

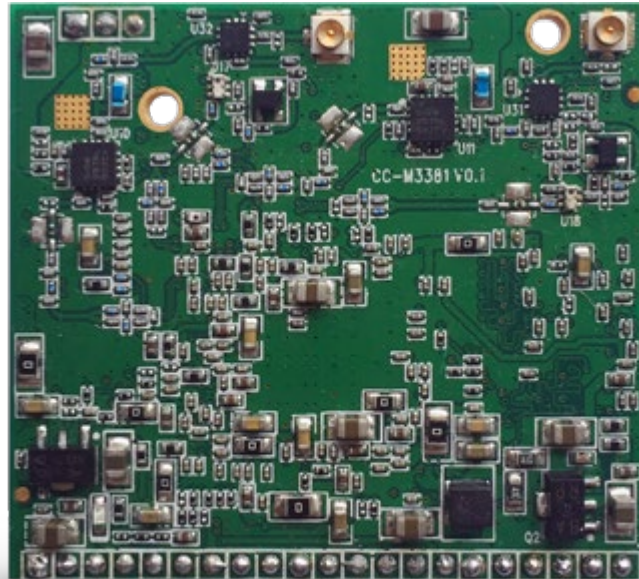
# M3381

**2x2 2.4GHz 802.11b/g/n**

**2x2 5GHz 802.11a/n**

**Dual-band Module**

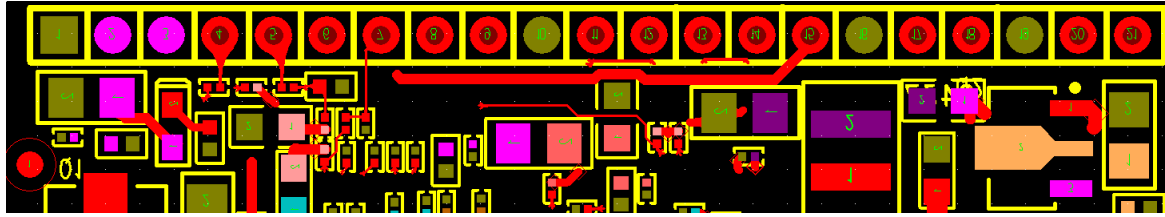
## Product Feature



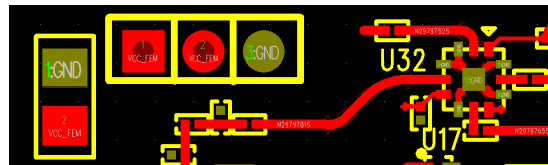
- Support 802.11n.
- High performance 5GHz or 2.4GHz 2x2 MIMO wireless module.
- Max transmission throughput: 300Mbps.
- Provide users with a standard wired network signal interface that supports TCP/IP.
- Can be used to develop wireless video related products.

# Signal Definition Constraint

J1



J2



Serial Number	Name	Functional Description
<b>J1</b>		
1	GND	Ground.
2	3.3V	3.3V power input
3	3.3V	3.3V power input
4	LAN0	Output, local network status indication signal
5	RST	Module reset, low effective
6	WLAN	Output, wireless network status indication signal
7	GPIO16/default	Input, restore the factory default value of the module, low level is valid for a certain time
8	GPIO21	Reserved
9	GPIO4	Reserved
10	GND	Ground.
11	PHY_TX+	Local network port TX+
12	PHY_TX-	Local network port TX-
13	PHY_RX+	Local network port RX+
14	PHY_RX-	Local network port RX-
15	PHY_2.0V	2.0V output, connected to the central tap of the network transformer
16	GND	Ground.
17	TXD	UART signal output
18	RXD	UART signal input
19	GND	Ground.
20	USB_DP	USB bus D+
21	USB_DM	USB bus D-
<b>J2</b>		
1	VDD_PA	RF part power supply, 3.3V or 5V
2	VDD_PA	RF part power supply, 3.3V or 5V
3	GND	Ground.

# Specifications

## Chip

Item	Mode
CPU	AR9344
Baseband	AR9344
DRAM	64M
Physical Interface	Standard 2.0mm pin header
Rated Voltage	Baseband: 3.3V ± 0.2V RF section: 3.3 or 5V
Maximum Power	3.3V: 20dBm 5V: 24dBm

## Power

	TX Power			Sensitivity		
	Date Rate	Avg. TX	Tolerance	Data Rate	Sensitivity	Tolerance
11b/g/n	1 Mbps	24dBm	+/- 2dBm	1 Mbps	-96dBm	+/- 2dBm
	11 Mbps	24dBm	+/- 2dBm	11 Mbps	-90dBm	+/- 2dBm
	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	21dBm	+/- 2dBm	54 Mbps	-76dBm	+/- 2dBm
	HT20 MCS0(合路)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7(合路)	24dBm	+/- 2dBm	HT20 MCS7	-73dBm	+/- 2dBm
	HT40 MCS0(合路)	27dBm	+/- 2dBm	HT40 MCS0	-88dBm	+/- 2dBm
	HT40 MCS7(合路)	24dBm	+/- 2dBm	HT40 MCS7	-70dBm	+/- 2dBm
11a/n	6 Mbps	21dBm	+/- 2dBm	6 Mbps	-93dBm	+/- 2dBm
	54 Mbps	18dBm	+/- 2dBm	54 Mbps	-74dBm	+/- 2dBm
	HT20 MCS0(合路)	24dBm	+/- 2dBm	HT20 MCS0	-93dBm	+/- 2dBm
	HT20 MCS7(合路)	20dBm	+/- 2dBm	HT20 MCS7	-73dBm	+/- 2dBm
	HT40 MCS0(合路)	24dBm	+/- 2dBm	HT40 MCS0	-90dBm	+/- 2dBm
	HT40 MCS7(合路)	20dBm	+/- 2dBm	HT40 MCS7	-70dBm	+/- 2dBm

## Mechanical Information

