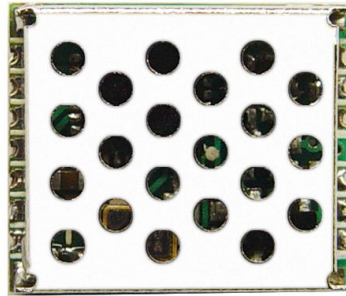

Wireless Low Power Transceiver RF Module (ISM Band System)



Version History

Version	Date	Changes
V1.01	Oct.29, 2007	1 st . Edition
V1.02	Dec.28,2007	2 nd . Edition
V1.03	Aug.27,2008	3 rd . Edition

Specification

● UHF Wireless Data Transceiver	● 800MHz ~ 928MHz ISM
● Channel hopping up to 1800 hops/s	● 24 bit RX/TX FIFO
● Hi Sensitivity: -123dBm	● Wire and frame mode
● Single 2.5V to 5V Supply	● Up to 10mW Output Power
● RS-232 (UART) compatible	● SPI micro-controller interface
● Application Range : Multi-channel home automation standards、Wireless audio、Wireless networks、Reading、Home Automation、Remote keyless entry	

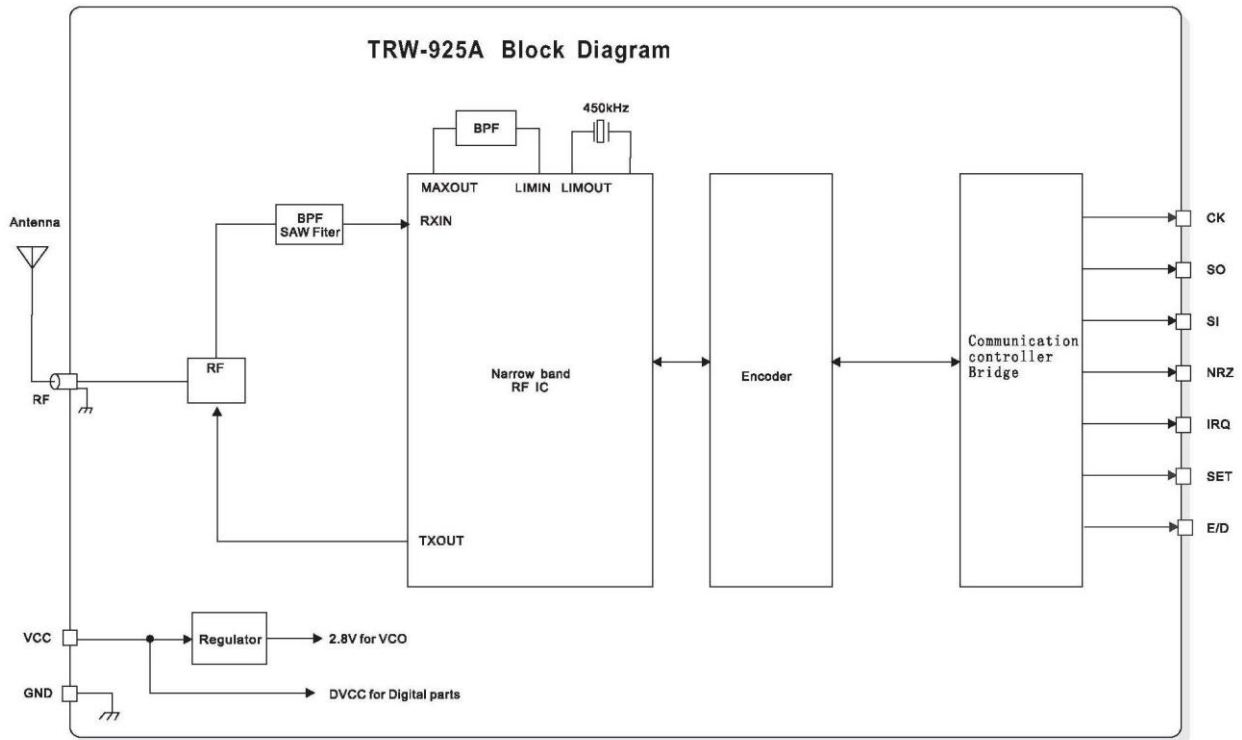
Transmit Mode

Parameter	Specification			Unit	Condition
	Min	Type	Max		
頻率範圍	800		928	MHz	
待機消耗電流			660	μA	
傳輸速率	1.2		500	Kbps	PSK最低2.4kbps FSK最低1.2kbps
輸出功率		10		mW	
最大工作電流			47.5	mA	868MHz: +10dBm

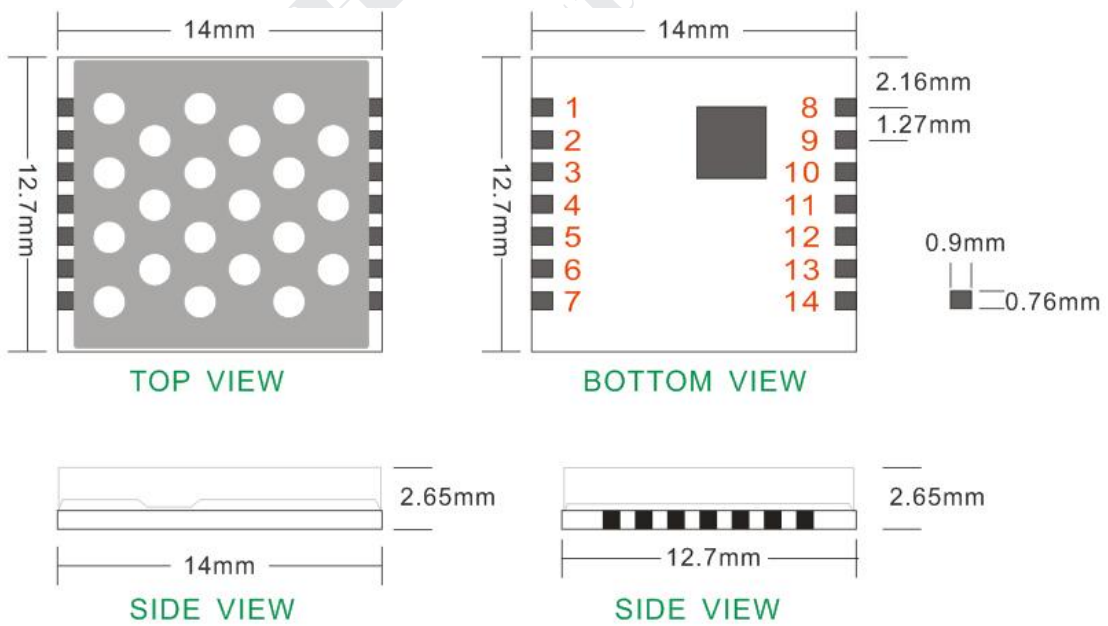
Receive Mode

Parameter	Specification			Unit	Condition
	Min	Type	Max		
頻率範圍	800		928	MHz	
待機消耗電流			660	μA	12.5KHz channel
傳輸速率	1.2		500	Kbps	PSK最低2.4Kbps FSK最低1.2Kbps
感度			-123	dBm	
最大工作電流			33.5	mA	868MHz: 500Kbit/s
工作溫度	-10		-70	°C	
儲存溫度	-50		-95	°C	

Block Diagram



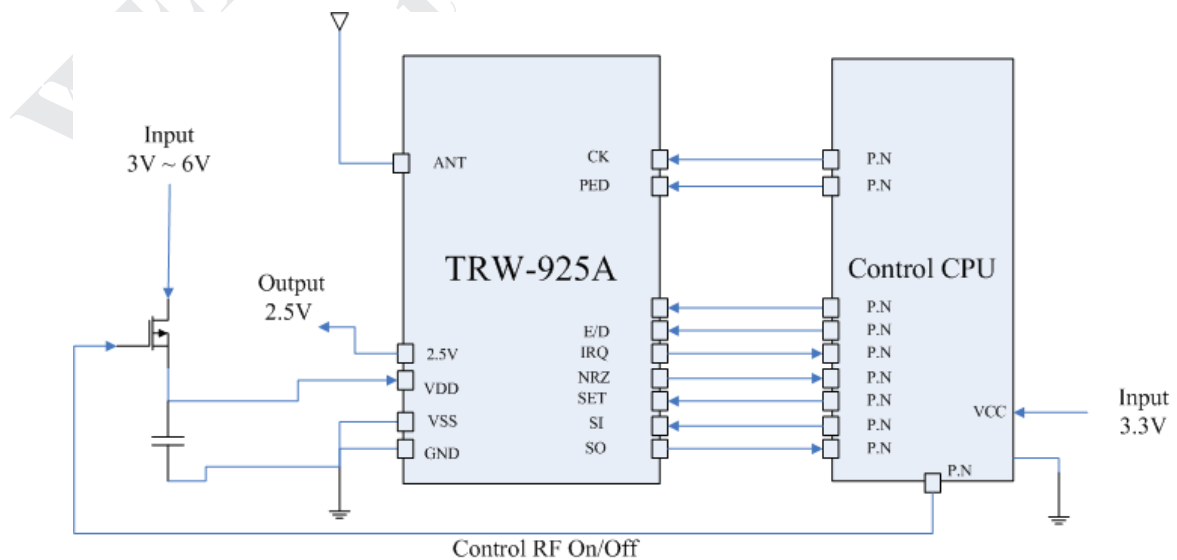
View



Pin Assignment

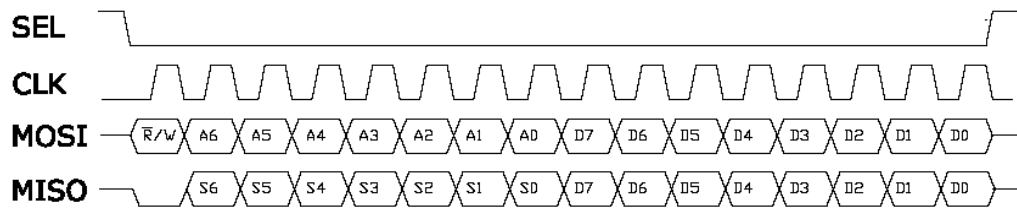
Pin	Function	IO	Description
1	GND	P	電源負極
2	ANT	ANT	天線接口
3	GND	P	電源負極
4	2.5V	P	輸出
5	VSS	P	電源負極
6	VDD	P	電源正極
7	PED	I	電源開關 (Hi=打開, Lo=關閉)
8	CK	I	CLK
9	SO	O	RF 串列資料輸出 (SPI O)
10	SI	I	RF 串列資料輸入 (SPI I)
11	NRZ	O	直接數據 CLK 輸出 (可選)
12	IRQ	O	直接數據 DATA 輸出 (可選)
13	SET	I	Lo 選擇
14	E/D	I	RF 控制 (Hi=工作, Lo=不工作)

Application Circuit

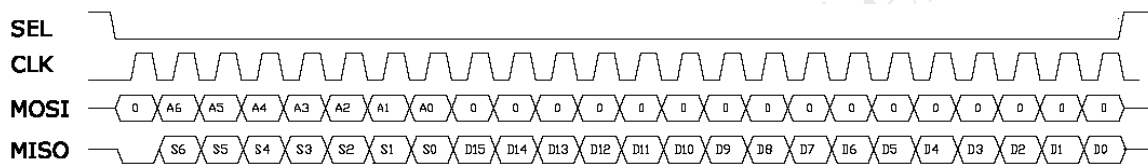


時序圖

SPI 8 位數據讀寫波形:



SPI 8 位數據讀波形 (最高有效位在前):



SPI 8 位數據讀波形 (最低有效位在前):

