

Integration instructions for host product manufacturers according to KDB 996369 D03 OEM
Manual v01

2.2 List of applicable FCC rules

FCC Part 15 Subpart C 15.247 & 15.207 & 15.209 & 15.407

2.3 Specific operational use conditions

The module WiFi Module is a module with WIFI 2.4G / BT/ WIFI 5G function.

Operation Frequency:

WIFI 2.4G:2412~2462MHz

BT:2402~2480MHz

WIFI 5G:5150 MHz ~5250MHz; 5250MHz~5350MHz; 5470MHz~5725MHz; 5725 MHz ~5850 MHz

Type:

WIFI 2.4G:PCB Antenna; Gain: Antenna 1: 2dBi; Antenna 2: 2dBi

WIFI 5G:PCB Antenna; Gain: Antenna 1: 2dBi; Antenna 2: 2dBi

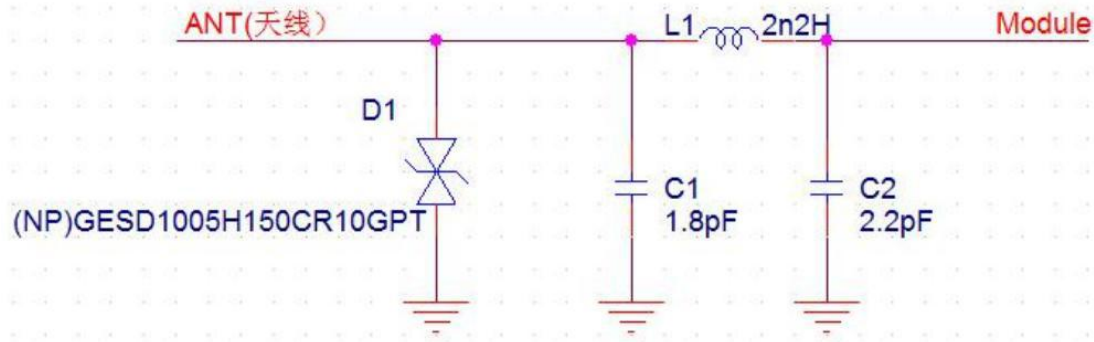
BT:PCB Antenna; Gain: 2 dBi

The module can be used for mobile or applications with the maximum (WIFI 2.4G:Ant1:2dBi;Ant2:2dBi;WIFI5G:Antenna 1: 2dBi; Antenna 2: 2dBi;BT: 2dBi); The host manufacturer installing this module into their product must ensure that the final 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

We will retain control over the final installation of the modular such that compliance of the end product is assured. In such cases, an operating condition on the limit modular approval for the module must be only approved for use when installed in devices produced by a specific manufacturer. If any hardware modify or RF control software modify will be made by host manufacturer,C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance, then it is illegal.

The antenna to compliance with antenna requirement part 15.203& 15.204. It should comply design requirements with the following:



Antenna design requirements

1. RF-line need 50Ω single line impedance;
2. Layout is arc line or straight line;
3. Parameter need adjustment according to different antenna;
4. Please antenna close to the WIFI module, its farthest distance cannot exceed 20 mm.

2.5 Trace antenna designs

Not applicable

2.6 RF exposure considerations

The module must be installed in the host equipment such that at least 20cm is maintained between the antenna and users' body; 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

2.7 Antennas

Antenna Specification are as follows:

Type:

WIFI 2.4G:PCB Antenna; Gain: Antenna 1: 2dBi; Antenna 2: 2dBi

WIFI 5G:PCB Antenna; Gain: Antenna 1: 2dBi; Antenna 2: 2dBi

BT:PCB Antenna; Gain: 2 dBi

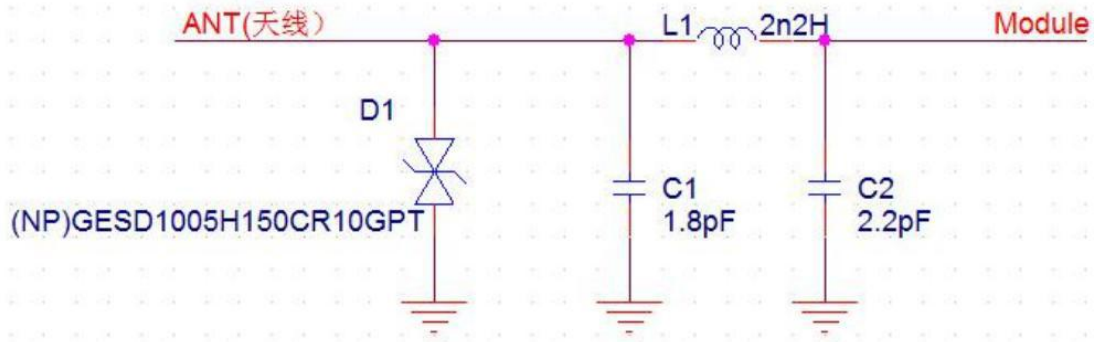
This device is intended only for host manufacturers under the following conditions: The transmitter module may not be co-located with any other transmitter or antenna;

The module shall be only used with the internal antenna(s) that has been originally tested and certified with this module.

The antenna must be either permanently attached or employ a 'unique' antenna coupler.

Antenna design requirements

1. RF-line need 50Ω single line impedance;
2. Layout is arc line or straight line;
3. Parameter need adjustment according to different antenna;
4. Please antenna close to the WIFI module, its farthest distance cannot exceed 20 mm.



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: 2AXHE-WD8822CS" with their finished product.

2.9 Information on test modes and additional testing requirements

Any company of the host device which install this modular with limit modular approval should perform the test of radiated & conducted emission and spurious emission, etc. according to FCC part 15C : 15.249 and 15.209 & 15.207 & 15.407, 15B Class B requirement, Only if the test result comply with FCC part 15C : 15.249 and 15.209 & 15.207 & 15.407 ,15B Class B requirement, then the host 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 15.247 & 15.207 & 15.209 & 15.407 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.

Important Note:

in the event that these conditions cannot be met for example certain laptop configurations or co-location with another transmitter). then the FCC authorization is no longer considered valid and the FCC ID cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product including the transmitter) and obtaining a separate FCC authorization. Radiation Exposure Statement:

This module support

BT(2402-2480MHz), WiFi 2412-2462MH, 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz which compliance with part 15.249,15.247,15.407 and apply for Limited Single Modular Approval. The module is limited to OEM installation only. The OEM integrator is

responsible for ensuring that the end-user has no manual instruction to remove or install module.

OEM integrator shall equip the antenna to compliance with antenna requirement part 15.203& 15.204 and must not be co-located or operating in conjunction with any other antenna or transmitters. And OEM host shall implement a Class II Permissive Change (C2PC) or a new FCC ID to demonstrate compliance with FCC standard. The OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed. The final end product must be labeled in a visible area with the following: "Contains FCC ID: 2AXHE-WD8822CS"

OEM integration instructions:

This device is intended only for OEM integrators 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 external antenna(s) that has been originally tested and certified with this module.

As long as the conditions above are met, further transmitter test will not be required. However, the OEM integrator 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.).

Validity of using the module certification:

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization for this module in combination with the host equipment is no longer considered valid and the FCC ID of the module cannot be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End product labeling:

The final end product must be labeled in a visible area with the following: "Contains Transmitter Module FCC ID: 2AXHE-WD8822CS".

Information that must be placed in the end user manual:

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 shown in this manual.

FCC STATEMENT :

This device complies with part 15 of the FCC 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.

Any 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.

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