



高霖通訊科技有限公司  
Go-Link Technology Co., Ltd.

產品規格/承認書  
PRODUCT SPECIFICATION / APPROVAL SHEET

產品

Product : 2.4GHz WiFi Module

型號

Model No : MRT5350-101

客戶

Customer :

客戶型號

Customer Model No. :

		本承認書內容若貴公司確認無誤， 請於下方承認欄內簽章。 <b>Please confirm your acceptance of this approval sheet by authorized signatures.</b>	
		承認欄 <b>Approved Signature</b>	
版本 (Version)	V1.1		
日期 (Date)	2016/11/30		

## Features

- Compliant with IEEE802.11b/g/n 、 IEEE802.3 、 IEEE802.3u
- Support CSMA/CA 、 CSMA/CD 、 TCP/IP 、 PPPoE 、 DHCP 、 ICMP 、 NAT protocol
- Embedded PA/LNA
- 150Mbps PHY data rate
- 20Mhz / 40Mhz channel width

## Environmental Specification

No.	Items	Min.	Typ.	Max.	Unit.
1	Operating Temperature	-10	-	+60	°C
2	Storage Temperature	-20	-	+70	°C

## Specifications

Testing Condition @ 25°C

Standard	IEEE 802.11 b/g/n 、 IEEE802.3 、 IEEE802.3u 、 CSMA/CA 、 CSMA/CD 、 TCP/IP 、 PPPoE 、 DHCP 、 ICMP 、 NAT 、 PPPoE
Ethernet	One 10/100M port
Frequency	2.400 ~ 2.483GHz
Data Rate	11n : 135 / 121.5 / 108 / 81 / 54 / 40.5 / 27 / 13.5 Mbps 65 / 58.5 / 52 / 39 / 26 / 19.5 / 13 / 6.5 Mbps 11g : 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps 11b : 11 / 5.5 / 2 / 1 Mbps
Channel	14
Spread spectrum	DSSS
Modulation type	DBPSK 、 DQPSK 、 CCK and OFDM ( BPSK/QPSK/16-QAM/64-QAM )
Sensitivity	-64 dBm @ 135Mbps / 10% PER -70 dBm @ 54Mbps / 10% PER -85 dBm @ 11Mbps / 8% PER
Transmit Power	11n : 15 dBm 11g : 15 dBm 11b : 17 dBm
Power Dissipation	3.3V, 340mA (Typ.) / 430mA (Max.)

## Pins Assignment

### A. J1 Pin Definition

Description	Pin	Specification	Notes
POWER	1	3.3V	3.3V DC input pin
	2	3.3V	3.3V DC input pin
	3	GND	Ground
	8	GND	Ground
	9	GND	Ground
	20	GND	Ground
GPIO / I2C	17	I2C_SCLK/ GPIO2	I2C Clock
	18	I2C_SD/GPIO1	I2C Data
GPIO / I2S	12	I2S_CLK/GPIO7	See Table 2: I2S clock
	14	I2S_SDO /GPIO9	See Table 2: I2S output
	15	I2S_WS/ GPIO8	See Table 2: I2SWS
	16	I2S_SDI /GPIO10	See Table 2: I2SSD
GPIO / UART	4	RXD/ GPIO14	See Table 1
	6	TXD/ GPIO12	See Table 1
LED	5	WPS_LED	WPS Activity LED
	10	WLAN_LED	WLAN Activity LED
KEY	7	WPS_PB	WPS KEY
LDO	19	SOD_1.8V	Power supply to 10/100 transformer
EPHY4	21	RXIP4	PHY4 RX+
	22	TXOP4	PHY4 TX+
	23	RXIM4	PHY4 RX-
	24	TXOM4	PHY4 TX-
USB	11	UPHYO_PADP	USB Data+
	13	UPHYO_PADM	USB Data-

### B. J2 Pin Definition ( Option )

Description	Pin	Specification	Notes
LDO	25	SOD_1.8V	Power supply to 10/100 transformer
	26	GND	Ground
PHY4	27	TXOP4	PHY4 TX+
	28	TXOM4	PHY4 TX-
	29	RXIP4	PHY4 RX+
	30	RXIM4	PHY4 RX-

### C. J3 Pin Definition

Description	Pin	Specification	Notes
Antenna Port1	31	GND	Ground
	32	ANT	WiFi Antenna connector
	33	GND	Ground

## I/O Design Definition

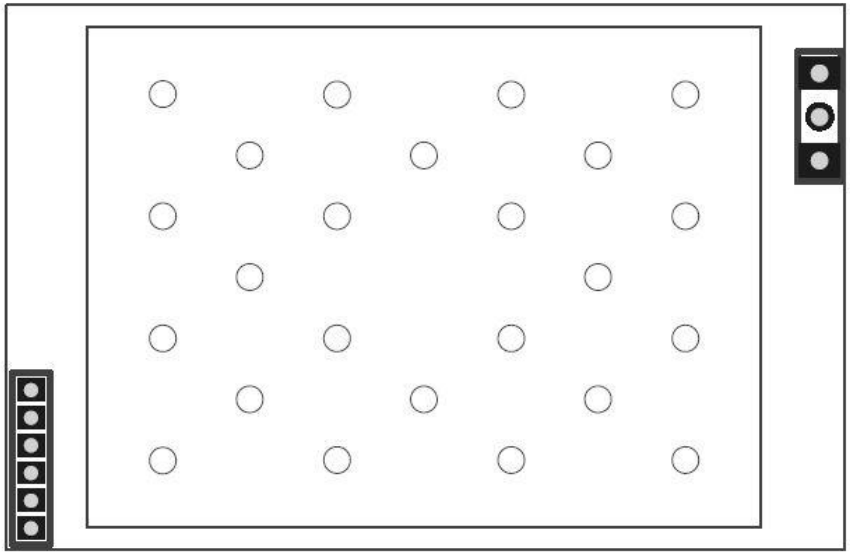
Table 1: GPIO share scheme:

UARTF	RIN	GPIO#14
	DCD_N	GPIO#12
	RXD	GPIO#10
	CTS_N	GPIO#9
	TXD	GPIO#8
	RTS_N	GPIO#7
I2C	I2C_SCLK	GPIO#2
	I2C_SD	GPIO#1
GPIO	GPIO0	GPIO#0

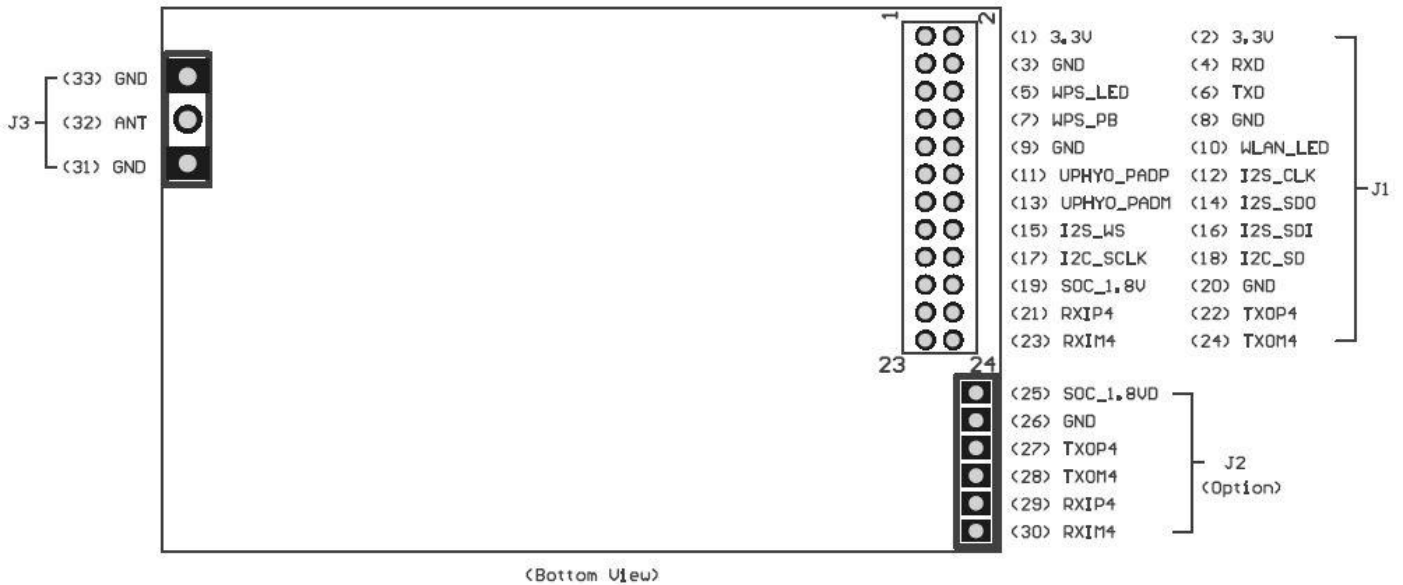
Table 2: UART pin share scheme

Pin Name	3'b000 UARTF	3'b001 PCM, UARTF	3'b010 PCM, I2S	3'b011 I2S UARTF	3'b100 PCM, GPIO	3'b101 GPIO UARTF	3'b110 GPIO I2S	3'b111 GPIO
RIN	RIN	PCMDTX	PCMDTX	RXD	PCMDTX	GPIO#14	GPIO#14	GPIO#14
DCD_N	DCD_N	PCMCLK	PCMCLK	TXD	PCMCLK	GPIO#12	GPIO#12	GPIO#12
RXD	RXD	RXD	I2SSDI	I2SSDI	GPIO#10	RXD	I2SSDI	GPIO#10
CTS_N	CTS_N	CTS_N	I2SSDO	I2SSDO	GPIO#9	CTS_N	I2SSDO	GPIO#9
TXD	TXD	TXD	I2SWS	I2SWS	GPIO#8	TXD	I2SWS	GPIO#8
RTS_N	RTS_N	RTS_N	I2SCLK	I2SCLK	GPIO#7	RTS_N	I2SCLK	GPIO#7

# Mechanical Dimension



(Top View)



(Bottom View)

