

## **Modular Approval Request FCC (KDB 996369 D01 & Part 15.212)**

FCC ID: 2A876-DXYBT015

<b><i>Items to be covered by Single modular transmitters.</i></b>	<b><i>Answer from applicant</i></b>
1. The modular transmitter must have its own RF shielding.	No, This modular has no RF shield.
2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.	Yes, the modular data inputs are buffered through log or microcontroller connections. All modulation and data inputs are buffered by circuitry on the transmitter chip
3. The modular transmitter must have its own power supply regulation.	Yes, Power supply regulation is provided by circuitry on the CPU chip
4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(b)(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable).	Yes, The EUT meet the FCC antenna requirements
5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed.	Yes, The EUT is can transmitting Stand-alone, please refer the test setup photos
6. The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number in accordance with 15.212 (a)(1)(vi)(A) / (B).	Yes, The module is labeled with its permanently affixed FCC ID label.
7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.	Yes, The EUT is full compliant with FCC rules
8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 1.1310, 2.1091, 2.1093, and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance. Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.	Yes, This module is complies with FCC CFR 47 part 2.1091 and FCC KDB 447498 D01 General RF Exposure Guidance v06 limit, Please refer RF exposure report.

<b>Items to be covered by <i>Split modular transmitters</i>.</b>	<b>Answer from applicant</b>
1. The modular transmitter must comply with all requirements of a single modular transmitter except for items (1) & (5) of the above single modular approval requirements.	
2. Only the radio front end must be shielded. The physical crystal and tuning capacitors may be located external to the shielded radio elements. The interface between the split sections of the modular system must be digital with a minimum signalling amplitude of 150 mV peak-to-peak.	
3. Control information and other data may be exchanged between the transmitter control elements and radio front end.	
4. The sections of a split modular transmitter must be tested installed in a host device(s) similar to that which is representative of the platform(s) intended for use.	
5. Manufacturers must ensure that only transmitter control elements and radio front end components that have been approved together are capable of operating together. The transmitter module must not operate unless it has verified that the installed transmitter control elements and radio front end have been authorized together. Manufacturers may use means including, but not limited to, coding in hardware and electronic signatures in software to meet these requirements, and must describe the methods in their application for equipment authorization.	

C

**Name and surname of applicant (or authorized representative): Alex Wong**

**Date:** 2023/01/10

**Signature:** 

## Wuhan P&S Information Technology Co.,Ltd

The DXY BLE MODULE (FCC ID: 2A876-DXYBT015) works in the 2.4G wireless frequency band and uses an on-board antenna. The standing wave ratio (VSWR) and efficiency of the antenna depend on the placement of the patch. Various factors should be avoided as far as possible to the wireless signal transmission and reception.

Note the following:

- 1、Avoid using metal for the product shell surrounding the Bluetooth. When using a part of the metal shell, try to keep the antenna part of the module away from the metal part. The metal connecting wire or metal screw inside the product should be as far away as possible from the antenna part of the module.
- 2、The antenna part of the module should be placed against the edge of the carrier board PCB or directly exposed to the carrier board, and it is not allowed to be placed in the middle of the board, There is at least 5mm of free space in the antenna direction, and the carrier board under the antenna is milled out. Copper and wiring are not allowed in the direction parallel to the antenna.
- 3、It is recommended to use insulating material to isolate the module mounting position on the substrate, for example, put a whole piece of silk screen at this position (Top Over Lay)

The module is a limited module. Any company of the host device which install this modular with limit modular approval should perform the test of radiated emission and spurious emission according to FCC part 15C: 15.247 and 15.209 requirement

Name: Alex Wong



Date: Jan. 30 2023

Signature of applicant: