



NINGBO ZHIYIN ACOUSTIC EQUIPMENT CO.,LTD

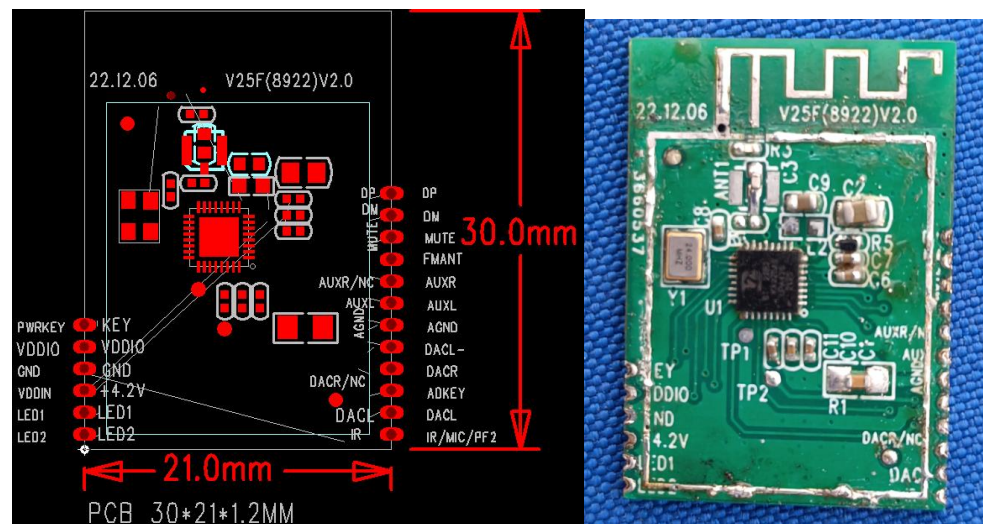
V25F-TWS(305B)V1.0

I. Product introduction

- 1, support a variety of audio formats: MP3, WMA(double decoding), WAV
- 2, Support BT, USB, AUX function is optional
3. IR infrared function
4. Bluetooth version 5.0 dual-mode
- 5, support U disk fast upgrade program
- 6, signal to noise ratio SNR can reach 99DB
7. Bluetooth can be used in a single machine, and any two machines can also realize the TWS function against the box
- 8, support DACL mixed output and DACL DACR stereo output
- 9, Support button function, through different resistors under the ground can be connected to a maximum of 5 keys

II. Product schematic diagram

1、Front(尺寸 30*21mm)





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FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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, 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 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 radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

**Integration instructions for host product
manufacturers according to KDB 996369
D03 OEM Manual v01r01**



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2.2 List of applicable FCC rules

FCC Part 15 Subpart C 15.247 & 15.207 & 15.209 & 15.205

2.3 Specific operational use conditions

Operation Frequency	:	2402~2480MHz
Number of Channel	:	79 Channels
Modulation Type	:	GFSK, $\pi/4$ -DQPSK
Antenna Type	:	PCB Antenna
Antenna Gain(Peak)	:	1.7 dBi

The module can be used for mobile or portable applications with a **maximum 1.52dBi antenna**. The host manufacturer installing this module into their product must ensure that the final composite product complies with the FCC requirements by a technical assessment or evaluation to the FCC rules, including the transmitter operation. The host manufacturer 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.

2.4 Limited module procedures

Not applicable. The module is a Single module and complies with the requirement of FCC Part 15.212.

2.5 Trace antenna designs

Not applicable. The module has a fixed antenna.



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2.6RF exposure considerations

The device can be used in portable exposure condition without restriction and if RF exposure statement or module layout is changed, then the host product manufacturer required to take responsibility of the module through a change in FCC ID or new application. The FCC ID of the module cannot be used on the final product. In these circumstances, the host manufacturer will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

2.7Antennas

Antenna Specification are as follows:

Antenna Type:PCB antenna

Antenna Gain(Peak):1.52 dBi (Provided by customer)

This device is intended only for host manufacturers under the following conditions: The transmitter module may not be co-located with any other transmitter or antenna;

The module shall be only used with the PCB antenna(s) that has been originally tested and certified with this module. The antenna must be either permanently attached or employ a 'unique' antenna couple.



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As long as the conditions above are met, further transmitter test will not be required. However, the host manufacturer is still responsible for testing their end-product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).

2.8 Label and compliance information

Host product manufacturers need to provide a physical or e-label stating

“Contains **FCC ID** :2BDOV-V25F With their finished product.

2.9 Information on test modes and additional testing requirements

Operation Frequency	:	2402~2480MHz
Number of Channel	:	79 Channels
Modulation Type	:	GFSK, $\pi/4$ -DQPSK
Antenna Type	:	PCB Antenna
Antenna Gain(Peak)	:	1.52 dBi

Host manufacturer must perform test of radiated & conducted emission and spurious emission, etc according to the actual test modes for a stand-alone modular transmitter in a host, as well as for multiple simultaneously transmitting modules or other transmitters in a host product.

Only when all the test results of test modes comply with FCC requirements, then the end product can be sold legally.

2.10 Additional testing, Part 15 Subpart B disclaimer

The modular transmitter is only FCC authorized for FCC Part 15 Subpart C

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15.247 & 15.207 & 15.209 & 15.205 and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification. If the grantee markets their product as being Part 15 Subpart B compliant (when it also contains unintentional-radiator digital circuitry), then the grantee shall provide a notice stating that the final host product still requires Part 15 Subpart B compliance testing with the modular transmitter installed.

2.11 Note EMI Considerations

Host manufacture is recommended to use D04 Module Integration Guide recommending as "best practice" RF design engineering testing and evaluation in case non-linear interactions generate additional non-compliant limits due to module placement to host components or properties.

2.12 How to make changes

This module is stand-alone modular. If the end product will involve the Multiple simultaneously transmitting condition or different operational conditions for a stand-alone modular transmitter in a host, host manufacturer have to consult with module manufacturer for the installation method in end system. According to the KDB 996369 D02 Q&A Q12, that a host manufacture only needs to do an evaluation (i.e., no C2PC required when no emission exceeds the limit of any individual device (including unintentional radiators) as a composite. The host manufacturer must fix any failure.