

Futaba

FHSS2-24G 2.4GHz Module User Manual.

Futaba corporation

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1. Features

- 2.4GHz Frequency Hopping Spread Spectrum (FHSS) radio transceiver module.
- Operates in the unlicensed worldwide ISM band (2.4 GHz to 2.483.5GHz) band
- Fully integrated power regulation with a wide input unregulated operating range 4.0 to 7.2V.
- Equipped Fully integrated local oscillator and 26MHz 20ppm reference crystal
- 100mA operating current
- Transmit power 40mW EIRP
- Receive sensitivity up to -95dBm
- FHSS data rates up to 500kbps
- 1/2 mile operating range

2. Pin assign

Pin Number	Name	Description
J103 1	I/O 1	Input/output 1
2	I/O 2	Input/output 2
3	I/O 3	Input/output 3
4	I/O 4	Input/output 4
5	I/O 5	Input/output 5
6	GND	Module Ground
J104 1	I/O 6	Input/output 6
2	I/O 7	Input/output 7
3	I/O 8	Input/output 8
4	I/O 9	Input/output 9
5	I/O 10	Input/output 10
6	I/O 11	Input/output 11
7	LED	LED control output
8	Vcc	Module power input
9	Vdd	3.3V Regulated power output

3. Specifications

Parameter	Value	Units
Storage temperature	-20 ~ +80	Degrees Celsius
Operating temperature	-10 ~ +45	Degrees Celsius
Transmit power (conducted)	16 max	dBm
Receive Sensitivity	-95	dBm
Input voltage	4.0 ~ 7.2	Volt
Output voltage	3.3	Volt
Transmit current	100 max	mA

4. Module User Requirements

4.1 This module must be integrated into a device where the user cannot access the antenna connector and should not be able to remove or install the module.

4.2 Under a 2.14dBi antenna can be used with this module. The antenna must not exceed the gain and pattern of the standard dipole antenna.

4.3 The device must contain the following permanent labeling on the exterior of the device as follows:

Contains FCC ID: AZPFHSS2-24G

4.4 The user manual of the device must contain the following paragraph:

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.

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

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations

governing a radio transmitter in the 2.400 GHz to 2.4835 GHz frequency range.

4.5 This module meets the requirements for a RF category mobile device that may be used at separation distances of more than 20cm from the human body. However if the module is placed into the host that is RF category portable, the FCC RF exposure requirements of the portable host must be properly \ addressed.