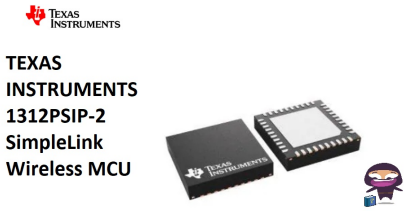

TEXAS INSTRUMENTS 1312PSIP-2 SimpleLink Wireless MCU Instruction Manual

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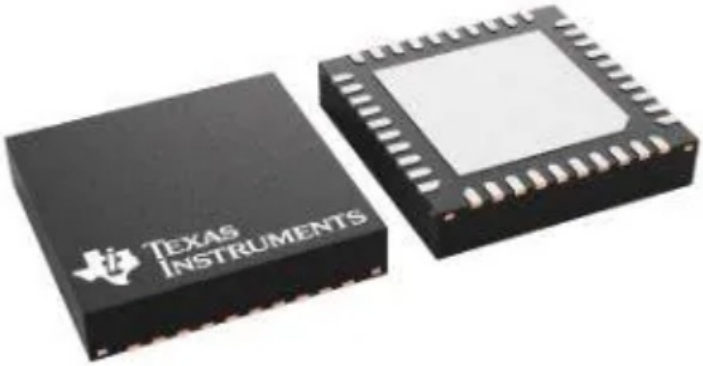

Product Information

Specifications

- Brand: Texas Instruments
- Model: RF Module
- Antenna Types:
  - Integrated PCB antenna
  - Flexi PCB antenna
  - Stanced antenna
  - External whip antenna
  - Chip antenna
  - Wire antenna
- Frequency Range: Not specified
- Maximum Gain: +2.69 dBi

Product Usage Instructions

OEM/Integrators Installation

This module is limited to OEM installation ONLY. Ensure compliance with regulatory requirements.

Antenna Installation

1. Install the antenna maintaining a distance of 20 cm between the antenna and users.
2. Avoid co-locating the transmitter module with other transmitters or antennas.
3. Use only antennas of the same type with equal or less gain as specified in the manual.

FAQs

Q: Can this module be used in portable configurations?

A: Separate approval is required for portable configurations as per regulatory guidelines.

OEM/Integrators Installation Manual

Important Notice to OEM integrators

1. This module is limited to OEM installation ONLY.

2. This module is limited to installation in mobile or fixed applications, according to Part2.1091(b).
3. The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations
4. For FCC Part 15.31 (h) and (k): The host manufacturer is responsible for additional testing to verify compliance as a composite system. When testing the host device for compliance with Part 15 Subpart B, the host manufacturer is required to show compliance with Part 15 Subpart B while the transmitter module(s) are installed and operating. The modules should be transmitting and the evaluation should confirm that the module's intentional emissions are compliant (i.e. fundamental and out of band emissions). The host manufacturer must verify that there are no additional unintentional emissions other than what is permitted in Part 15 Subpart B or that emissions are compliant with the transmitter(s) rule(s).

Antenna Installation

1. The antenna must be installed such that 20 cm is maintained between the antenna and users,
2. The transmitter module may not be co-located with any other transmitter or antenna.
3. Only antennas of the same type and with equal or less gains as shown below may be used with this module. Other types of antennas and/or higher gain antennas may require additional authorization for operation.

Brand	**Antenna Type**	**Peak Gain (dBi)**
TI	Integrated PCB antenna	+2.69 dBi
Kaadas	Flexi PCB antenna	-5.82 dBi
Leederson	Integrated PCB antenna	-4.51 dBi
Leederson	Integrated PCB antenna	-1.83 dBi
Leederson	Stanced antenna	-9.48 dBi
Leederson	Stanced antenna	+0.37 dBi
Leederson	Integrated PCB antenna	-1.74 dBi
Pulse	External whip antenna	+0.90 dBi
Johanson Technology	Chip antenna	-0.50 dBi
Johanson Technology	Chip antenna	+1.00 dBi
Pulse	Wire antenna	+0.80 dBi

Table 1 – Antenna Specifications

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC/IC authorization is no longer considered valid and the FCC ID/IC 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/IC authorization.

Manual Information to the End User

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 show in this manual.

Federal Communication Commission Interference 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.

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 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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Industry Canada Statement
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

CAN ICES-3(B)/ NMB-3(B)

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

End Product Labeling

In order to comply with the CC1312PSIP modular approval for use in Canada and the United States. OEM/Host manufacturers must include the following example label as shown in Figure 5 on their end-product and user manual.

- Model: CC1312PSIPMOT2 ContainsF
- CC ID: ZAT-1312PSIP-2 Contains

- IC: 451H-1312PSIP2

Figure 1 – Example label for end product to reuse the modular approval

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IMPORTANT NOTICE Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265

Documents / Resources

	**TEXAS INSTRUMENTS 1312PSIP-2 SimpleLink Wireless MCU** [pdf] Instruction Manual 1312PSIP-2, ZAT-1312PSIP-2, ZAT1312PSIP2, 1312PSIP-2 SimpleLink Wireless MCU, 1312PSIP-2, SimpleLink Wireless MCU, Wireless MCU, MCU

References

- **User Manual**