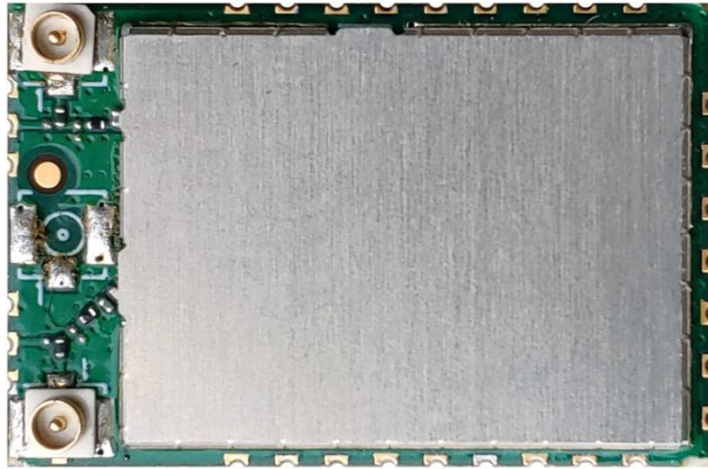# FRX-M79AU-21

802.11a/b/g/n/ac/ax 1200Mbps

WLAN + Bluetooth v5.2 Combo

USB3.0 Module Specification

Module Name: FRX-M79AU-21	
Module Type: 802.11a/b/g/n/ac/ax 1200Mbps WLAN + Bluetooth v5.2 Combo USB3.0 Module	
Revision: V1.0	
Customer Approval:	
Company:	
Title:	
Signature:	Date:
Title:	
Signature:	Date:

Revision History

Revision	Summary	Release Date
0.1	Initial release	2021-02-24

1. Introduction

FRX-M79AU-21 is ahighlyintegratedDual-band WLAN+ Bluetooth v5.2Combomodule.It combines a 2T2R Dual-band WLAN subsystem and a Bluetooth v5.2 subsystem which features dual BT controllers.This modulecompatible IEEE 802.11a/b/g/n/ac/ax standard and provides the maximum PHYrate up to 1200Mbps, it supports BT / BLE dual mode with BT v5.2/v4.2/v2.1 compliant, offering feature-rich wireless connectivity at high standards, and delivering reliable, cost-effective throughput from an extended distance.

1.1 Features

- Operating Frequency: 2.4~2.4835GHz or 5.15~5.85GHz
- WLAN features:

  Support Dual-band 2T2R mode with 20/40/80Mhz bandwidth

  Support MU-MIMO RX, MU-OFDMA TX/RX

  Support TX/RX Beamformer

  Support DBDC (dual band dual concurrent)
- Bluetooth features:

  Support BT Classic / BT Low Energy dual mode

  Contains dual BT controllers

1.2 General Specifications

Module Name	802.11a/b/g/n/ac/ax 1200Mbps WLAN + Bluetooth v5.2 Combo USB3.0 Module
Chipset	MT7921AUN
WLAN Standard	IEEE802.11a/b/g/n/ac/ax
BT Specification	Bluetooth Core Specification v5.2/4.2/2.1
Host Interface	USB3.0/USB2.0 for WLAN;USB2.0 for Bluetooth (Reserved UART interface for BT)
Antenna	IPEX / MHF-1 connector for external WLAN antenna; Half hole PADs for external BT antenna (Reserved IPEX connector for BT0)
Dimension	27.0*17.8*2.5mm (L*W*H)
Power Supply	DC 3.3V±0.2V @ 1800 mA (Max)
Operation Temperature	-20℃ to +70℃
Operation Humidity	10% to 95% RH (Non-Condensing)

2. Pin Assignments
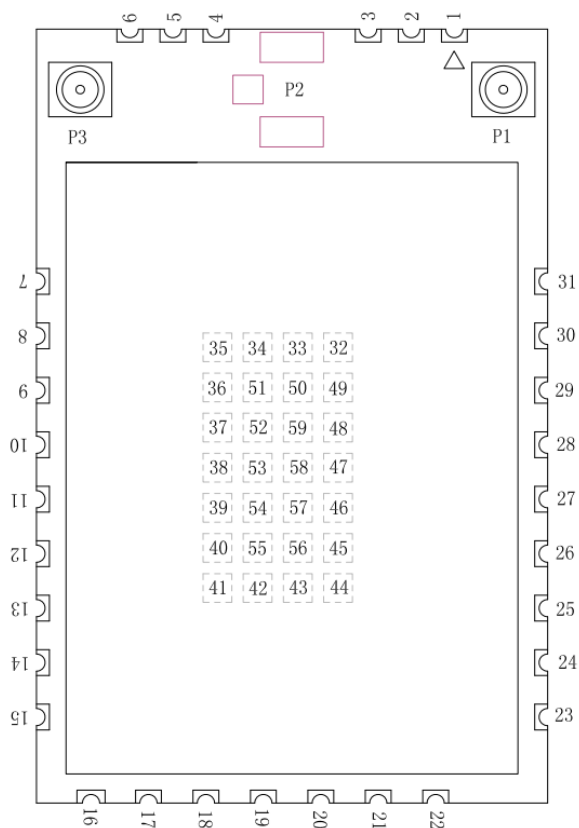
(TOP View)

2.1 Pin Definition

No.	Pin Name	Type	Level	Module Pin Description
1	GND	RF		RF Ground for WLAN_ANT1
2	NC	RF		NC（Reserved 2.4G / 5G RFPAD for WLAN_ANT1)
3	GND	RF		RF Ground for WLAN_ANT1
4	GND	RF		RF Ground for WLAN_ANT0
5	NC	RF		NC（Reserved 2.4G / 5G RFPAD for WLAN_ANT0)
6	GND	RF		RF Ground for WLAN_ANT0
7	GND	RF		RF Ground for BT_ANT1
8	BT_RF1	RF		RF PAD for BT_ANT1
9	GPIO / UART_TXD	I/O	3.3V	Function1、GPIO15，output shall not be used as input； Function2、UART TXD output； Function3、BT Host Interface Select Boot strap： 　　0：USB (internal pull Low by 10K) 　　1：UART If not used，this Pin can be left floating .
10	GND	P		Ground for Power and I/O
11	GPIO / UART_RXD	I/O	3.3V	1、GPIO14，I/O； 2、UART RXD input . If not used，this Pin can be left floating .
12	GPIO / WL_Wake_Host	I/O	3.3V	1、GPIO1，I/O； 2、Wlan Wake up Host，Active Lowoutput， 　　internal pull high by 10K resistor. If not used，this Pin can be left floating .
13	GND	P		Ground for Power and I/O
14	SSTX-	AO		USB3.0 SuperSpeed Device Interface TX differential pair， DC blocked output（to connect USB 3.0 Host "SSRX-"） If USB3.0 is not used，this Pin can be left floating .
15	SSTX+	AO		USB3.0 SuperSpeed Device Interface TX differential pair， DC blocked output（to connect USB 3.0 Host "SSRX+"） If USB3.0 is not used，this Pin can be left floating .
16	SSRX-	AI		USB3.0 SuperSpeed Device Interface RX differential pair （to connect USB 3.0 Host "SSTX-"） If USB3.0 is not used，this Pin can be left floating .

17	SSRX+	AI		USB3.0 SuperSpeed Device Interface RX differential pair (to connect USB 3.0 Host "SSTX+"） If USB3.0 is not used，this Pin can be left floating .
18	GND	P		Ground for Power and I/O
19	HSD+	A I/O		USB2.0 HighSpeed Device Interfacedifferential pair (to connect USB 2.0 Host "HSD+"）
20	HSD-	AI/O		USB2.0 HighSpeed Device Interfacedifferential pair (to connect USB 2.0 Host "HSD-"）
21	VDD33	P		DC 3.3V power supply
22	Reset	I/O	3.3V	Reset input，this Pin can externally shutdown/reset theModule, Active Low, internal pull high by 10K resistor. If not used，this Pin can be left floating .
23	GPIO / BT_Wake_Host	I/O	3.3V	1、GPIO0，I/O； 2、BT LE Wake up Host，Active Lowoutput， internal pull high by 10K resistor. If not used，this Pin can be left floating .
24	GPIO / UART_RTS	I/O	3.3V	1、GPIO11，output，shall not be used as input； 2、UART RTS output； 3、USB FrequencySelect_Boot strap： 0：USB 5G Mode 1：USB 2.5G Mode (internal weak pull Low) If not used，this Pin can be left floating .
25	GPIO / UART_CTS	I/O	3.3V	1、GPIO12，I/O； 2、UART RTS input . If not used，this Pin can be left floating .
26~28	NC	/		NC
29	GND	RF		RF Ground for BT_ANT0
30	BT_RF0	RF		RF PAD for BT_ANT0
31	GND	RF		RF Ground for BT_ANT0
32~59	GND	P		Optional ground pads of heatsink,can be left floating.
P1	WLAN_RF1	RF		IPEX connector for 2.4G / 5G RF to WLAN_ANT1
P2	NC	RF		NC（Reserved IPEX connector PAD for BT_ANT0）
P3	WLAN_RF0	RF		IPEX connector for 2.4G / 5G RF to WLAN_ANT0

P: Power;I/O: In/Output; A I/O: AnalogIn/Output;RF: Analog RF Port;

3. Electrical and Thermal Specifications

3.1 Recommended Operating Conditions

Parameters		Min	Typ	Max	Units
Ambient Operating Temperature		-20	25	70	℃
External Antenna VSWR			1.7	2	/
Supply Voltage	VDD33	3.1	3.3	3.5	V

3.2 Digital I/O DC Specifications

Symbol	Parameter	Min	Typ	Max	Units
VIH	Input High Voltage	VDD33*0.625	--	VDD33+0.3	V
VIL	Input Low Voltage	-0.3	--	VDD33*0.25	V
VOH	Output High Voltage	VDD33*0.75	--	VDD33+0.3	V
VOL	Output Low Voltage	-0.3	--	VDD33*0.125	V

3.3 Current Consumption

Conditions : VDD33=3.3V ; Ta:25℃			
Use Case	**VDD33 Current (average)**		
	Typ	Max	Units
WLANUnassociated (Linux Driver,BT disable)	TBD	TBD	mA
2.4G HE_SU 40MHz RX Listen (Linux Driver, BT disable)	TBD	TBD	mA
5G HE_SU 80MHz RX Listen (Linux Driver, BT disable)	TBD	TBD	mA
2.4G HT20 MCS8 TX@19dBm (2TX RF test)	TBD	TBD	mA
2.4G HE_SU 40MHz MCS11 TX@14dBm (2TX RF test)	TBD	TBD	mA
5G HT20 MCS8 TX@19.5dBm (2TX RF test)	TBD	TBD	mA
5G HE_SU 80MHz MCS11 TX@13.5dBm(2TX RF test)	TBD	TBD	mA
2.4G HE_SU 40MHz MCS11RX Active (2RX RF test)	TBD	TBD	mA
5G HE_SU 80MHz MCS11 RX Active (2RX RF test)	TBD	TBD	mA

Bluetooth Unassociated (Linux Driver, WLAN disable)	TBD	TBD	mA
BT BR_1M DH1 TX@9dBm (BT0 or BT1 RF test)	TBD	TBD	mA
BT LE_2M TX@7dBm (BT0 or BT1 RF test)	TBD	TBD	mA
BT BR_1M DH1 RX Active(BT0 or BT1 RF test)	TBD	TBD	mA

4. WLAN& Bluetooth RF Specifications

4.1 2.4G WLAN RF Specification

Conditions : VDD33=3.3V ; Ta:25℃	
Features	**Description**
WLAN Standard	IEEE 802.11b/g/n/ax, CSMA/CA
Frequency Range	2.4~2.4835GHz (2.4GHz ISM Band)
Channels	Ch1~Ch13 (For 20MHz Channels)
Modulation	802.11b (DSSS): CCK, DQPSK,DBPSK; 802.11g (OFDM): BPSK, QPSK, QAM16, QAM64; 802.11n (OFDM): BPSK, QPSK, QAM16, QAM64; 802.11ax (OFDMA): BPSK,BPSK_DCM,QPSK,QPSK_DCM, QAM16, QAM16_DCM, QAM64, QAM256, QAM1024;
Date Rate	802.11b: 1, 2, 5.5, 11Mbps; 802.11g: 6, 9, 12, 18, 24, 36, 48, 54Mbps; 802.11n (HT20): MCS0~MCS7(1T1R_SISO) 6.5~72.2Mbps; 802.11n (HT20): MCS8~MCS15(2T2R_MIMO) 13~144.4Mbps; 802.11n (HT40): MCS0~MCS7(1T1R) 13.5~150Mbps; 802.11n (HT40): MCS8~MCS15(2T2R) 27~300Mbps; 802.11ax (HE_MU,26~242RU): MCS0~MCS11(1T1R) 0.4~143.4Mbps; 802.11ax (HE_MU,26~242RU): MCS0~MCS11(2T2R) 0.8~286.8Mbps; 802.11ax (HE_SU,non-OFDMA 20MHz): MCS0~MCS11(1T1R) 3.6~143.4Mbps; 802.11ax (HE_SU,non-OFDMA 20MHz): MCS0~MCS11(2T2R) 7.3~286.8Mbps; 802.11ax (HE_SU,non-OFDMA 40MHz): MCS0~MCS11(1T1R) 7.3~286.8Mbps; 802.11ax (HE_SU,non-OFDMA 40MHz): MCS0~MCS11(2T2R) 14.6~573.5Mbps;
Frequency Tolerance	≦±15ppm
2.4G Transmitter Specifications	

TX Rate	TX Power (dBm)	TX Power Tolerance (dB)	EVM (dB)

2.4G Receiver Specifications			
RX Rate	Min Input Level（dBm）	Max InputLevel（dBm）	PER
802.11b@1Mbps	-94	-5	< 8%
802.11b@11Mbps	-87	-5	< 8%
802.11g@6Mbps	-92	-5	< 10%
802.11g@54Mbps	-74	-5	< 10%
802.11n@HT20_MCS0	-92	-5	< 10%
802.11n@HT20_MCS7	-72	-5	< 10%
802.11n@HT40_MCS0	-89	-5	< 10%
802.11n@HT40_MCS7	-69	-5	< 10%
802.11ax@HE_SU 20M_MCS0	-91	-5	< 10%
802.11ax@HE_SU 20M_MCS11	-61	-5	< 10%
802.11ax@HE_SU 40M_MCS0	-88	-5	< 10%
802.11ax@HE_SU 40M_MCS11	-58	-5	< 10%

4.2 5G WLAN RF Specification

Conditions: VDD33=3.3V; Ta:25℃	
Features	Description
WLAN Standard	IEEE 802.11a/n/ac/ax, CSMA/CA
Frequency Range	5.15~5.25GHz; 5.735~5.835GHz (5GHz ISM Band)

Channels	Ch36, Ch40, Ch44, Ch48; Ch149~Ch165(For 20MHz Channels)
Modulation	802.11a (OFDM): BPSK, QPSK, QAM16, QAM64; 802.11n (OFDM): BPSK, QPSK, QAM16, QAM64; 802.11ac (OFDM): BPSK, QPSK, QAM16, QAM64, QAM256; 802.11ax (OFDMA): BPSK,BPSK_DCM,QPSK,QPSK_DCM, QAM16, QAM16_DCM, QAM64, QAM256, QAM1024;
Date Rate	802.11a: 6, 9, 12, 18, 24, 36, 48, 54Mbps; 802.11n (HT20): MCS0~MCS7(1T1R_SISO) 6.5~72.2Mbps; 802.11n (HT20): MCS8~MCS15(2T2R_MIMO) 13~144.4Mbps; 802.11n (HT40): MCS0~MCS7(1T1R) 13.5~150Mbps; 802.11n (HT40): MCS8~MCS15(2T2R) 27~300Mbps; 802.11ac (VHT20): MCS0~MCS8(1T1R) 6.5~86.7Mbps; 802.11ac (VHT20): MCS0~MCS8(2T2R) 13~173.3Mbps; 802.11ac (VHT40): MCS0~MCS9(1T1R)13.5~200Mbps; 802.11ac (VHT40): MCS0~MCS9(2T2R)27~400Mbps; 802.11ac (VHT80): MCS0~MCS9(1T1R)29.3~433.3Mbps; 802.11ac (VHT80): MCS0~MCS9(2T2R)58.5~866.7Mbps; 802.11ax (HE_MU,26~484RU): MCS0~MCS11(1T1R) 0.4~286.8Mbps; 802.11ax (HE_MU,26~484RU): MCS0~MCS11(2T2R) 0.8~573.5Mbps; 802.11ax (HE_SU,non-OFDMA 20MHz): MCS0~MCS11(1T1R) 3.6~143.4Mbps; 802.11ax (HE_SU,non-OFDMA 20MHz): MCS0~MCS11(2T2R) 7.3~286.8Mbps; 802.11ax (HE_SU,non-OFDMA 40MHz): MCS0~MCS11(1T1R) 7.3~286.8Mbps; 802.11ax (HE_SU,non-OFDMA 40MHz): MCS0~MCS11(2T2R) 14.6~573.5Mbps; 802.11ax (HE_SU,non-OFDMA 80MHz): MCS0~MCS11(1T1R) 15.3~600.4Mbps; 802.11ax (HE_SU,non-OFDMA 80MHz): MCS0~MCS11(2T2R) 30.6~1201Mbps;
Frequency Tolerance	≦±15ppm

5G Receiver Specifications			
RX Rate	Min Input Level（dBm)	Max InputLevel（dBm)	PER
802.11a@6Mbps	-92	-5	< 10%
802.11a@54Mbps	-74	-5	< 10%
802.11n@HT20_MCS0	-92	-5	< 10%
802.11n@HT20_MCS7	-72	-5	< 10%
802.11n@HT40_MCS0	-89	-5	< 10%
802.11n@HT40_MCS7	-69	-5	< 10%
802.11ac@VHT80_MCS0	-85	-5	< 10%
802.11ac@VHT80_MCS9	-59	-5	< 10%
802.11ax@HE_SU 80M_MCS0	-86	-5	< 10%
802.11ax@HE_SU 80M_MCS11	-56	-5	< 10%

4.3 Bluetooth RF Specification

Conditions: VDD33=3.3V; Ta:25℃	
Features	Description
Bluetooth Specification	Bluetooth Core Specification v5.2/4.2/2.1
Frequency Range	2.4~2.4835GHz (2.4GHz ISM Band)
Channels	Bluetooth Classic: Ch0~Ch78 (For 1MHz Channels); Bluetooth Low Energy: Ch0~Ch39 (For 2MHz Channels);

Power Classes	Bluetooth Classic: Class1; Bluetooth Low Energy: Class1.5;		
Date Rate & Modulation	BR_1Mbps: GFSK; EDR_2Mbps: π/4-DQPSK; EDR_3Mbps: 8DPSK; LE_1Mbps: GFSK (Uncoded);		

Bluetooth Transmitter Specifications

BR_1M (DH1) Modulation Characteristics

Δf1avg	140KHz	158.6KHz	175KHz
Δf2avg	140KHz	159.7KHz	175KHz
Δf2max	115KHz	162.4KHz	/
Δf2avg/Δf1avg	0.8	1	/
Items	**Min**	**Typ**	**Max**

EDR_3M(3DH5) EDR Carrier Frequency Stability and Modulation Accuracy

ωi	-75KHz	2.69KHz	+75KHz
ωi+ωo	-75KHz	2.74KHz	+75KHz
ωo	-10KHz	-0.4KHz	+10KHz
8DPSK RMS DEVM	/	0.044	0.13
8DPSK DEVM	/	0.093	0.25
Items	**Min**	**Typ**	**Max**

LE_1M Modulation Characteristics

Δf1avg	225KHz	249.8KHz	275KHz

	Min	Typ	Max
Δf2avg	225KHz	239.4KHz	275KHz
Δf2max	185KHz	243.6KHz	/
Δf2avg/Δf1avg	0.8	0.96	/
Items	**Min**	**Typ**	**Max**

Bluetooth Receiver Specifications

Items	Sensitivity		Maximum Input Level	
	Input Level(Typ)	**BER**	**Input Level(Typ)**	**BER**
BR_1M (DH1)	-90dBm	≦0.1%	-5dBm	≦0.1%
EDR_3M (3DH5)	-80 dBm	≦0.01%	-5dBm	≦0.1%
	Input Level (Typ)	**PER**	**Input Level (Typ)**	**PER**
LE_1M	-88 dBm	≦ 5%	-5dBm	≦ 5%

5. Mechanical Specifications

5.1 Module Outline Drawing
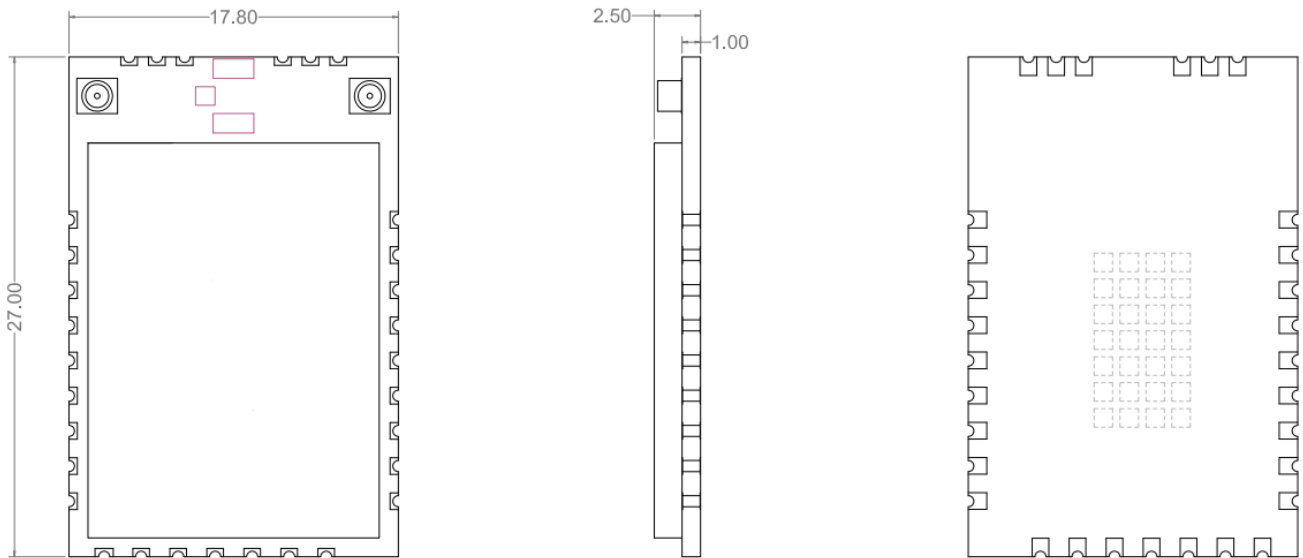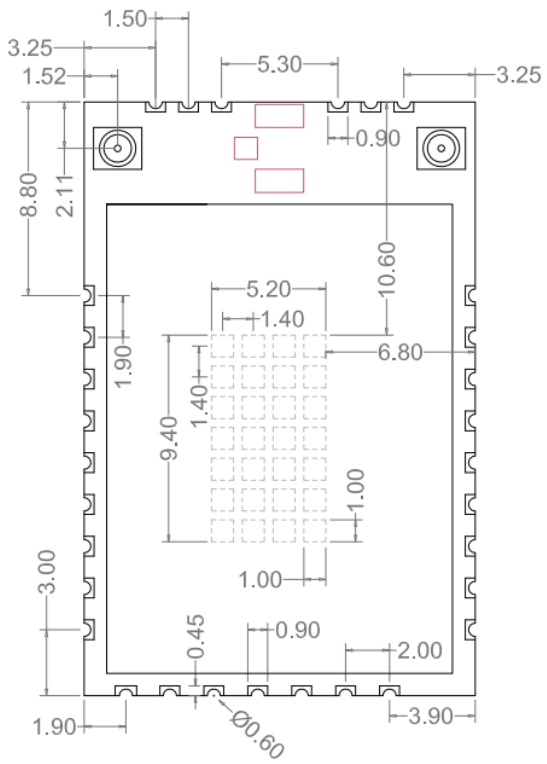

Module dimension: 27.0*17.8*2.5mm(L*W*H; Tolerance: ±0.15mm)

IPEX / MHF-1 connector dimension: 2.6*3.0*1.2mm (L*W*H, Ø2.0mm)
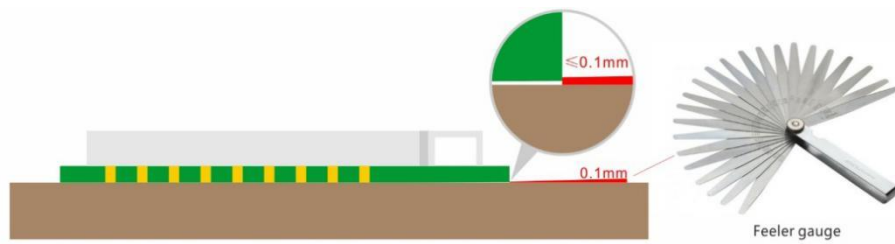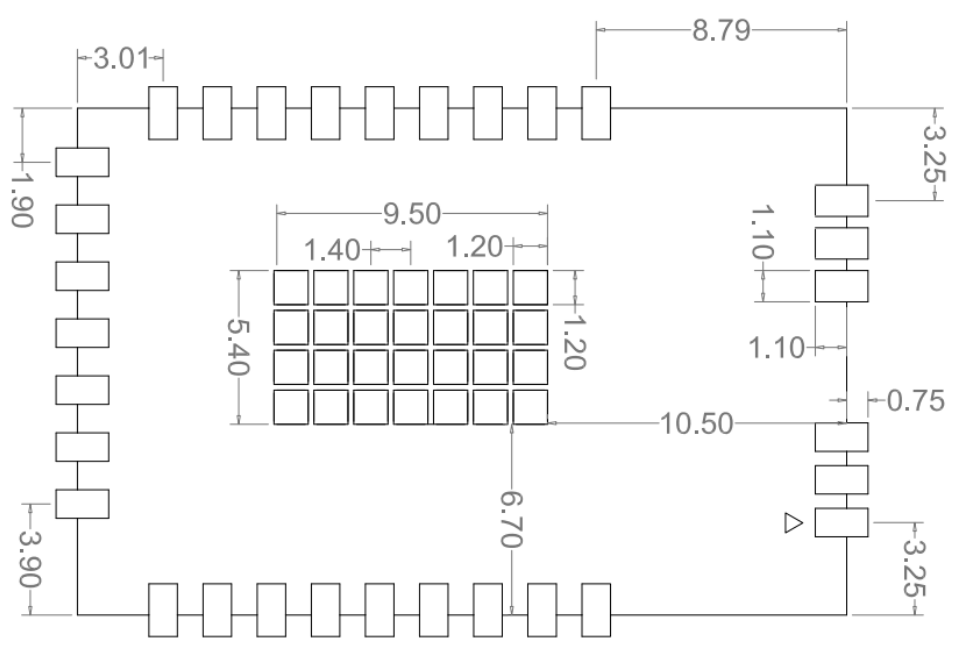

Module Bow and Twist: ≤0.1mm

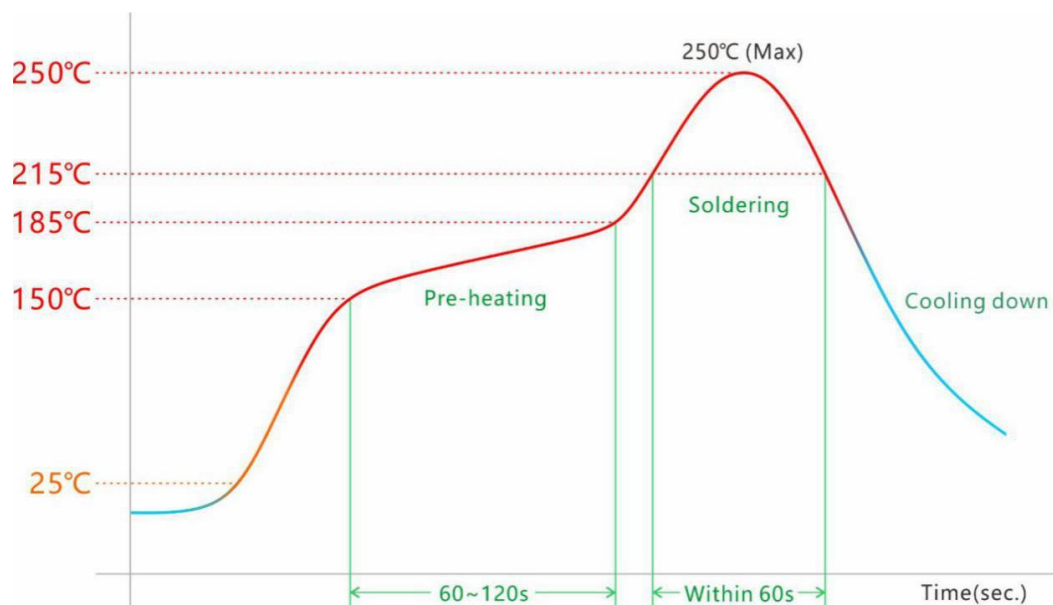## 5.2 Mechanical Dimensions
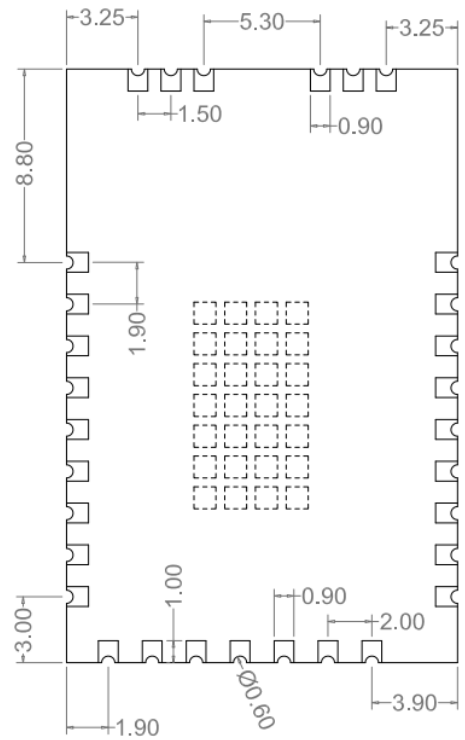
(TopView)(Bottom View)

6. Application Information

6.1 Recommend PCB Layout Footprint

6.1 Reflow Soldering Standard Conditions

Please use the reflow within 2 times.
Set up the highest temperature within 250℃.

7. Key Components Of Module

No.	Parts	Specification	Manufacturer	Note
1	Chipset	MT7921AUN	MediaTek Inc.	
2	PCB	7921AU1	Shenzhen Tie Fa TechnologyCO. LTD	
			Guangdong KINGSHINE ELECTRONICS CO., LTD	
			QuzhouSunlordElectronics CO., LTD	
3	Crystal	40MHz-6pF-10ppm-2016	Lucki Electronics Co., Ltd	
			Shenzhen Kaiyuexiang Electronics Co., Ltd	
			Chengde Oscillator Electronic Technology Co., Ltd.	
4	Diplexer	RFDIP1607ALM9T21	Walsin Technology CORP. TDK China Co., Ltd.	

8. Package and Storage Information

8.1 Package Dimensions
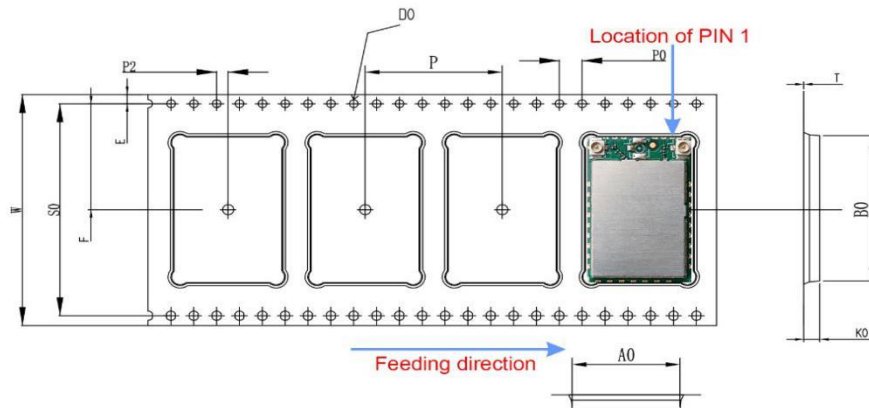
ITEM	W	A0	B0	K0	E	F	P	P0	P2	D0	T
DIM	44.00+0.3	18.50±0.1	27.30±0.1	2.90±0.1	1.75±0.1	20.2±0.1	24.00±0.1	4.00±0.1	2.00±0.1	Ø1.5±0.1	0.40±0.05

Package specification:

1. 1000 modules per roll and 4,000 modules per box.

2. Outer box size: 37.5*36*29cm.

3. The diameter of the blue environment-friendly rubber plate is 13 inches,
   with a total thickness of 48mm (with a width of 44mm carrying belt).

4. Put 1 package of dry agent (20g) and humidity card in each anti-static vacuum bag.

5. Each carton is packed with 4 boxes.

8.2 StorageConditions

Absolute Maximum Ratings:
    Storage temperature: -40℃ to +85℃,
    Storage humidity: 10% to 95 (Non-Condensing)
Recommended Storage Conditions:
    Storage temperature: 5℃ to +40℃,
    Storage humidity: 20% to 90% RH

Please use this Module within 12month after vacuum-packaged.
The Module shall be stored without opening the packing.
After the packing opened, the Module shall be used within 72hours.
When the color of the humidity indicator in the packing changed,
The Module shall be baked before soldering.
Baking condition: 60℃, 24hours, 1time.

ESD Sensitivity:
 ESD Protection: 3KV(HBM ,Maximum rating)
The Module is a static-sensitive electronic device.
Do not operate or store near strong electrostatic fields.
Take proper ESD precautions!

ESD CAUTION

FCC Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

 - Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and receiver.
 - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 - Consult the dealer or an experienced radio/TV technician for help important announcement

Important Note:

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance
20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/Canada.

This device is intended only for OEM integrators under the following conditions:

1. The antenna must be installed such that 20 cm is maintained between the antenna and users, and
2. The transmitter module may not be co-located with any other transmitter or antenna,
3. For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change. (if modular only test Channel 1-11)

As long as the three conditions above are met, further transmitter testing will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed.

Important Note:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

The final end product must be labeled in a visible area with the following" Contains FCC ID: **2AVED-FRX-M79AU-21** "

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM Manual v01

2.2 List of applicable FCC rules

CFR 47 FCC PART 15 SUBPART C has been investigated. It is applicable to the modular transmitter

2.3 Specific operational use conditions

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system.

2.4 Limited module procedures

Not applicable

2.5 Trace antenna designs

Not applicable

2.6 RF exposure considerations

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

2.7 Antennas

This radio transmitter **FCCID: 2AVED-FRX-M79AU-21** has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Model	Type	Connector	Peak gain (dBi)				
			2400-2483.5 MHz	5150-5250 MHz	5250-5350 MHz	5470-5725 MHz	5725-5850 MHz
2400-2483.5 MHz	External Antenna	/	5.00dBi	/	/	/	/
2400-2483.5 MHz 5000-6000 MHz	External Antenna	/	5.00dBi	5.00dBi	/	/	5.00dBi
2400-2483.5 MHz 5000-6000 MHz	External Antenna	/	5.00dBi	5.00dBi	/	/	5.00dBi

2.8 Label and compliance information

The final end product must be labeled in a visible area with the following" Contains FCC ID:2AVED-FRX-M79AU-21".

2.9 Information on test modes and additional testing requirements

Host manufacturer is strongly recommended to confirm compliance with FCC requirements for the transmitter when the module is installed in the host.

2.10 Additional testing, Part 15 Subpart B disclaimer

Host manufacturer is responsible for compliance of the host system with module installed with all other applicable requirements for the system such as Part 15 B.