# A6610

HW

**Application** 

Note



# **Revision History**

Date	Version	Summary of Changes
2022.11	1.0	First Release
2023.03	1.1	Update Kit Usage and Burning

#### Note:

Adding/ Removing contents in this document may create a numbering mismatching of sections, tables, pictures existing in the revision history above over the time. And the associated cross-references could be useless because the pointed objects are different than expected or don't exist anymore.



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## **About**

This document provides general information about the A6610 EVK mode.

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#### 1. Introduction

The A6610 EVK module integrates various transmission interfaces such as I2C, I2S, SPI, SDIO, UART, etc., and is equipped with USB to UART base for users to carry out RF related testing and software system development. Simply connect to USB for operation.

#### 1.1 Block Diagram

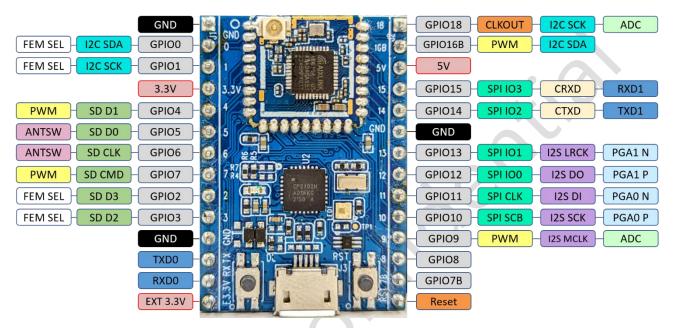


Figure 1: A6610 EVK KIT

#### 1.2 A6610 EVK module features

- 1 micro-USB 5V power supply;
- 2 I2C interfaces;
- 2 UART interfaces;
- 1 SPI interface ;
- ➤ 1 I2S;
- > 1 SDIO interface;
- > 1 I-pex connector;
- 2 push button switches;
- 1 full-color RGB LED light;
- 1 power indicator light ;

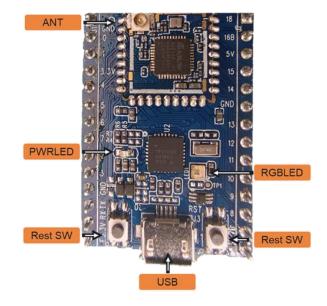


Figure 2: A6610 EVK KIT Interface



#### 2. Hardware connection

#### 2.1 Install USB to UART driver

The A6610 EVK KIT is equipped with the CP2102 IC, which can read UART logs directly through the micro USB on the board, and requires the Silicon Labs CP210x USB to UART Bridge driver to be installed on the PC before use, which can be downloaded via Internet search.

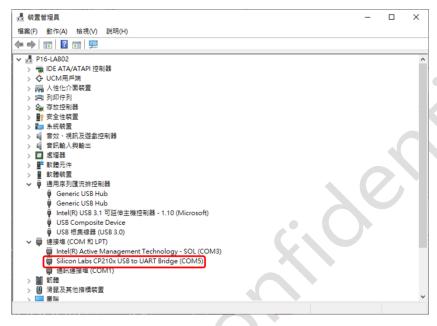


Figure 3: Install driver

#### 2.2 Device connection

The A6610 EVK KIT is powered by USB 5V power supply. After powering up, use the serial software to read the UART console log (Tera Term is used in the example), and set the baud rate to 115200. When burning, press and hold the Download button and short press the Reset button to enter the Download mode.

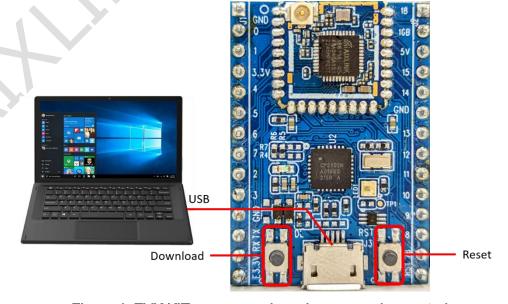


Figure 4: EVK KIT power supply and programming control



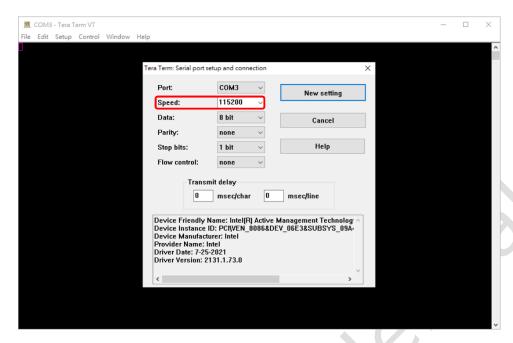


Figure 5: Baud rate setting

## **Burning Applications**

#### 3.1 Burning Software

The A6610 EVK module is programmed with Flash\_Tool\_V0.1.5 software. The FW.bin file and the corresponding Config.ini file must be prepared before burning. The FW and Config files must be in the same folder path when burning.

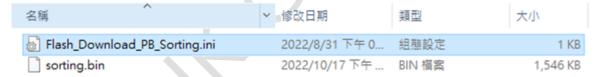


Figure 6: Bin and Config.ini setting

## 3.2 Burning Process

The A6610 KIT must be connected to the computer before programming. Open Flash\_Tool\_V0.1.5 software, please refer to Figure 7 for the interface configuration; please refer to Figure 8 and the description for the programming procedure.



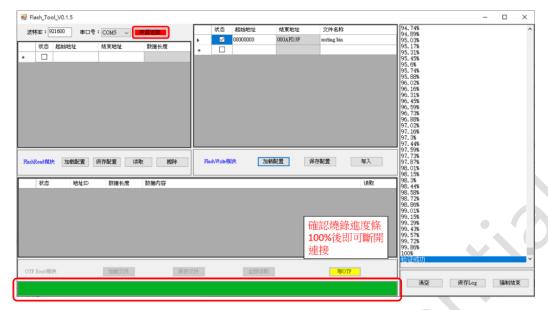


Figure 7: Burning interface

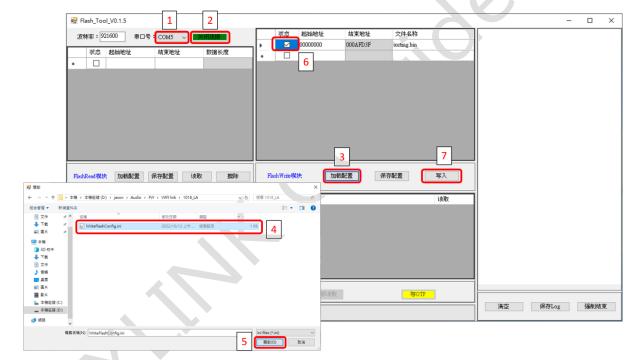


Figure 8: Burning steps

- ① Set the serial port.
- ② Turn on the connection and the button turns green. Make sure the serial software is disconnected before performing this step.
- ③Load the configuration.
- Select the Config.ini file in the target path
- ⑤Confirm to open
- Select the FW file to be burned
- **7 Click on Write**
- ®Press and hold the Download button and short press the Reset button to enter the burning mode, as shown in Figure 9



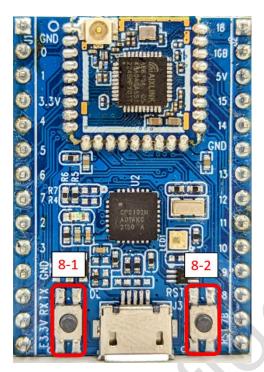


Figure 9: Enter Download mode