

Certificate

of
Radio Equipment in JAPAN

No: 201-210658 / 00

Telefication, operating as Conformity Assessment Body (CAB ID Number: 201) with respect to Japan, declares that the listed product complies with the Technical Regulations Conformity Certification of Specified Radio equipment (ordinance of MPT N° 37,1981)

Product description: **ESP32 WROOM-32 module**

Trademark: **Fanstel**

Type designation: **ESP32M4**

Variants: **See Annex 3**

Manufacturer: **Fanstel Corporation, Taipei**

Address: **10F-10, No. 79, Sec. 1, Hsin Tai Wu Rd., Hsi-Chih**

City: **New Taipei City**

Country: **Taiwan**

This certificate is granted to:

Name: **Fanstel Corporation, Taipei**

Address: **10F-10, No. 79, Sec. 1, Hsin Tai Wu Rd., Hsi-Chih**

City: **New Taipei City**

Country: **Taiwan**

This certificate has THREE Annexes.

Apeldoorn, 07 September 2021

CAB



David Chen
Product Assessor



- The validity of this Certificate is limited to products, which are equal to the one examined in the type-examination
- When the manufacturer (or holder of this certificate) is placing the product on the Japanese market, the product must be affixed with the following Specified Radio Equipment marking:



Remarks and observations

The following conditions are applicable:

Antennas for IEEE 802.11b/g/n:

2 PCB antennas, max gain of 2.2 dBi at 2.4 GHz

Dipole antenna, max gain of 0 dBi at 2.4 GHz

Documentation lodged for this type-examination

Test Reports:

- International Standards Laboratory: ISL-20LR045JAP, 24 August 2021

Product Documentation:

- Assembly drawings
- Bill of materials
- Block diagram
- Electrical diagrams
- Antenna specifications
- Internal photos
- External photos
- Manual
- Test setup photos

Technical Standards and Specifications

The product shows no non-compliances with:

- Equipment Radio Regulations: 2008 (including amendments)

Chapter I, General Provisions

Chapter II, Transmitting equipment

Chapter III, Receiving Equipment

Chapter IV, section 4.17 article 49.20

Radio equipment specified in:

Item 19, Paragraph 1, Article 2

Technical features and characteristics

The product includes the following features and characteristics:

IEEE 802.11b

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 13M1 G1D
- Maximum output power: 7 mW/MHz rated

IEEE 802.11g

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 16M7 D1D,G1D
- Maximum output power: 4.5 mW/MHz rated

IEEE 802.11n 20 MHz

- Operating frequency range: 2412-2472 MHz (13 channels)
- ITU designation: 17M5 D1D,G1D
- Maximum output power: 5 mW/MHz rated

IEEE 802.11n 40 MHz

- Operating frequency range: 2422-2462 MHz (9 channels)
- ITU designation: 36M3 D1D,G1D
- Maximum output power: 1.45 mW/MHz rated

The product as described in this Certificate includes the following type designations:

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32M4

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32E4

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32F4

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32M16

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32E16

- Product description: ESP32 WROOM-32 module
- Trademark: Fanstel
- Type designation: ESP32F16