
區 (D:) lvgl.mk	2023/2/21 上午 04:05	Makefile 來源檔案	1	KB		
README.md	2023/2/21 上午 04:05	Markdown 來源...	9	KB		
README_pt_BR.md	2023/2/21 上午 04:05	Markdown 來源...	9	KB		
README_zh.md	2023/2/21 上午 04:05	Markdown 來源...	9	KB		
SConscript	2023/2/21 上午 04:05	檔案	1	KB		

The lv_music_demo() LVGL file is located in C:\Keil_v5\ARM\PACK\lvgl_8_3\lvgl-release-v8.3\demos , the LVGL music demo resource file name is lv_demo_music.c .
(under the directory : C:\Keil_v5\ARM\PACK\lvgl_8_3\lvgl-release-v8.3\demos\music) .

002 To install the ARM keil-uvision V5.29 into windows 10 notebook .

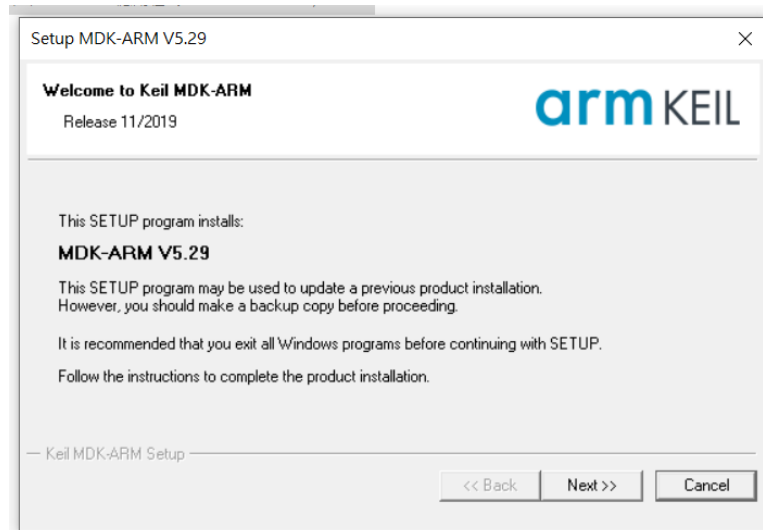
1. Using google chrome browser to keyin URL web site ,
<https://developer.arm.com/documentation/107778/5-38a/MDK-Version-5-29> ,
you can see the ARM Keil-uvision V5.29 software tool, as following :



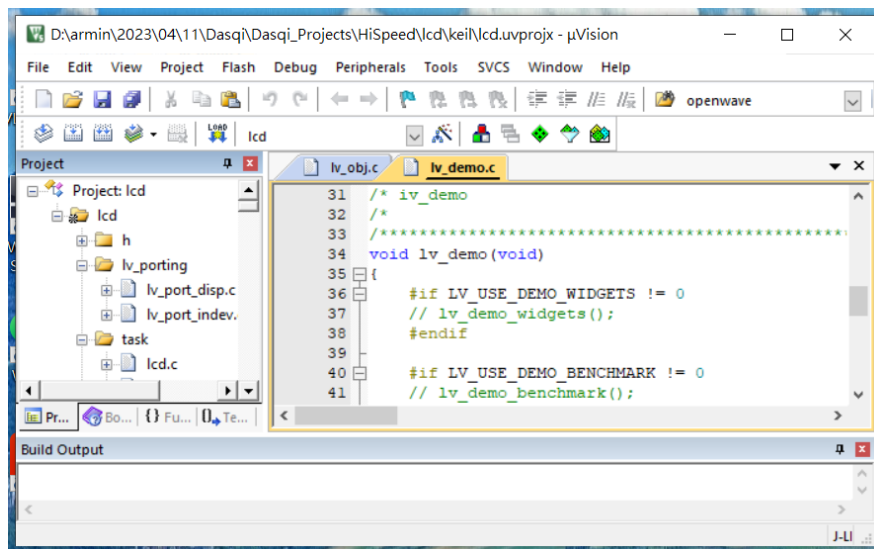
to download ARM Keil-uvision V5.29 software tool. And install ARM Keil-uvision V5.29 IDE developing tool , MDK529.zip , into Windows .



Install ARM Keil-uvision V5.29 MDK tool , as following :

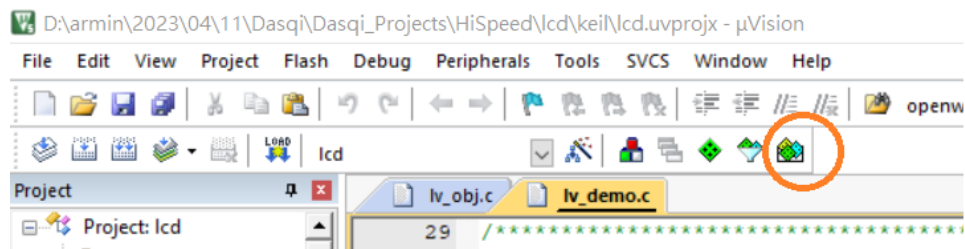


After installed , Keil MDK-ARM icon , as following :



003 To setup the ARM keil-uvision V5.29 environment settings

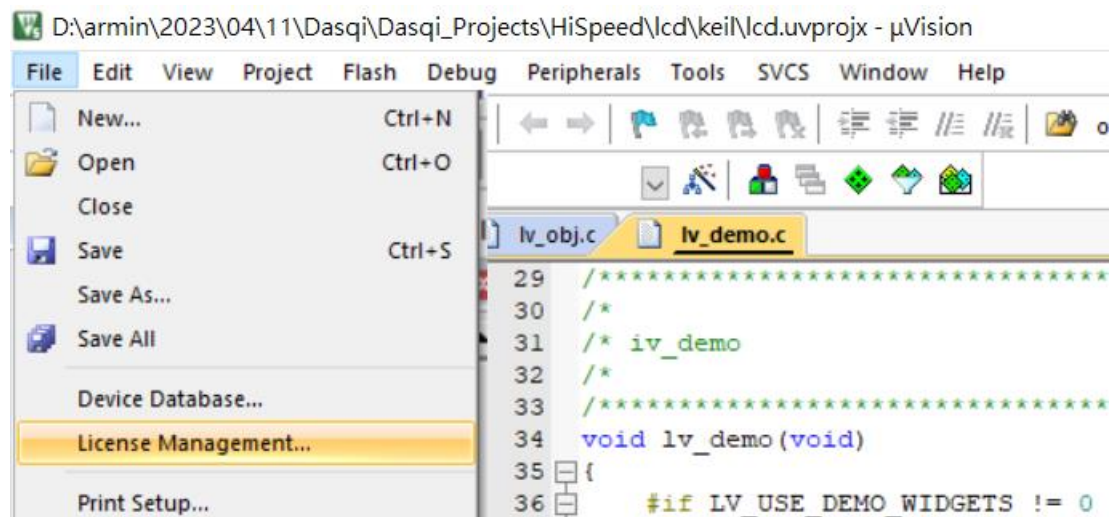
1. First , to check ARM Keil_uvision MDK's MCU setup information :



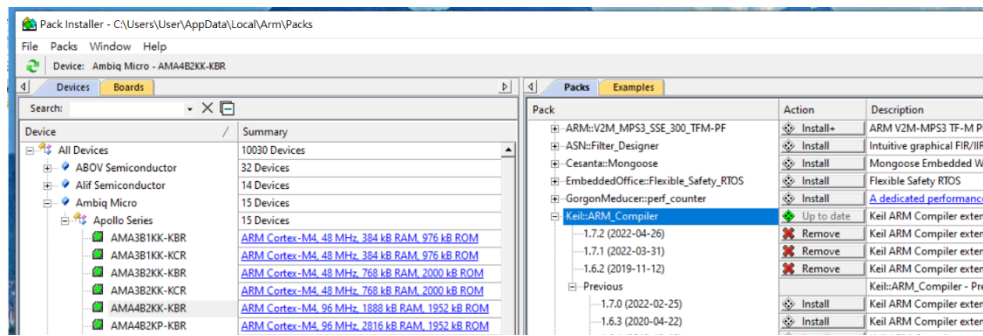
Check the Keil_uvision MDK tool 's License Management information :

Need to check Computer ID : xxxxx-xxxxx

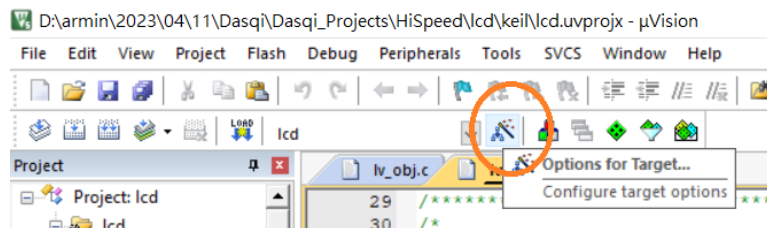
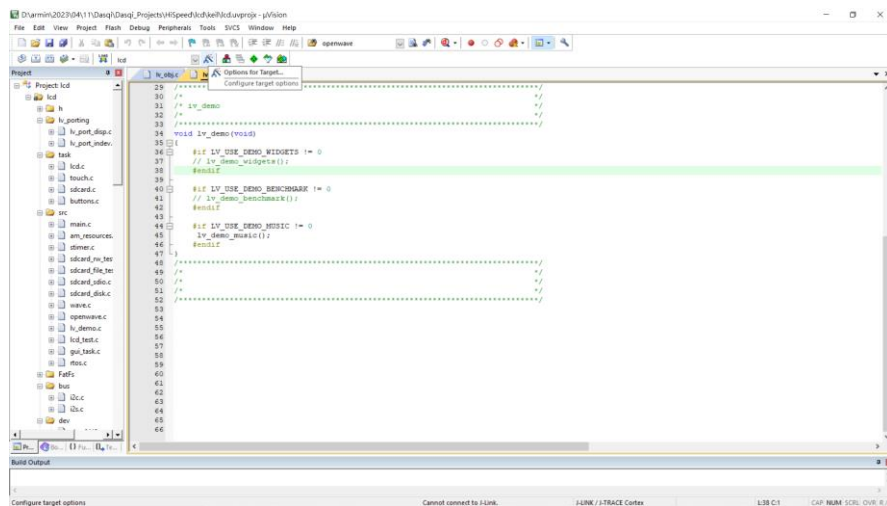
Need to check License ID code : xxxxx-xxxxx-.....



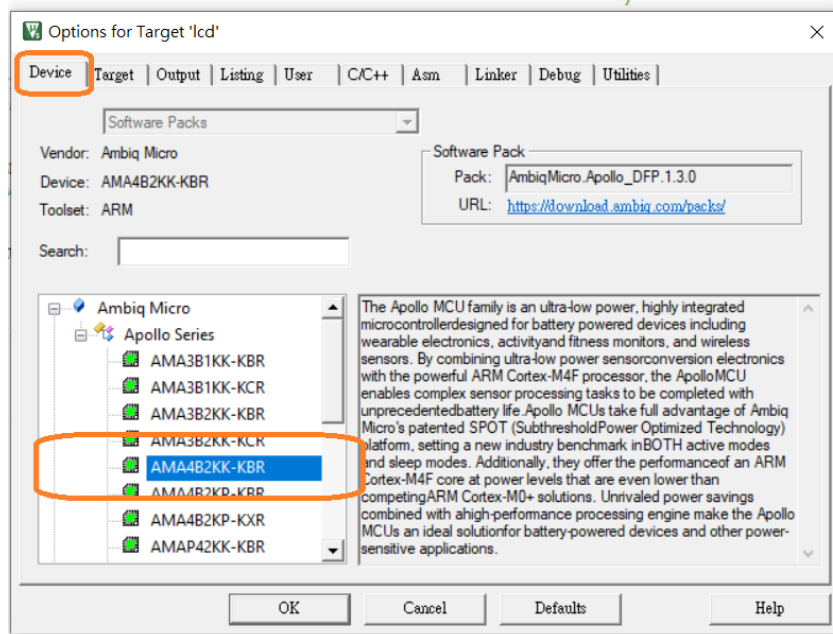
Press the Pack Installer , to check MCU setting .



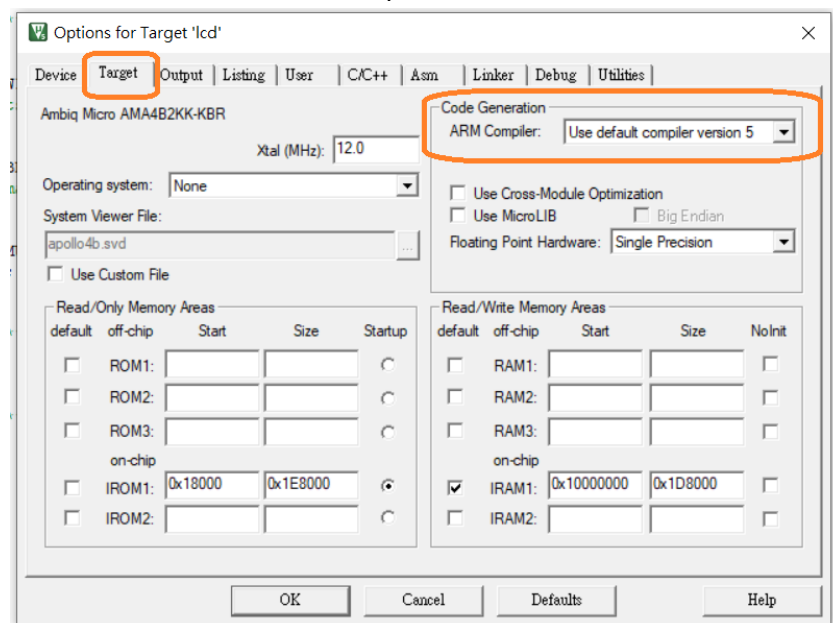
Advance setup information check



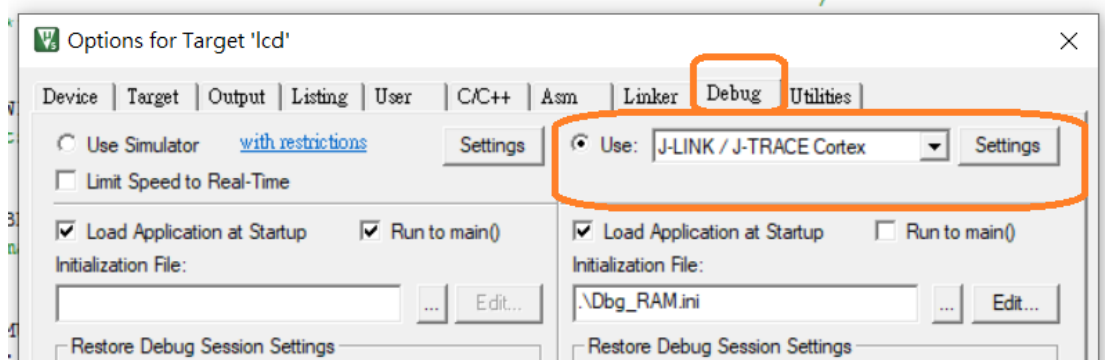
To check MCU : Ambiq AMA4B2KK-KBR



To check ARM Compiler version , as version 5



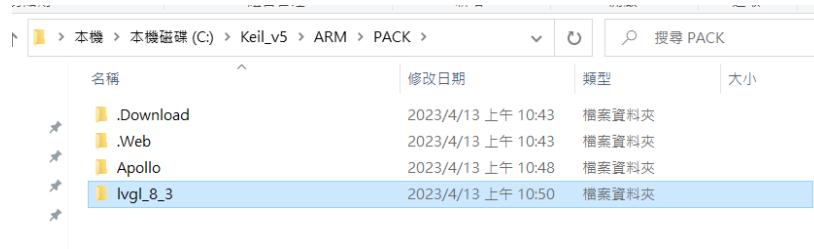
To check J-Link download interface board



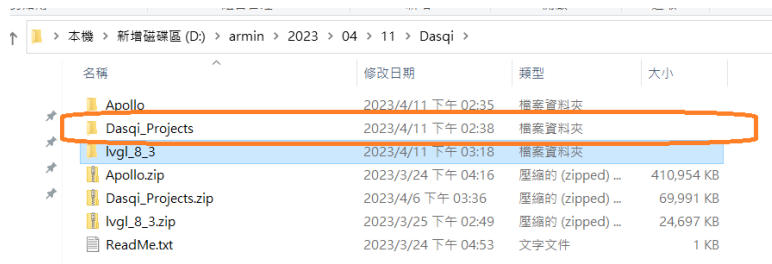
If the above 3 settings as correct , the setup is correct.

004 To copy DASQI developing Software into keil-uvision v5.29 environment

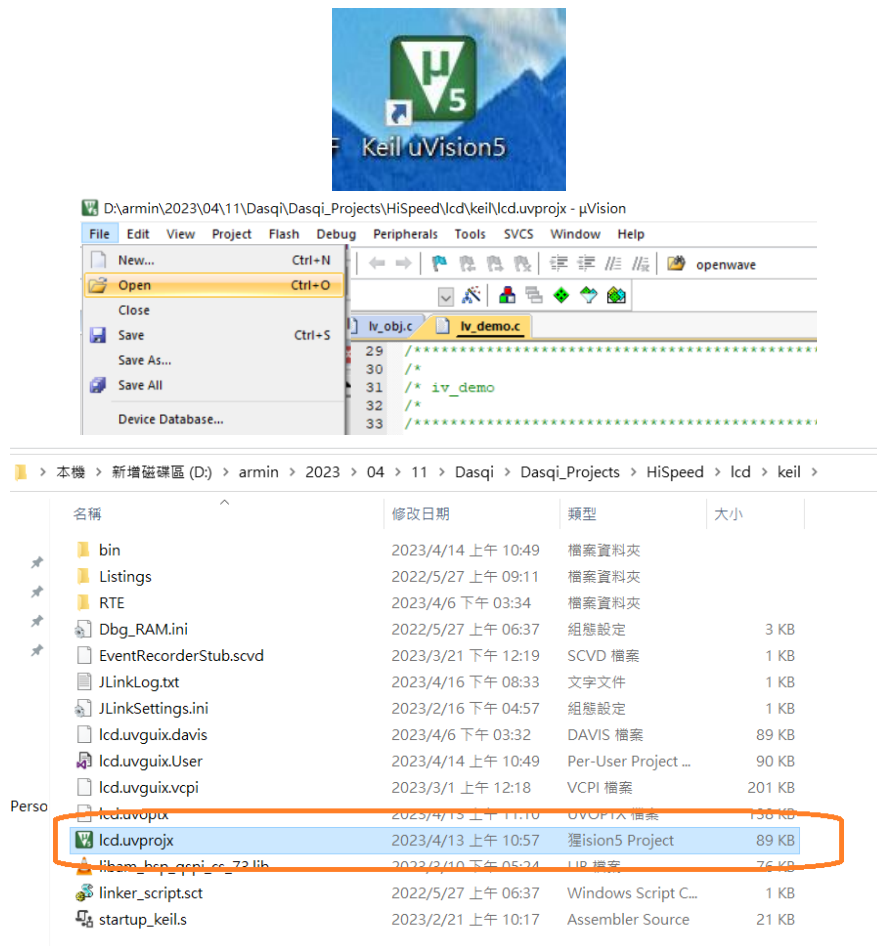
1. 將 Apollo.zip 和 lvgl_8_3.zip 解壓縮之後放在 C:\Keil_v5\ARM\PACK 子目錄之下。As following :



2. 將 Dasqi_Projects.zip 解壓縮到任何可工作的子目錄中。

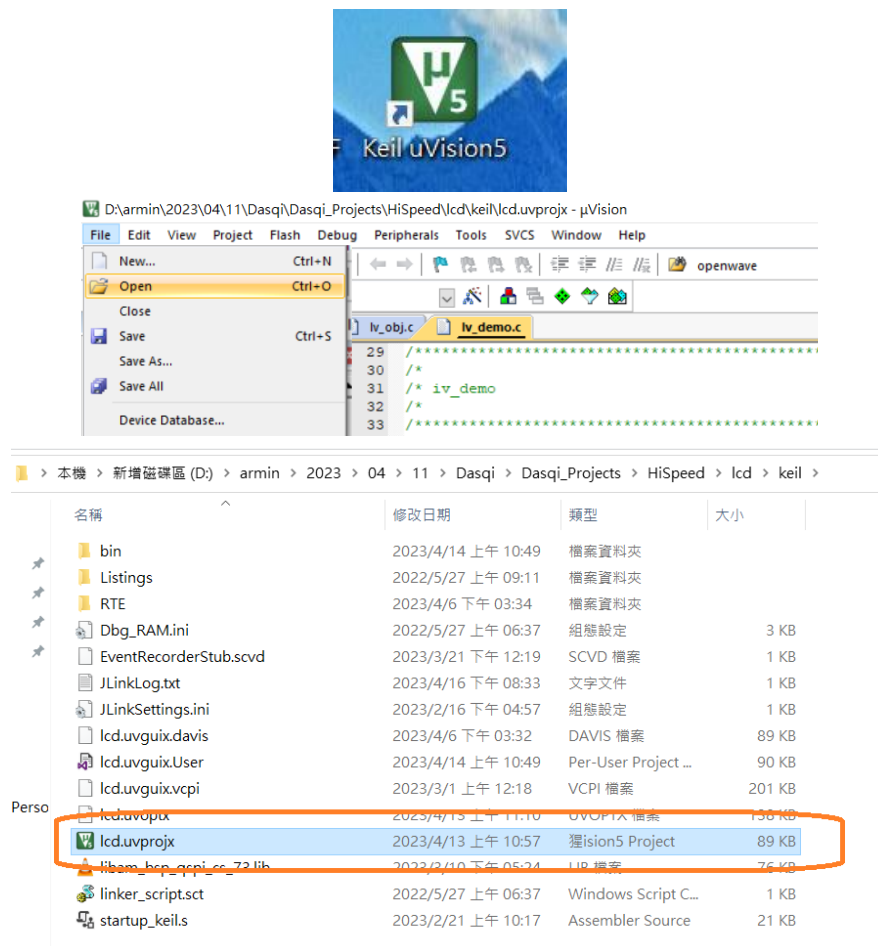


3. Open keil-uvision5 IDE tool , and open lcd project file (lcd.uvprojx) .

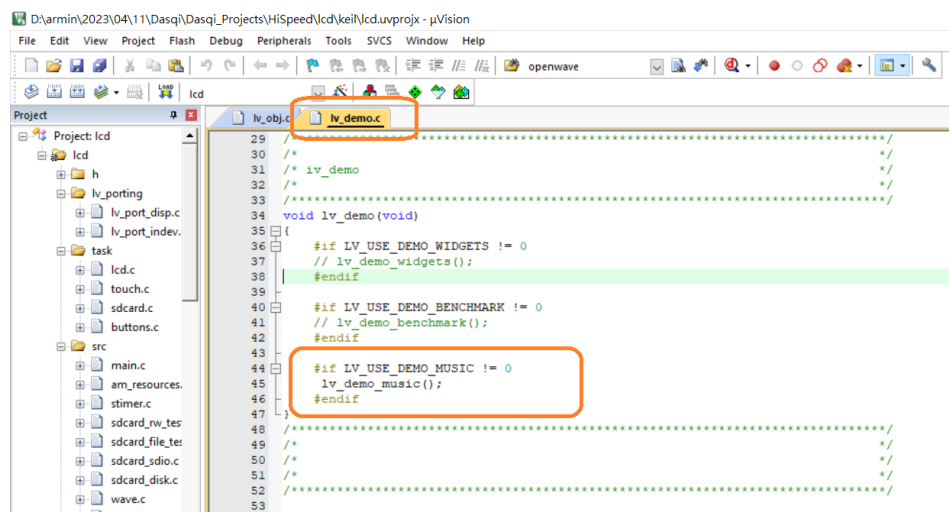


005 To open the lcd project to run lv_music_demo()

1. Open keil-uvision5 IDE tool , and open lcd project file (lcd.uvprojx) .



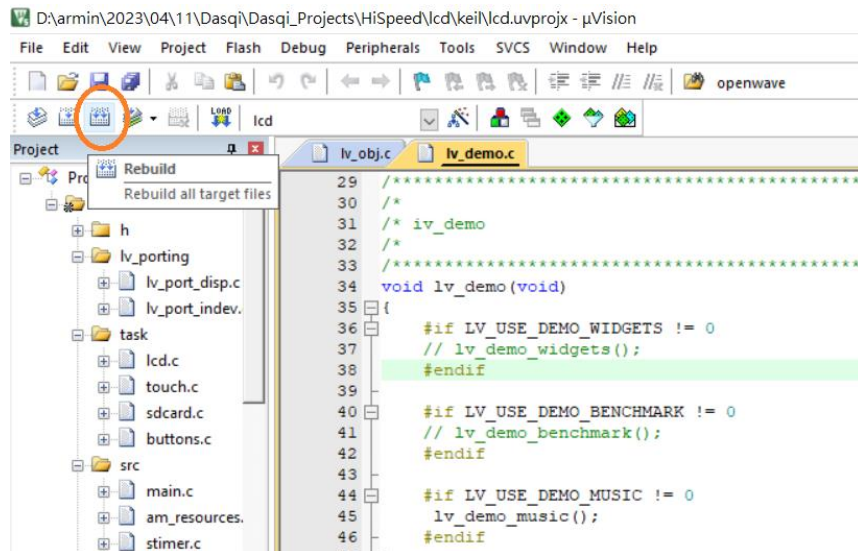
2. Open lv_demo.c file , and check lv_music_demo() as available.



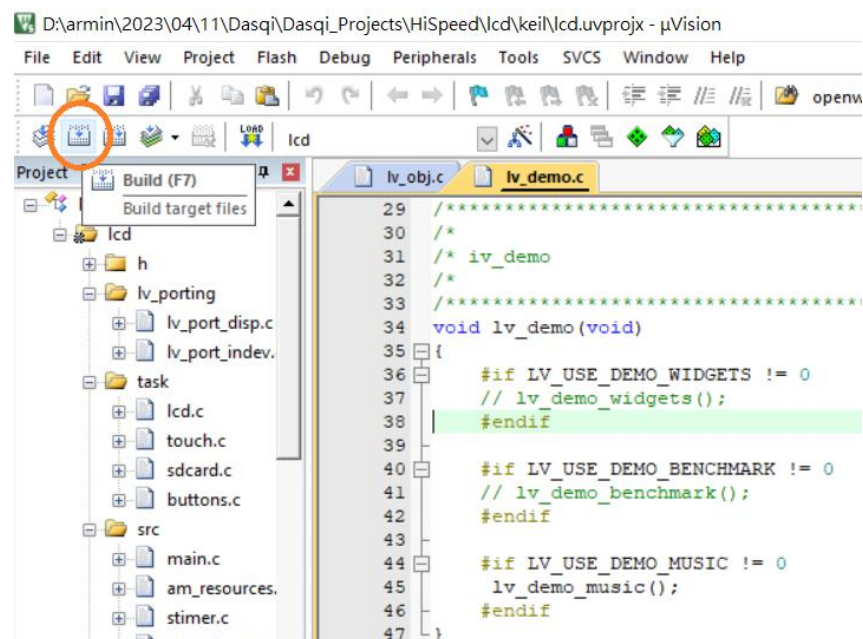
006 To compile the project in the keil-uvision 5.29

1. Press the compile icon to compile, as following :

The fully compile process :

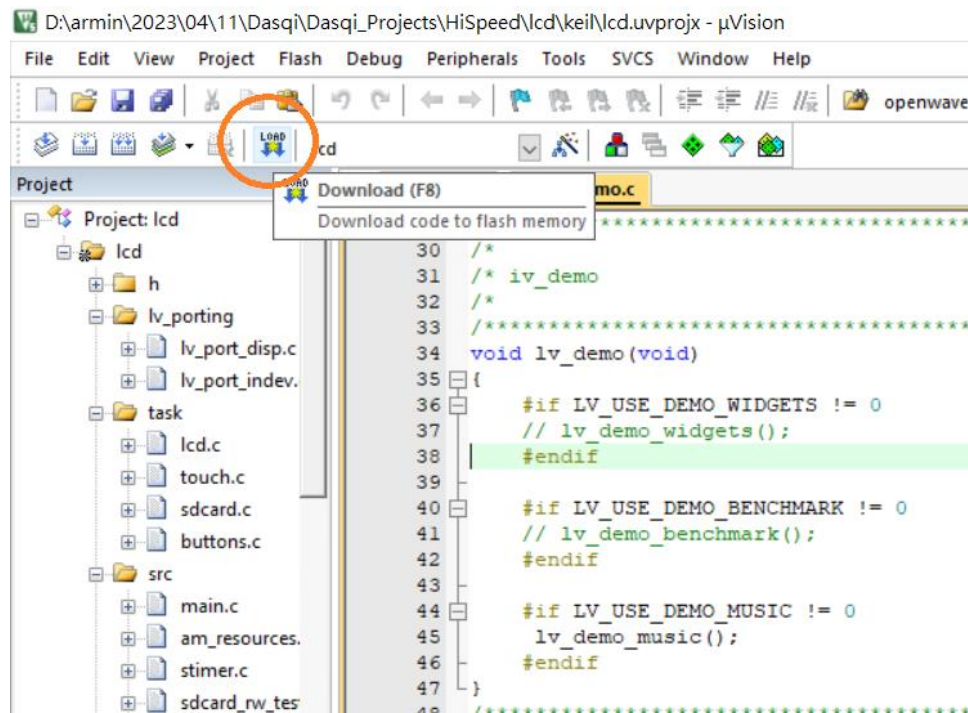


The partial compile process (only new modifies need to re-compile) :



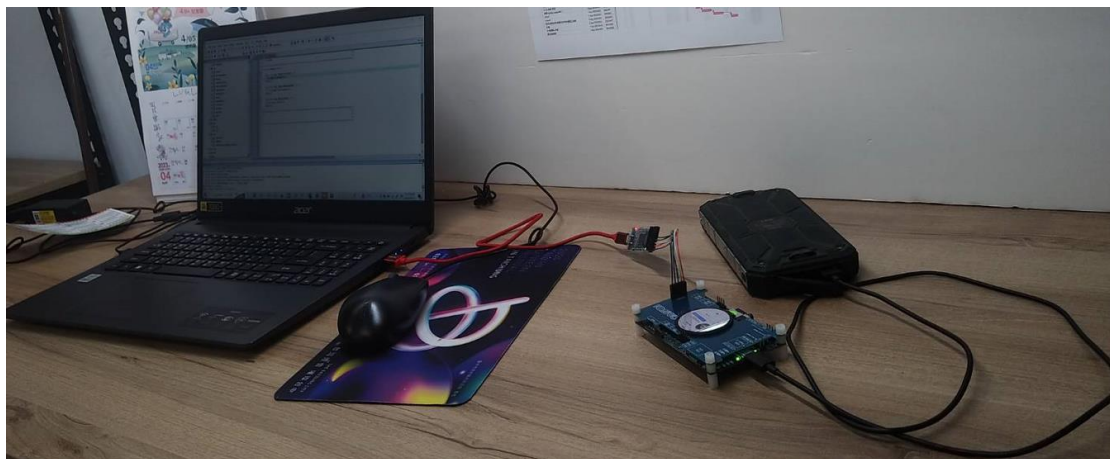
007 To load the project in the keil-uvision 5.29

1. Press the load icon to compile, as following :



008 To setup the hardware test environment of DASQI Apollo4 BLE plus board

1. Check the connection between the computer , J-LINK interface adapter and the Apollo4B plus PCBA board .
2. The notebook to run keil-uvision5 MDK software.
3. USB cable between the notebook and J-LINK interface adapter.
4. The J-LINK interface adapter.
5. The flat cable between J-LINK interface adapter and the Apollo4B plus PCBA board.
6. The Apollo4B plus PCBA board.
7. The Type-C USB cable between the Apollo4B plus PCBA board and the Power bank.
8. The chart as following :



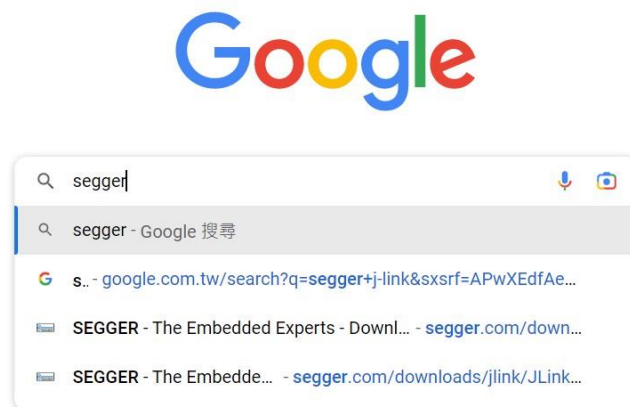
009 To run lv_music_demo() in the DASQI Apollo4 BLE plus board

1. After loaded the binary code into the Apollo4B plus PCBA board , To connect the USB power bank (+5V) , with type-C USB cable , to the Apollo4B plus PCBA board , then the LVGL music demo shows in the display , as following :

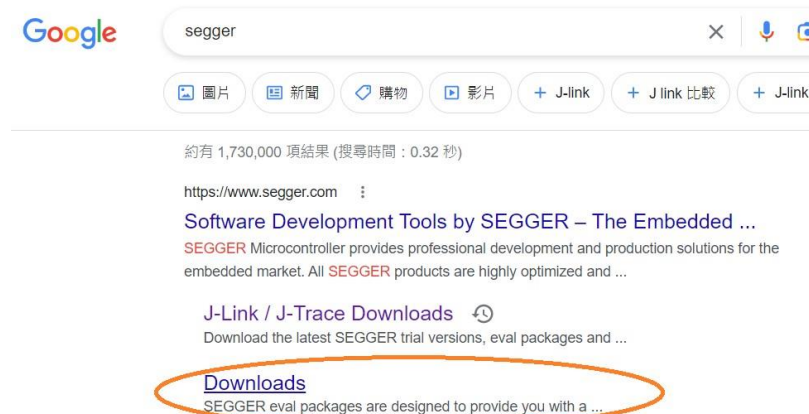


010 flash the binary code by using SEGGER J-Flash Lite V7.86h

1. Prepare the binary file to flash into the Apollo4 BLE PCBA board
The lv_music_demo() LVGL binary file is located in
D:\armin\2023\04\11\Dasqi\Dasqi_Projects\HiSpeed\lcd\keil\bin , the binary
file name is lcd.hex .
2. Try to download JLINK flash tool, first to search “segger” from google search
web site, as following :



3. Find out the JLINK flash tool web site : [segger.com/downloads/jlink](https://www.segger.com/downloads/jlink)



4. From the web site : [segger.com/downloads/jlink](https://www.segger.com/downloads/jlink), to download windows
version JLINK tool. And install JLINK_Windows_V786h_x86_64.exe into
Windows .

segger.com/downloads/jlink

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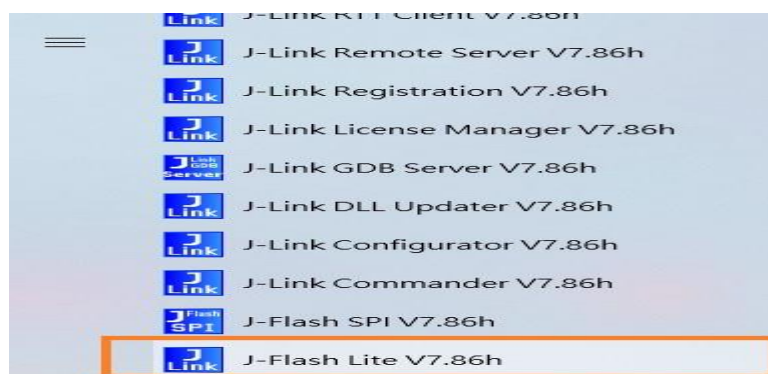
Our downloads are protected and signed with SEGGER emSecure! [More information](#) about signed downloads, how signatures are created and how easy downloaded files can be verified.

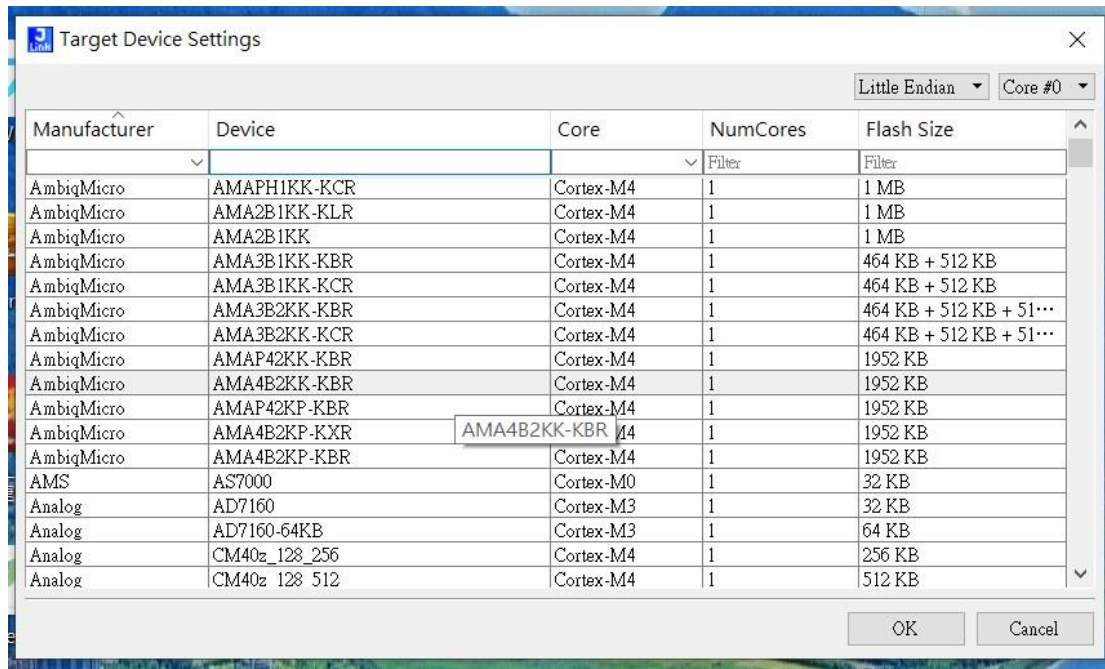
J-Link Software and Documentation Pack

	Version	
J-Link Software and Documentation pack <ul style="list-style-type: none"> All-in-one debugging solution Can be downloaded and used free of charge by any owner of a SEGGER J-Link, J-Trace or Flasher model. Not all features of it may be available on all J-Link / J-Trace / Flasher models. Updated frequently Release Notes More information 	V7.86h	Windows
	[2023-04-12]	64-bit Installer
		32-bit Installer
	Windows ARM	
		64-bit Installer
		Linux

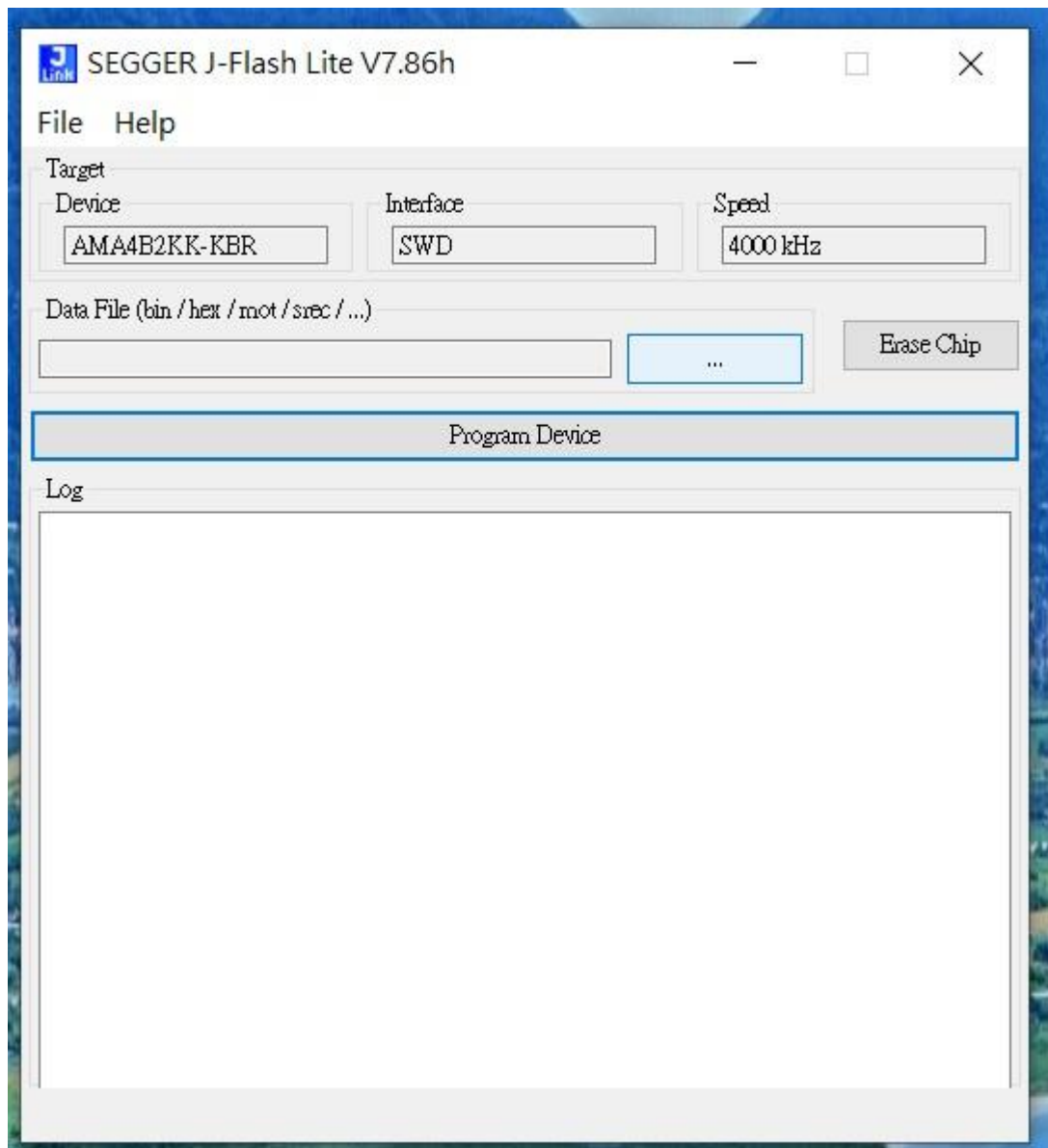
JLink_Windows_V786h_x86_64.exe 2023/4/13 上午 11:02 應用程式 55,617 KB

5. Run J-Flash Lite V7.86h , as following :

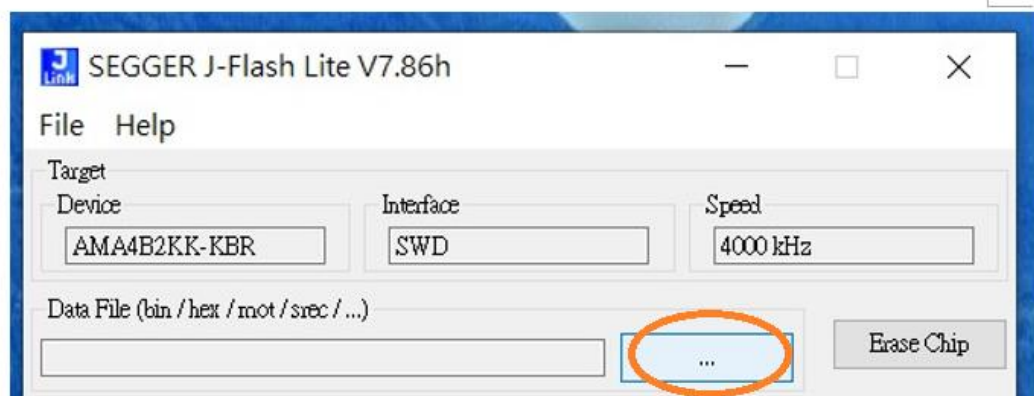


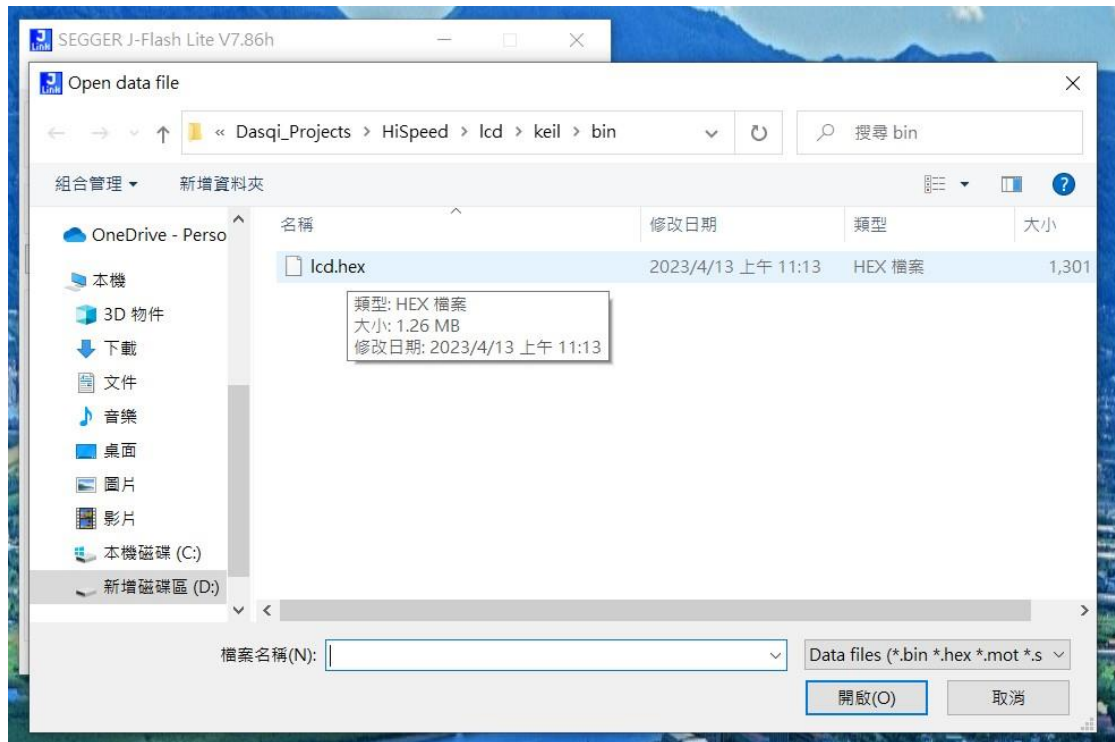


To select the MCU code : AmbiqMicro AMA4B2KK-KBR (Cortex-M4)

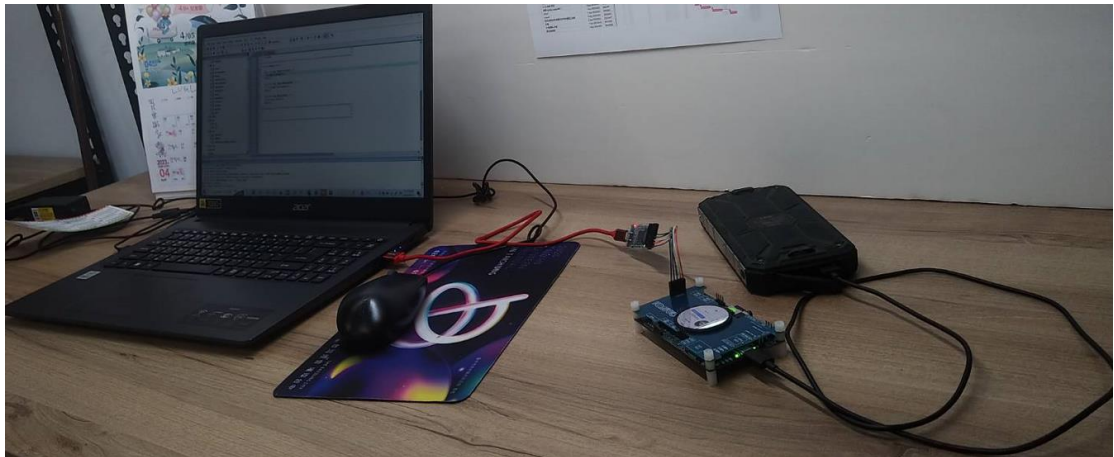


To select the binary file : lcd.hex

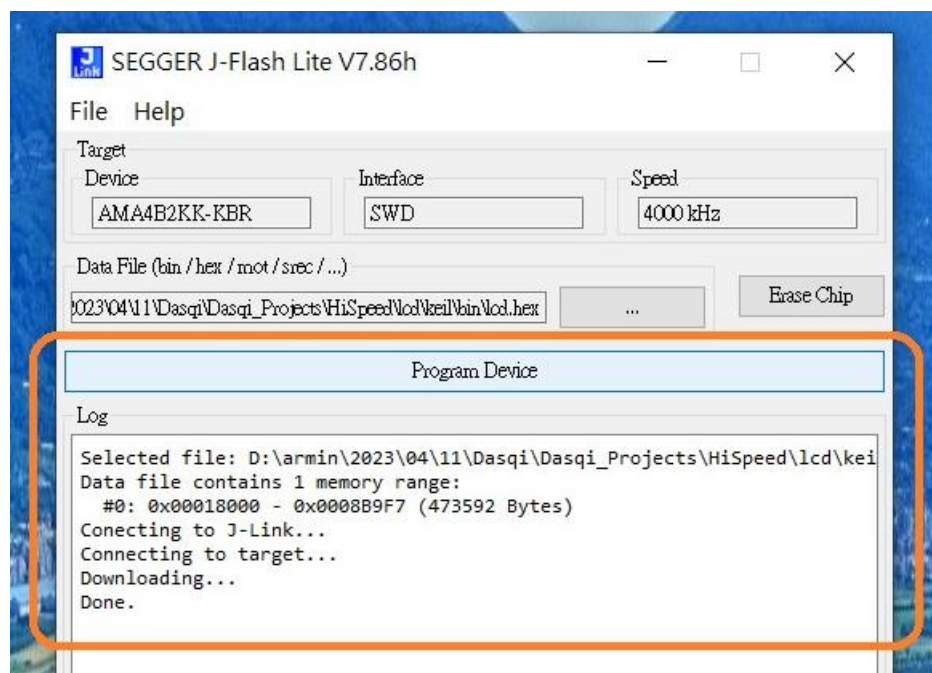
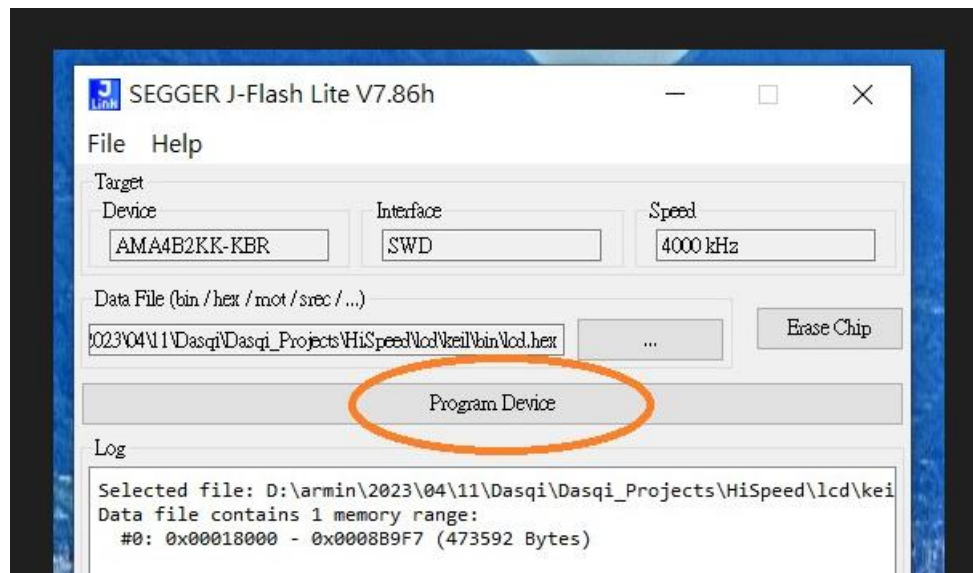




To check the notebook – JTAG interface – PCBA connection.



Press the Program Device button to flash binary into PCBA .



After flashing completed , Apollo4B PCBA board runs lv_music_demo() .

