



# **ZEBRA**

## **Installation Guide**

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### **802.11ax Radio Module**

802.11ax + BT + BTLE combo module

## **Compliance and Regulatory Statements**

### **FCC Compliance Statement (USA)**

This device complies with Part 15 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.

This equipment has been tested and found to comply with the limits for Class B Digital Devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the product manuals, 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, the user is encouraged to do 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 RF service technician for help.

The end product must be labeled, in a visible area, with the following:  
Contains FCC ID: I28-WYSBHVDXP

### **Modification Warning**

The user is cautioned that any changes or modifications not expressly approved by Zebra Technologies could void the user's authority to operate the equipment. To ensure compliance, this printer must be used with fully shielded communication cables.

### **RF Exposure Statement**

This transmitter complies with FCC radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter, except in accordance with FCC multitransmitter product procedures.

### **Canadian DOC Compliance Statement**

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. This Class B digital apparatus complies with Canadian ICES-003.

### **Industry Canada (IC) Warning**

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: 1) This device may not cause interference., 2) This device must accept any interference, including interference that may cause undesired operation of the device.

The end product must be labeled, in a visible area, with the following:

Contains IC: 3798B-WYSBHVDXP

### **Approved Antenna information**

Only Zebra approved antennas are allowed and cannot be user replaceable.

Antenna Type:

#### **WLAN**

Chip Gain: 3.2 dBi (2.4G); 4.2 dBi (5G)

Patch Gain: 3.81 dBi (2.4G); 4.4 dBi (5G)

Omnidirectional Gain 3.0 dBi (2.4G); 5.0 dBi (5G)

#### **Bluetooth**

Monopole: 3 dBi (2.4G)

### **General**

The 802.11ax radio module has been certified as a Full Modular. Additional evaluation is required for use in all host devices. The following describes the installation procedures for the various hosts in which the module has been evaluated.

### **Installation Instructions for Zebra printers**

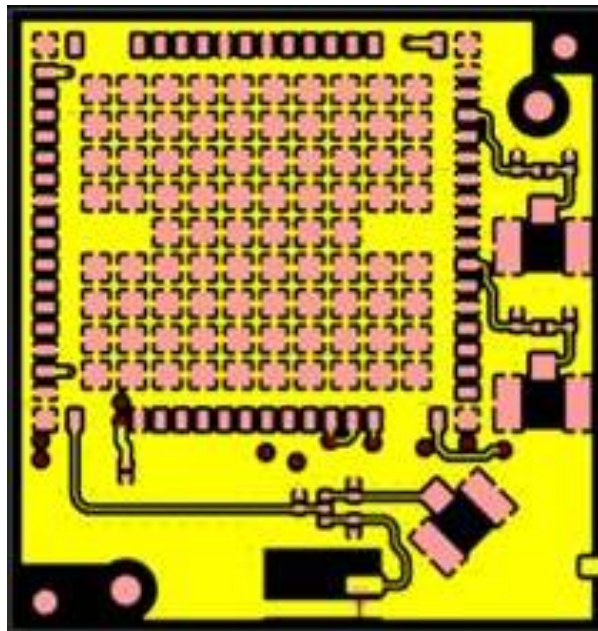
The 802.11ax radio module is not intended for OEM Integrators or end users. it can only be installed at the grantee manufacturing facility.

### **Important Notice to OEM integrators**

1. This module is limited to OEM installation ONLY.
2. This module is limited to installation in mobile or fixed applications, according to Part 2.1091(b).
3. The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations
4. For FCC Part 15.31 (h) and (k): The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with Part 15 Subpart B, the host manufacturer is required to show compliance with Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module's intentional emissions are compliant (i.e. fundamental and out of band emissions). The host manufacturer must verify that there are no additional unintentional emissions other than what is permitted in Part 15 Subpart B or emissions are complaint with the transmitter(s) rule(s).

### **RF trace layout guide**

The RF trace of the test board which was used in the FCC test is define as below, use the same RF layout for meet FCC requirement. Host integrator can contact module manufacturer for RF trace layout Gerber file.



### **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.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Le dispositif utilisé dans la bande 5150-5250 MHz est réservé à une utilisation en intérieur afin de réduire le risque de brouillage préjudiciable aux systèmes mobiles par satellite dans le même canal;

### **Radiation Exposure Statement**

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

**The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.**

AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK(NI)
IS	LI	NO	CH	TR		

Zebra hereby declares that this radio equipment is in compliance with Directives 2014/53/EU and 2011/65/EU.

Any radio operation limitations within EEA countries are identified in EU Declaration of Conformity. The full text of the EU Declaration of Conformity is available at: [zebra.com/doc](http://zebra.com/doc).



**Waste Electrical and Electronic Equipment (WEEE)**

This symbol means that according to local laws and regulations your product and/or its battery shall be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Proper recycling of your product will protect human health and the environment.

**RF Exposure Information (MPE)**

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure. This equipment should be installed and operated to ensure a minimum of 20 cm spacing to any person at all times.

**OEM/Host manufacturer responsibilities**

OEM/Host manufacturers are ultimately responsible for the compliance of the Host and Module. The final product must be reassessed against all the essential requirements of the RED before it can be placed on the EU market. This includes reassessing the transmitter module for compliance with the Radio and EMF essential requirements of the RED. This module must not be incorporated into any other device or system without retesting for compliance as multi-radio and combined equipment.

In all cases assessment of the final product must be met against the Essential requirements of the RE Directive Articles 3.1(a) and (b), safety and EMC respectively, as well as any relevant Article 3.3 requirements.

1. Only Zebra approved antenna were verified in the conformity testing, and for compliance the antenna shall not be modified. A separate approval is required for all other operating configurations, including different antenna configurations.
2. If any other simultaneous transmission radio is installed in the host platform together with this module, or above restrictions cannot be kept, a separate RF exposure assessment and CE equipment certification is required.