

## FLDSTX1 2.4GHz Module User Manual.

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### 1. Features

- 2.4GHz radio transceiver module.
- Operates in the unlicensed worldwide ISM band (2409.2 to 2474.0 MHz).
- Fully integrated power regulation with a wide input unregulated operating range 2.0 to 3.6V.
- Fully integrated local oscillator and 26MHz 10ppm reference crystal
- Transmit power less than 100mW
- Receive sensitivity up to -104dBm
- Full packet assembling and disassembling
- Fully buffered digital interface with high voltage tolerant inputs

# 2. Pin description

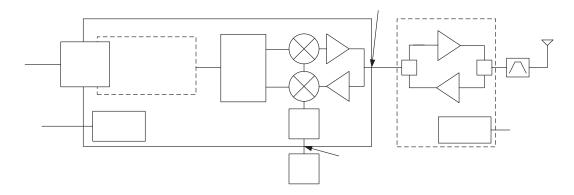
Pin Number	Name	Description	
1	GND	Module Ground	
2	VIN	Module DC Power	
3	RESET_N	Baseband CPU reset input	
4	VIN	Module DC Power	
5	P1.2	Baseband CPU digital port P1.2	
6	P1.4	Baseband CPU digital port P1.4	
7	P1.0	Baseband CPU digital port P1.0	
8	P1.1	Baseband CPU digital port P1.1	
9	P0.2	Baseband CPU digital port P0.2	
10	P0.3	Baseband CPU digital port P0.3	
11	P0.4	Baseband CPU digital port P0.4	
12	P0.5	Baseband CPU digital port P0.5	
13	P2.1	Baseband CPU digital port P2.1	
14	P2.2	Baseband CPU digital port P2.2	

## 3. Specifications

Parameter	Value	Units	
Storage Temp	-50 to 150	Degrees Celsius	
VDD	2.0 to 3.6	Volts	
Receive Sensitivity	-104	dBm	
Transmit power (conducted)	6.5+/-1	dBm	

Idle current	5	mA
Receive current	20	mA
Transmit current	65	mA

# 4. Block Diagram



# 5. Module User Requirements

- 5.1 This module must be integrated into a device where the user cannot access the antenna connector.
- 5.2 Only a 2dBi antenna can be used with this module. The antenna must meet and not exceed the gain and pattern of the supplied Inpaq DAM00BM11500209 folded dipole antenna.
- 5.3 The device must contain the following permanent labeling on the exterior of the device as follows:

# **Contains FCC ID: 2AEIGFLDSTX1**

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

## FCC Information

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.

### **CE Information**

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 2.4092 GHz to 2.4740 GHz frequency range.

The following countries associated regulatory agencies recognizing the noted certifications for this product as authorized for sale and use are:

UK	DE	DK	NO	SE
FI	EE	LV	LT	PL
CZ AT	SK	HU	RO	SI
AT	ΙΤ	ES	PT	ΙE
NL	LU	MT	CY	GR

### Caution:

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

# **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.

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

If the FCC identification number is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: 2AEIGFLDSTX1 Or Contains FCC ID: 2AEIGFLDSTX1"

when the module is installed inside another device, the user manual of this device must contain below warning statements;

- 1. 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.
- (2) This device must accept any interference received, including interference that may cause undesired operation.
- 2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The devices must be installed and used in strict accordance with the manufacturer's instructions as described in the user documentation that comes with the product