Documents Version: 2.30

Document No. 2006-0046-E

RF Module

（WM2500）

USER GUIDE

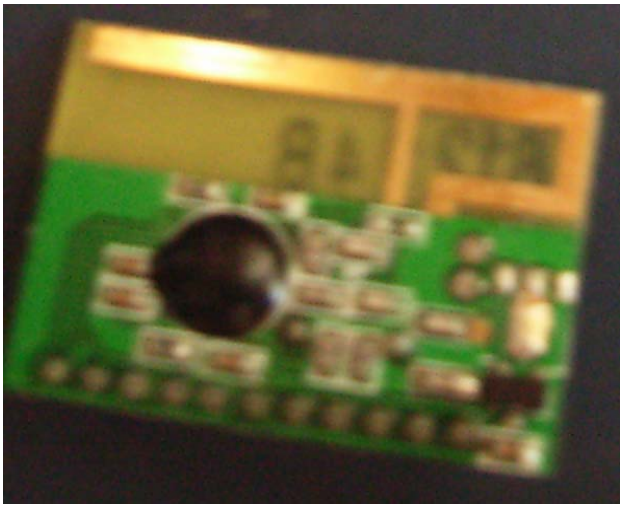
Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com

Index

Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com

1: Introduce

The WM2500D Based on the Chipcon CC2500 radio transceiver chip. The designer can use this part as a drop-in subsystem component, and never has to care about things like impedance matching or soldering fine pitch devices.



2. Pin Configuration

Pin Number	***Signal***
1	GD01/SO
2	SCLK
3	SI
4	RX/TXDATA(GD00)
5	GND
6	VDD
7	NC
8	NC
9	GD02
10	NC
11	CSn

Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com

First place the module with the antenna on top and with the connector close to your body. then the most left pin is pin #1

3. Operating Rang

Parameters	Min	Max	Unit
Supply Voltage	2.2	5.5	V
Temperature ambient	-10	60	℃

4. Electrical Specification

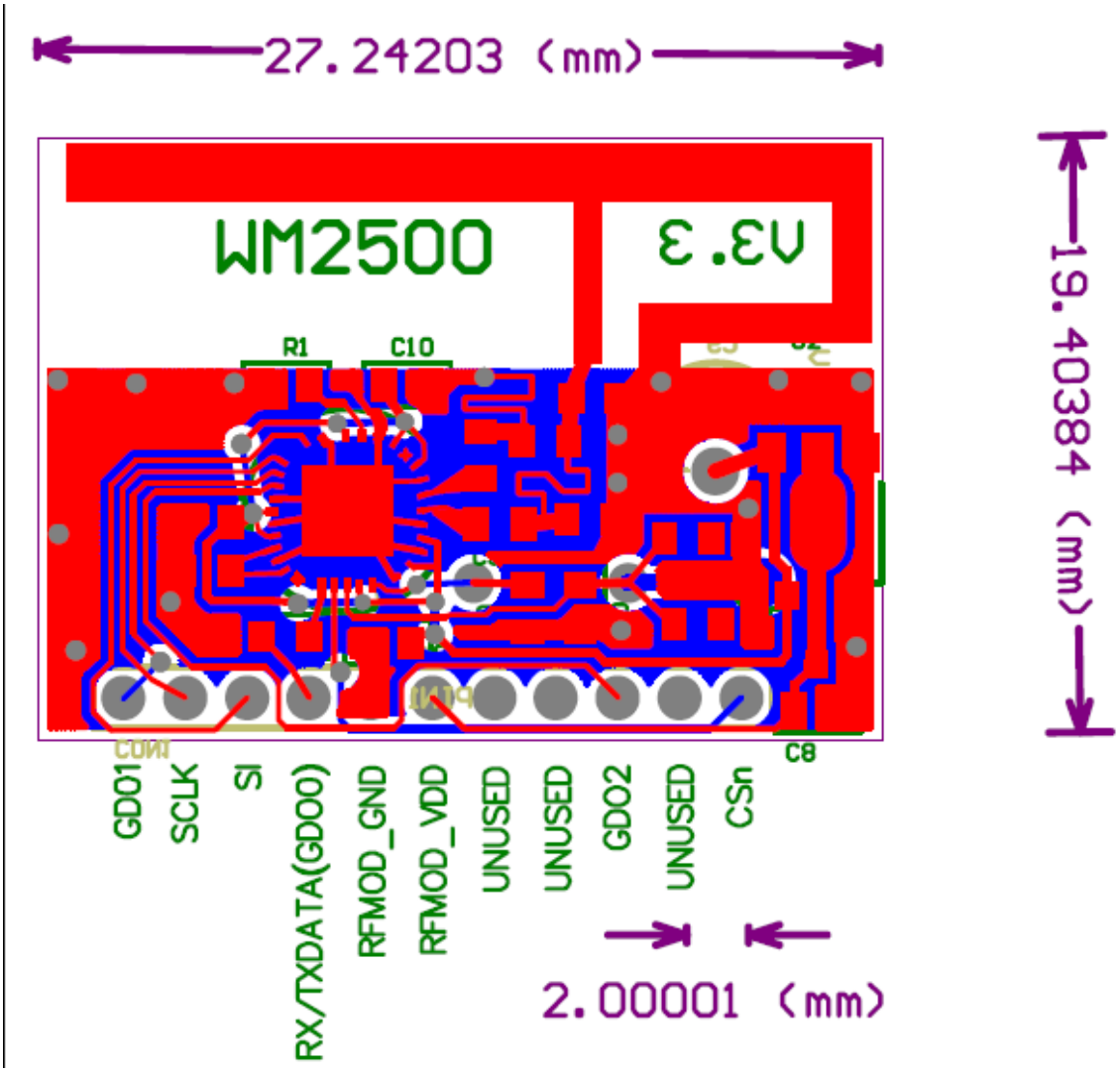
Tc=25℃ ,RFMOD_VDD=3V if nothing else stated

NO	*Parameters*	*Min*	*Typ*	*Max*	*Unit*	*Condition*
1	**Supply**					
1.1	supply voltage	2.2		3.6	V	
2	**Current consumption**					
2.1	power down mode		20		uA	
2.2	Idle mode		2		mA	
2.3	Rx states		20		mA	
2.4	Tx states		23		mA	
2.5	Voltage regulator current draw		10		uA	
3	**Transmitter Part**					
3.1	Tx data rate		250		Kbps	
3.2	Frequency range	2400		2483.5	MHz	
3.3	Output power		0		dBm	
3.4	Spurious emissions					
	25MHz-1GHz		-36		dBm	
	47-74,87.5-118,174-230,470-862MHz		-54		dBm	
	1800-1900MHz		-47		dBm	
	At 2-RF and 3-RF		-41		dBm	
	Otherwise above 1GHz		-30		dBm	

Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com

4	**Receiver Part**					
4.1	Receiver sensitivity		-80		dBm	
4.2	Saturation		-13		dBm	
4.3	Adjacent channel rejection		21		dB	Desired channel 3 dB above the sensitivity limit. 750kHz channel spacing
4.4	Alternate channel rejection		30		dB	Desired channel 3 dB above the sensitivity limit. 750kHz channel spacing

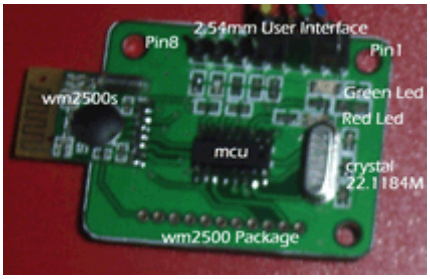
5. PCB Diagram

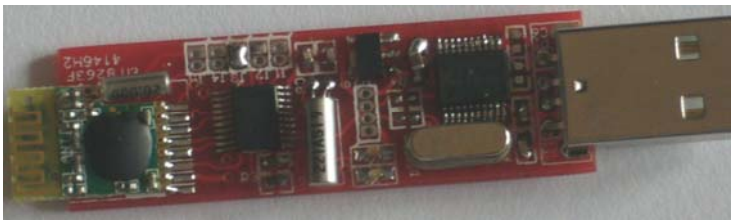


Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com

6. Customer service

We also provide BB (base band) chip to customer. It will be easy for customer to connect with UART Interface or other special function. Customer don't need to care anything for wireless with BB. For USB interface , the WM24USB_S can be provided.





Shenzhen,China: RF WORLD (RPing Group)
15F,Nanshang Block,Zhongyin Bldg.,Caitian Rd.,Shenzhen 518026,China
Tel:86 755 82469767 82469790
Fax:86 755 82469915
Email: sales@mcurf.com www.mcurf.com