

AW-HM610

802.11ah Module EVK

User Guide

Rev. 0.1

(For Standard)

Revision History

Document NO:

Version	Revision Date	DCN NO.	Description	Initials	Approved
0.1	2023/11/30		Initial Version	Daniel Lee	NC Chen

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1 Overview

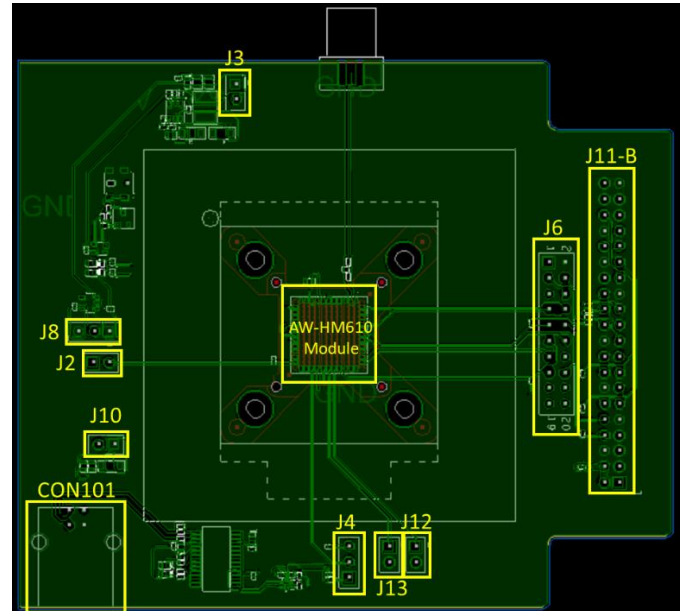
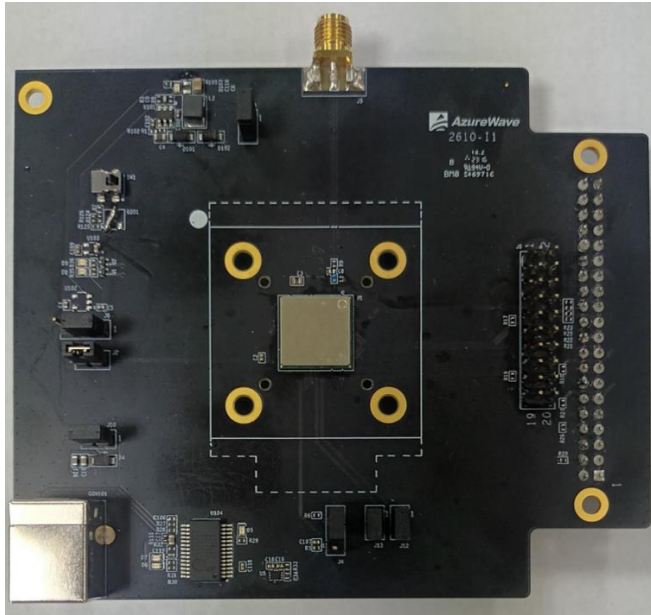
1.1 Device supported

This document supports the AW-HM610 (12 x 12 mm LGA Module). The AW-HM610 test board can be operated in MFG mode or Host Mode. If you want to perform AW-HM610 RF performance test, please contact the relevant personnel of Newracom to obtain NRC7394 Manufacturing Test Tool GUI (MFT GUI) and related user guide.

2. Basic Setup and Requirements for MFG Mode

This section provides the detailed information about the setting for AW-HM610 demo board. 錯誤! 找不到參照來源。 shows the overview of the AW-HM610 test board physical photo and PCB placement (TOP). The description of jumpers' functions and settings on demo board is as follows:

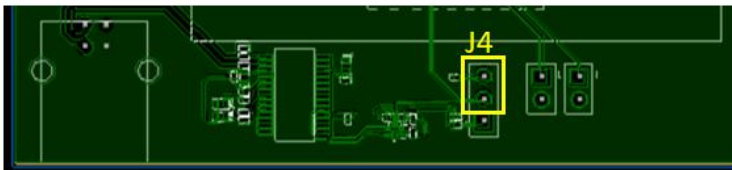
Azurewave AW-HM610 test board physical photo and PCB placement



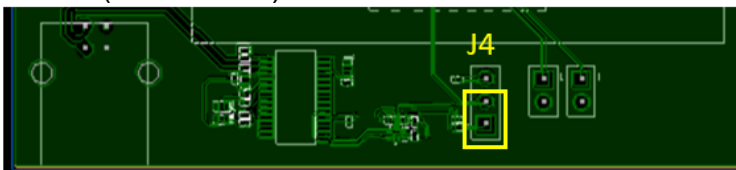
2.1 Operation Mode Configurations

AW-HM610 can be operated in MFG mode or Host Mode through the setting of jumper J4.

J4 = L (Host Mode)



J4 = H (MFG Mode)

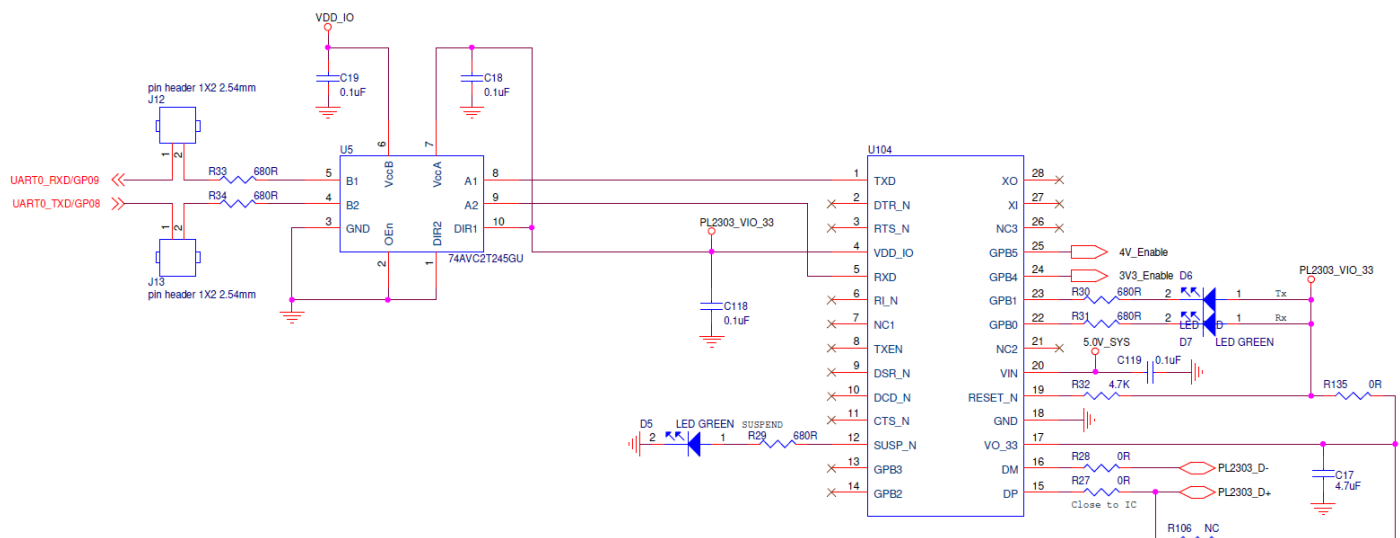


2.2 Power Supply

- a. The 5.0V power supply can be provided by USB connector (CON101) and short J10
- c. The 3.3V power supply (J3) for AW-HM610 pin.9 VBAT is converted from the 5V power supply through the LDO on the demo board. You can measure the current of VBAT by connecting an ammeter in series with J3.
- d. The 1.8V power supply is converted from the 3.3V power supply through the LDO on the demo board. You can measure the current of VDDIO by connecting an ammeter in series with J2.
- e. VDDIO for AW-HM610 can be set to 1.8V or 3.3V through J8
 Short J8 pin.2 and pin.1 to set VDDIO to 3.3V (default)
 Short J8 pin.2 and pin.3 to set VDDIO to 1.8V

2.3 USB to UART (J12 & J13)

Set the UART port (UART0) of AW-HM610 by short-circuiting J12 and J13.



UART TO USB

2.4 GPIOs and JTAG (J6)

The GPIO pins of AW-HM610 are connected to J6, the definition of each pin is as follows



3. Basic Setup and Requirements for Host Mode

AW-HM610 can be connected to the Host side via SPI interface. The picture below is a photo of AW-HM610 demo board connected to Raspberry Pi4 via J11-B. Please note that the mode of J4, must be set correctly when operating in Host Mode.

J4 = L (Host Mode)

