





# Foxconn WBU058-BGA Series WLAN and BT Wireless Module **Owner's Manual**

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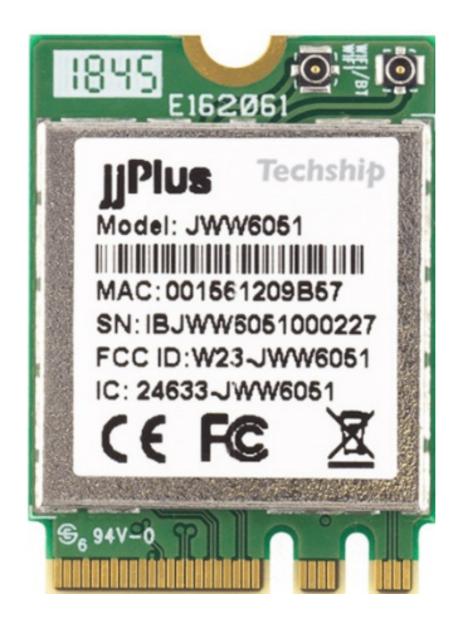


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Foxconn WBU058-BGA Series WLAN and BT Wireless Module



### **Specifications**

• Model: WBU058-BGA-V11, WBU058-BGA-V13, WBU058-BGA-V15

• Type: WLAN and BT Wireless Module

## **Product Usage Instructions**

### **Module Overview**

### **Key Features**

Integrate high-efficiency power management unit with single 3.3V and 5V power supply input.

### **Feature Difference**

Feature	WBU058-BGA-V11	WBU058-BGA-V13	WBU058-BGA-V15
Wi-Fi 6E + BT5.3	V	V	V

### **Pin Definition**

### **Electrical and RF Specifications**

### **Recommended Operation Rating**

3.3V: 3.3 – 3.6 V
5V: 4.5 – 5.5 V

### **RF Operation Frequency**

2.4GHz WLAN: 2412 – 2462 MHz
2.4GHz BT: 2402 – 2480 MHz

## **Frequently Asked Questions**

### Q: How do I connect the module to a power supply?

A: To connect the module to a power supply, use a 3.3V and 5V power supply input as specified in the user manual.

#### **MODULE OVERVIEW**

Foxconn WBU058-BGA-VXX (XX=11, 13, 15) module is a highly integrated module that features a high-performance  $2\times2$  dual-band WLAN subsystem, a Bluetooth v5.3 subsystem, and merged bu $\Sigma$ om sw $\Theta$ ch/IR receiver/LED indicator/light sensor/thermal sensor (V13 only)/far field mic (V15 only). The WLAN subsystem contains the 802.11a/b/g/n/ac/ax radio, and baseband that is designed to meet feature-rich wireless connec $\Theta$ vity at high standards and deliver reliable, cost-effective throughput from an extended distance. Op $\Theta$ mized RF architecture and baseband algorithms provide superb performance and low power consumption. Intelligent MAC design deploys a highly efficient offload engine and hardware data processing accelerators which fully offloads the Wi-Fi task of the host processor.

### **Key Characteristic**

- Integrate high-efficiency power management unit with single 3.3V and 5V power supply input.
- 32-bit RISC MCU for Wi-Fi/Bluetooth protocols and Wi-Fi offload
- Embedded SRAM/ROM
- IEEE 802.11 a/b/g/n/ac/ax compliant
- Support 20MHz, 40MHz, 80MHz bandwidth in 2.4GHz, 5GHz, 6GHz band
- Support Bluetooth 5.3
- Dual-band 2T2R mode
- Support MU-MIMO RX
- Support STBC, LDPC
- Greenfield, mixed mode, and legacy modes support
- IEEE 802.11 d/e/h/i/j/k/mc/r/v/w support
- Security support for WFA WPA/WPA2/WPA3 personal, WPS2.0, WAPI
- QoS support of WFA WMM, WMM PS
- Bluetooth v5.3 with BLE (BT low energy)
- Supports BT/BLE dual mode.
- Supports BT/Wi-Fi coexistence.

- Supports 7 BT links and 16 BLE links.
- BoΣom switch
- IR receiver
- White / RED LED indicator
- Ambient light sensor
- Thermal sensor (V13 only)
- Far-field mic (V15 only

## **Feature Difference**

Feature	WBU058-BGA-VXX				
reature	WBU058-BGA-V11	WBU058-BGA-V13	WBU058-BGA-V15		
Wi-Fi 6E + BT5.3	V	V	V		
IR receiver	V	V	V		
Key	V	V	V		
LED indicator	V	V	V		
Light Sensor	V	V	V		
Thermal Sensor	_	V	-		
Far Filed Mic (MIC/Tally & RGB/MIC S	_	_	V		
WITCH)					

## **Pin Definition**

Connector: P-TWO 1311019-45CD1N001

Pin #	Pin Name	Pin Type	Supply Doma in	Description	Remark
1	5V_STBY	Power	5V	5V input for White and RGB LED	
2	GND	Ground	_	Ground	
3	GND	Ground	_	Ground	
4	GND	Ground	_	Ground	
5	GND	Ground	_	Ground	
6	3.3V_MAIN	Power	3.3V	3.3V for light sensor and thermal sensor	
7	ERR_LED	I	_	error indicator control	
8	W_LED	I	_	white light control	
9	POWER_K EY	0	_	power button switch	

10	MIC_DET	0	_	Microphone enable detect	V15 only
11	MIC_DATA _R	0	_	Microphone R-side data	V15 only
12	MIC_CLK	0	_	Microphone clock	V15 only
13	GND	Ground	_	Ground	
14	MIC_DATA _L	О	_	Microphone L-side data	V15 only
15	MIC_TALL Y	I	_	Tally light control	V15 only
16	SENSE_O PT	0	_	Light sensor output signal	
17	GND	Ground	_	Ground	
18	IR_OUT	0	_	Signal from IR receiver	
19	MIC_B	I	_	Blue light control	V15 only
20	MIC_G	I	_	Greenlight control	V15 only
21	MIC_R	I	_	Red light control	V15 only
22	3.3V_STBY	Power	3.3V	3.3V power supply to IR receiver/Red LED/	
23	I2C0_SCL	I/O	_	I2C for Light sensor	V13 only
24	I2C0_SDA	I/O	_	I2C for Light sensor	V13 only
25	GND	Ground	_	Ground	
26	GND	Ground	_	Ground	
27	BT_WOBT #	О	_	Wake up on BT	
28	WIFI_BT_R ST#	I	_	Reset BT	
29	WIFI_WO WL#	0	_	Wake up on LAN	
30	WIFI_RST#	I	_	Reset Wi-Fi	
31	BT_RST#	I	_	Full reset	
32	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN	
33	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN	
34	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN	
35	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN	

36	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN
37	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN
38	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN
39	WIFI_VBU S	Power	3.3V	3.3V power supply to MT7921AUN
40	GND	Ground	_	Ground
41	GND	Ground	_	Ground
42	WIFI_DP	I/O	_	USB differential Signal
43	WIFI_DM	I/O	_	USB differential Signal
44	GND	Ground	_	Ground
45	GND	Ground	_	Ground

# **Electrical and RF Specifications**

## **Recommended Operation Rating**

Power domain	Condition	Min	Тур.	Мах.	Unit
3.3V	3.3V	3	3.3	3.6	V
5V	5V	4.5	5	5.5	V
RF Interface	Zo		50		Ohm

## **RF Operation Frequency**

	Min	Max.	Unit
2.4GHz WLAN	2412	2462	MHz
2.4GHz BT	2402	2480	MHz
5GHz	5180	5825	MHz
6GHz	5955	7115	MHz

## WLAN RF Specification – TX

**B-mode (Total Conducted AVG Power Max.)** 

Data Rate (Mbps)	Modulation	Typical Power (dBm)	Data Rate (Mbps)	Modulation	Typical Power (dBm)
1	DBPSK	15	5.5	ССК	15
2	DQPSK	15	11	ССК	15

If some channels cannot reach the maximum, use the reported power as a reference.

## **G-mode (Total Conducted AVG Power Max.)**

Data Rate (Mbps)	Modulation	Typical Power (dBm)	Data Rate (Mbps)	Modulation	Typical Power (dBm)
6	OFDM	15	24	OFDM	15
9	OFDM	15	36	OFDM	15
12	OFDM	15	48	OFDM	15
18	OFDM	15	54	OFDM	15

If some channels cannot reach the maximum, use the reported power as a reference.

## 2.4G BW20/40 n/ax-mode (Total Conducted AVG Power Max.)

Data Rate (Mbps)	Typical Power (dBm)	Data Rate (Mbps)	Typical Power (dBm)
HT20/HE20-MCS0	14.5	HT40/HE40-MCS0	14
HT20/HE20-MCS1	14.5	HT40/HE40-MCS1	14
HT20/HE20-MCS2	14.5	HT40/HE40-MCS2	14
HT20/HE20-MCS3	14.5	HT40/HE40-MCS3	14
HT20/HE20-MCS4	14.5	HT40/HE40-MCS4	14
HT20/HE20-MCS5	14.5	HT40/HE40-MCS5	14
HT20/HE20-MCS6	14.5	HT40/HE40-MCS6	14
HT20/HE20-MCS7	14.5	HT40/HE40-MCS7	14
HE20-MCS8	14.5	HE40-MCS8	14
HE20-MCS9	14.5	HE40-MCS9	14
HE20-MCS10	14.5	HE40-MCS10	14
HE20-MCS11	14.5	HE40-MCS11	14

If some channels cannot reach the maximum, use the reported power as a reference.

## 5G A-mode UNII-1/UNII-2a/UNII-2c (Total Conducted AVG Power Max.)

Data Rate (Mbps)	Modulation	Typical Power (dBm)	Data Rate (Mbps)	Modulation	Typical Power (dBm)
6	OFDM	11.5	24	OFDM	11.5
9	OFDM	11.5	36	OFDM	11.5
12	OFDM	11.5	48	OFDM	11.5
18	OFDM	11.5	54	OFDM	11.5

If some channels cannot reach the maximum, use the reported power as a reference.

## 5G A-mode UNII-3 (Total Conducted AVG Power Max.)

Data Rate (Mbps)	Modulation	Typical Power (dBm)	Data Rate (Mbps)	Modulation	Typical Power (dBm)
6	OFDM	9	24	OFDM	9
9	OFDM	9	36	OFDM	9
12	OFDM	9	48	OFDM	9
18	OFDM	9	54	OFDM	9

If some channels cannot reach the maximum, use the reported power as a reference.

## 5G BW20/40/80 n/ac/ax mode UNII-1/UNII-2a/UNII-2c (Total Conducted Power Max.)

Data Rate (Mbps) Typical Power (dBm)		Data Rate (Mbps)	Typical Power (dBm)	
VHT/HT20/HE20-MCS0	11	VHT/HT40/HE40-MCS6	11	
VHT/HT20/HE20-MCS1	11	VHT/HT40/HE40-MCS7	11	

VHT/HT20/HE20-MCS2	11	VHT/HE40-MCS8	11
VHT/HT20/HE20-MCS3	11	VHT/HE40-MCS9	11
VHT/HT20/HE20-MCS4	11	VHT/HT80/HE80-MCS0	11
VHT/HT20/HE20-MCS5	11	VHT/HT80/HE80 -MCS1	11
VHT/HT20/HE20-MCS6	11	VHT/HT80/HE80-MCS2	11
VHT/HT20/HE20-MCS7	11	VHT/HT80/HE80-MCS3	11
VHT/HE20-MCS8	11	VHT/HT80/HE80-MCS4	11
VHT/HE20-MCS9	11	VHT/HT80/HE80-MCS5	11
VHT/HT40/HE40-MCS0	11	VHT/HT80/HE80-MCS6	11
VHT/HT40/HE40-MCS1	11	VHT/HT80/HE80-MCS7	11
VHT/HT40/HE40-MCS2	11	VHT/HE80-MCS8	11
VHT/HT40/HE40-MCS3	11	VHT/HE80-MCS9	11
VHT/HT40/HE40-MCS4	11		
VHT/HT40/HE40-MCS5	11		

If some channels cannot reach the maximum, use the reported power as a reference.

5G BW20/40/80 n/ac/ax mode UNII-3 (Total Conducted Power Max.)

Data Rate (Mbps)	Typical Power (dBm)	Data Rate (Mbps)	Typical Power (dBm)	
VHT/HT20/HE20-MCS0	9	VHT/HT40/HE40-MCS6	9	
VHT/HT20/HE20-MCS1	9	VHT/HT40/HE40-MCS7	9	
VHT/HT20/HE20-MCS2	9	VHT/HE40-MCS8	9	
VHT/HT20/HE20-MCS3	9	VHT/HE40-MCS9	9	
VHT/HT20/HE20-MCS4	9	VHT/HT80/HE80-MCS0	9	
VHT/HT20/HE20-MCS5	9	VHT/HT80/HE80 -MCS1	9	
VHT/HT20/HE20-MCS6	9	VHT/HT80/HE80-MCS2	9	
VHT/HT20/HE20-MCS7	9	VHT/HT80/HE80-MCS3	9	
VHT/HE20-MCS8	9	VHT/HT80/HE80-MCS4	9	
VHT/HE20-MCS9	9	VHT/HT80/HE80-MCS5	9	
VHT/HT40/HE40-MCS0	9	VHT/HT80/HE80-MCS6	9	
VHT/HT40/HE40-MCS1	9	VHT/HT80/HE80-MCS7	9	
VHT/HT40/HE40-MCS2	9	VHT/HE80-MCS8	9	
VHT/HT40/HE40-MCS3	9	VHT/HE80-MCS9	9	
VHT/HT40/HE40-MCS4	9			
VHT/HT40/HE40-MCS5	9			

If some channels cannot reach the maximum, use the reported power as a reference.

6G BW20/40/80 ax mode (Total Conducted Power Max.)

Data Rate (Mbps)	Typical Power (dBm)	Data Rate (Mbps)	Typical Power (dBm)
HE20-MCS0	7	HE40-MCS6	9
HE20-MCS1	7	HE40-MCS7	9
HE20-MCS2	7	HE40-MCS8	9
HE20-MCS3	7	HE40-MCS9	9
HE20-MCS4	7	HE80-MCS0	9
HE20-MCS5	7	HE80-MCS1	9
HE20-MCS6	7	HE80-MCS2	9
HE20-MCS7	7	HE80-MCS3	9
HE20-MCS8	7	HE80-MCS4	9
HE20-MCS9	7	HE80-MCS5	9
HE40-MCS0	9	HE80 -MCS6	9
HE40-MCS1	9	HE80-MCS7	9
HE40-MCS2	9	HE80-MCS8	9
HE40-MCS3	9	HE80-MCS9	9
HE40-MCS4	9		
HE40-MCS5	9		

<sup>\*</sup>If some channels cannot reach the maximum, use the reported power as a reference.

# Bluetooth RF Specification(draft)

Parameter	Condition	Min.	Тур.	Max.	Unit	
Basic Data Rate- Transmit Performance	e					
RF Transmit Power (TRM-LE01,02)	0	4	8	dBm		
In-Band Emission (TRM-LE03,04)	f-f0   = 2MHz	≤ -20	≤ -20		dBm	
III-Balid Ellissioli (Thivi-LE03,04)	f-f0   ≥ 3MHz	≤ -30	≤ -30			
	30MHz – 1GHz	≤ -36	≤ -36		dBm	
TX Output Spectrum –	1GHz -12.75GHz	≤ -30	≤ -30			
Out of Band Spurious Emission	5.15GHz -5.35GHz	≤ -47			- abiii	
	5.725GHz-5.825GHz	≤ -47	≤ -47			
	Delta f1 avg	225 ≤ Δ1	1avg≤ 27	'5		
Modulation Characteristic (TRM- LE05)	Delta f2 max	≥ 185 at	99.9%		kHz	
	Delta f2 avg/Delta f1 avg	≥ 0.8				
Carrier Frequency Drift (TRM-	Center frequency	≤± 150				
LE06,07)	During any packet	≤± 50	≤± 50		kHz	
Maximum Drift Rate (TRM-LE06,07)	20 Hz/5	20 Hz/50 us				
Basic Data Rate- Receiver Performance	е	'			-	
Sensitivity at 30.8% PER(0.1%BER) (RC	V-LE01,02)	≤ -81			dBm	
C/I Co-Channel interference (RCV-						
LE03)	Co-channel	≤ 21				
	f-f0   = 1MHz	≤ 15	≤ 15			
C/I Adjacent CH interference (RCV- LE03)	f-f0   = 2MHz	≤ -17			dB	
	f-f0   ≥ 3MHz	≤ -27				
C/I Image CH interference (RCV-	C/limage	≤ -9	≤ -9			
LE03)	C/limage±1MHz	≤ -15	≤ -15			
	30MHz – 2000 MHz	-30	-30 -35 -35			
Out of hand Blacking (BOV LEO4)	2003MHz – 2399MHz	-35			-  - D	
Out-of-band Blocking (RCV-LE04)	2484MHz – 2997MHz	-35			_ dBm	
	3000MHz – 12750MHz	-30	-30			
Intermodulation Performance at ≤30.8% (≤ 0.1% BER) (RCV-LE05)					dBm	
Maximum input power level (RCV-LE06)					dBm	
PER Report Integrity 50% ≤ PER ≤ 65.4% (RCV-LE07)					dBm	
Spurious Emission	30MHz – 12.75GHz	≤ -57	≤ -57		dBm	

If some channels cannot reach the maximum, use the reported power as a reference

### **Environment Specifications**

· Operatng Conditions

• Operaton Temperature : -10 ~ 50°C

• Relevant Humidity: 5 ~ 95% (non-condensing)

• Storage Conditions

• Non-Operaton Temperature : -20 ~ 85°C (Typ. 25°C)

• Relevant Humidity: 5 ~ 95% (non-condensing)

### **Federal Communications Commission Interference Statement:**

This equipment has been tested and found to comply with the limits for a Class B digital device, under part 15 of the FCC Rules. These limits are designed to provide reasonable protecθon against harmful interference in a residenθal installaθon. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communicaθons. However, there is no guarantee that interference will not occur in a parθcular installaθon. If this equipment does cause harmful interference to radio or television recepθon, 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 separaOon between the equipment and receiver.
- Connect the equipment to 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. Any changes or modificaθons not expressly
  approved by the party responsible for compliance could void your authority to operate the equipment. RF
  exposure statements This TransmiΣer must not be co-located or operaθng in conjuncθon with any other
  antenna or transmiter.

### **FCC RULES**

This equipment complies with FCC RF radiaOon exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cen0meters between the radiator and your body or nearby persons. CFR 47 FCC PART 15 SUBPART C (15.247) and SUBPART E (15.407) have been investigated. It applies to the modular transmiter. The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentaOon that comes with the product. This radio transmiter FCC ID: RX3-WBU058BGA has been approved by the 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. The Part 15 authorized transmitters used in the host product must use a unique antenna connector. The EUT antennas are printed antennas without a connector, which fully complies with the requirements. If the FCC idenOficaOon number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmiter Module FCC ID: RX3-WBU058BGA" Or "Contains FCC ID: RX3-WBU058BGA" The modular transmiter is only FCC authorized for the specific rule parts (i.e., FCC transmiter rules) listed on the grant, and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmiTer grant of certification. The final host product scroll rrequires15 Subpart B compliance testing with the modular transmiter installed. Manufacturers of U-NII devices are responsible for ensuring frequency stability such that emission is maintained within the band of operaton under all conditions of normal operaton as specified in the user's manual. OEM Integrator must refer to FCC KDB "996369 D04 Module Integration Guide v02" for modular transmiΣer

integraOon guidance. The module is for indoor applications only. The module may not be used for remote control of drones The antenna must be installed into the host device so that the end user does not have access to the antenna or its connector. Label Indoor Only Info & Restrictions. FCC regulations restrict the operation of this device to indoor use only. Operation prohibited on oil planorms, cars, trains, boats, and aircraft, except that the operation of this device is permitted in large aircraft while flying above 10,000 feet.

### **Industry Canada statement:**

This device complies with Industry Canada license-exempt RSSs. OperaOon is subject to the following two conditions:

- · This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired opera\(\theta\)on of the
  device. Le pr\(\text{e}\) sent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts
  de licence.

L'exploitaOon est autorisée aux deux condiOons suivantes :

- l'appareil ne doit pas produire de brouillage;
- l'uθlisateur de l'appareil doit accepter tout brouillage radioélectrique subi, meme si le brouillage est suscepθble d'en compromeΣre le foncθonnement.

### **Radiaton Exposure Statement:**

This equipment complies with IC radiaton exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. Déclaraton d'exposi\text{\text{O}} on aux radiatons: Cet \text{\text{\text{e}}} quipment est conforme aux limites d'exposi\text{\text{O}} on aux rayonnements IC \text{\text{e}} tablies pour un environnement non contr\text{\text{o}}\text{\text{\text{e}}}. Cet \text{\text{\text{e}}} quipment doit \text{\text{\text{e}}} tre install\text{\text{\text{e}}} et utlis\text{\text{\text{e}}} avec un minimum de 20 cm de distance entre la source de rayonnement et voter corps. This radio transmiter (IC: 2878F-WBU058BGA has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device. Le pr\text{\text{e}} sent \text{\text{\text{e}}} meteur radio (IC: 2878F-WBU058BGA a \text{\text{\text{e}}} text{\text{\text{e}}} approuv\text{\text{\text{e}}} par Industrie Canada pour fonctonner avec les types d'antenne \text{\text{\text{e}}} antenne \text{\text{\text{e}}} sup\text{\text{\text{e}}} and maximal indiqu\text{\text{e}}, sont strictement interdits pour l'exploitaton de l'\text{\text{\text{e}}} meteur.

Ant. N	Transmitte r Circuit	Frequency Range	Brand Na me	Model N ame	Maximum Gain (dB)	Ant. Type	Connect or Type
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WLAN ANT1	Chain0	2.412~2.472GHz 5.15~5.25GHz 5.25~5.35GHz 5.47~5.725GHz 5.725~5.85GHz 5.925~6.425GHz 6.425~6.525GHz 6.525~6.875GHz 6.875~7.125GHz	FOXCONN	WBU058- BGA	2.412~2.472GHz: 3.9 1 5.15~5.25GHz: 4.11 5.25~5.35GHz: 5.18 5.47~5.725GHz: 4.62 5.725~5.85GHz: 4.28 5.925~6.425GHz: 3.3 4 6.425~6.525GHz: 3.3 5 6.525~6.875GHz: 4.8 8 6.875~7.125GHz: 4.7	Printi ng	N/A
WLAN ANT2	Chain1	2.412~2.472GHz 5.15~5.25GHz 5.25~5.35GHz 5.47~5.725GHz 5.725~5.85GHz 5.925~6.425GHz 6.425~6.525GHz 6.525~6.875GHz 6.875~7.125GHz	FOXCONN	WBU058- BGA	2.412~2.472GHz: 4.9 4 5.15~5.25GHz: 3.8 5.25~5.35GHz: 3.76 5.47~5.725GHz: 3.36 5.725~5.85GHz: 3.34 5.925~6.425GHz: 3.0 7 6.425~6.525GHz: 3.3 9 6.525~6.875GHz: 4.0 1 6.875~7.125GHz: 2.9 7	Printi ng	N/A
BT ANT1	Chain0	2.4~2.4835GHz	FOXCONN	WBU058- BGA	2.81	Printi ng	N/A
BT ANT2	Chain1	2.4~2.4835GHz	FOXCONN	WBU058- BGA	1.53	Printi ng	N/A

If the ISED certification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This

exterior label can use wording such as the following: "Contains IC: 2878F-WBU058BGA".

#### 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 that integrates this module. The end user manual shall include all required regulatory information/warnings as shown in this manual. Must use the device only in host devices that meet the FCC/ISED RF exposure category of mobile, which means the device is installed and used at distances of at least 20cm from persons. The end user manual shall include FCC Part 15 /ISED RSS GEN compliance statements related to the transmitter as shown in this manual. The host manufacturer is responsible for compliance of the host system with the module installed with all other applicable requirements for the system such as Part 15 B, ICES 003. The host manufacturer is strongly recommended to confirm compliance with FCC/ISED requirements for the transmitter when the module is installed in the host. Must have on the host device a label showing Contains FCC ID: RX3-WBU058BGA, Contains IC: 2878F-WBU058BGA The use condition limitations extend to professional users, then instructions must state that this information also extends to the host manufacturer's instruction manual. If the end product will involve Multiple simultaneous transmitting conditions or different operational conditions for a stand-alone modular transmitter in a host, the host manufacturer has to consult with the module manufacturer for the installation method in the end system.

### WBU058BGA, contient IC: 2878F-WBU058BGA

Operation shall be limited to indoor use only. Operation on oil platforms, cars, trains, boats, and aircraft shall be prohibited except for on large aircraft flying above 10,000 ft.

Model: WBU058-BGA-V11 only sale for Canada

Model: WBU058-BGA-V11, WBU058-BGA-V13, WBU058-BGA-V15 sales for FCC

### **Documents / Resources**



Foxconn WBU058-BGA Series WLAN and BT Wireless Module [pdf] Owner's Manual WBU058-BGA-V11, WBU058-BGA-V13, WBU058-BGA-V15, WBU058-BGA Series WLAN and BT Wireless Module, WBU058-BGA Series, WLAN and BT Wireless Module, BT Wireless Module, Wireless Module, Module

#### References

User Manual

Manuals+, Privacy Policy

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