

Integration Instructions

This is the integration instructions for host product manufacturers to use when integrating the module in a host product.

It is mounted on our host product at the factory according to the specifications.

Input and Output Connectors

8 pin FFC type of 1.0mm pitch

Input / Output Connector's Pin Assignment

1 pin: Power Control Signal from System

2 pin: Vbus (Power Supply from System)(3.3V)

3 pin: GN

4 pin: GND

5 pin: D-

6 pin: D+

7 pin: GND

8 pin: GND / BLE Control Signal from System (Not Available)

Note: Refer to an attached circuit drawing in order to design a circuit for mode control.

Attention to connect with 8pin (GND).

2.1 General

This integration instructions describes the integration procedure per Sec. 2.2 to 2.12 of KDB 996369 D03.

This is limited modular approval as this module is limited to installation by the grantee into our host systems.

2.2 List of applicable FCC rules

This device complies with below part 15 of the FCC Rules.

Part 15 Subpart C

Part 15 Subpart E

2.3 Summarize the specific operational use conditions

This module is certified as limited modular approval as the voltage partially does not go through its own regulator, and supplying of stable voltage is relied on host device.

Mobile – 20 cm from a person's body

Modules can only be used in a host for the conditions that it was granted for. To be used in any

other way than granted, such as mobile to portable or with other transmitters simultaneously, requires additional evaluation, testing, or testing and Class 2 permissive change.

2.4 Limited Modular procedures

This module is certified as limited modular approval as it does not have its own power supply regulator, therefore regulated 3.3V (2.97V~3.63V) must be supplied by a host device using voltage regulator.

[Test Plan]

The host integrator must verify that the host equipment can consistently provide 3.3 VDC (2.97 V to 3.63 V) power to this RF module within the operating temperature range of the RF module (0°C to 45°C).

2.5 Trace antenna designs→Not applicable

2.6 RF Exposure considerations

Application conditions: Mobile – 20 cm from a person's body

Modules can only be used in a host for the conditions that it was granted for. To be used in any other way than granted, such as mobile to portable or with other transmitters simultaneously, requires additional evaluation, testing, or testing and Class 2 permissive change.

The following statements must be described on the user manual of the host device of this module;

[for FCC]

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment must be installed and operated keeping the radiator at least 20cm or more away from person's body.
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[for ISED]

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules. This equipment must be installed and operated keeping the radiator at least 20cm or more away from person's body.
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Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'ISDE. Cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.
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2.7 Antennas

[for FCC]

The device is designed to use the antennas listed below. Do not modify the antenna or any other part of the module. Any modifications will invalidate the modular certifications and require new approvals for the host system.

Model No.	Antenna Type	Antenna Gain
K30387	Inverted L Antenna	2.4GHz Max +1.8dBi / 5GHz Max +2.1dBi

2.8 Label and compliance information

The following information must be indicated on the host device of this module;

[for FCC]

Contains FCC ID: AZDK30387-2

[for ISED]

Contains IC: 498C-K30387

2.9 Information on test mode and additional testing requirements

Test modes should take into consideration different operational conditions for a stand-alone modular transmitter in a host, as well as for multiple simultaneously transmitting modules or other transmitters in a host product.

2.10 Additional testing, Part 15 Subpart B disclaimer

The modular transmitter is only FCC authorized for the specific rule parts (FCC Part 15.247 and Part 15.407) listed on the grant, and 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.

2.11 Note EMI Considerations

We recommend to use "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.

The host manufacturer is responsible for ensuring compliance with the applicable FCC rules for the transmitters operating individually and simultaneously. This includes compliance for the summation of all emissions from all outputs occupying the same or overlapping frequency ranges, as defined by the applicable rules.

2.12 How to make changes - Not applicable

*This module is limited to installation by the grantee into our host systems.