



Declaration of the Modular Approval

Applicant / Grantee	Fanstel Corporation, Taipei / X8W
FCC ID:	X8WESP32M16
Model:	ESP32M4; ESP32E4; ESP32M16; ESP32E16; ESP32F16; ESP32F4

The single module transmitter has been evaluated then tested meeting the requirements under Part 15C Section 2.12 as below:

Modular approval requirement	EUT Condition	Comply
(a) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.	Yes. The modular transmitter has its own RF shielding.	Compliant
(b) 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 module has buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal.	Compliant
(c) The modular transmitter must have its own power supply regulation.	Yes. The module contains power supply regulation. There are LDO and DCDC Regulator in chip nRF52832. Please refer to chip spec.	Compliant
(d) The modular transmitter must comply with the antenna and transmission system requirements of Sections 15.203, 15.204(b) and 15.204(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). The “professional installation” provision of Section 15.203 is not applicable to modules but can apply to limited modular approvals under paragraph (b) of this section.	Yes. The module contains a unique antenna connector, per Sections 15.203, 5.204(c)	Compliant



(e) The modular transmitter must be tested in a stand-alone configuration, <i>i.e.</i>, the module must not be inside another device during testing for compliance with part 15 requirements. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see Section 15.31(i)) must not be inside another device during testing.	Yes. The demonstrates compliance in a stand-alone configuration	Compliant
(f) The modular transmitter must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC identification number.	Yes. The module is labelled with its permanently affixed FCC ID label.	Compliant
(g) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete 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 requirements, which are	Yes. The module complies with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee.	Compliant



based on the intended use/configurations.		
(h) The modular transmitter must comply with any applicable RF exposure requirements in its final configuration.	Yes. The module complies with RF exposure requirements.	Compliant

Dated 2020/04/27

By:

Pandy Tung
Signature

Pandy Tung

Printed

Title:

Engineer

On behalf of :

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