

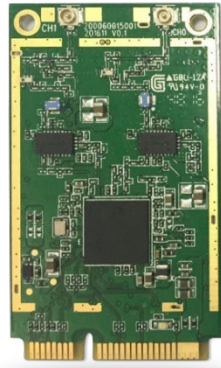
CC-M0382

2x2 2.4GHz 802.11b/g/n

2x2 5GHz 802.11a/n/ac

Dual-band module

Product Feature



- CC-M0382 Supports low-power USB3.0 interfaces (TBD)①
- Highly integrated WLAN chip system for 2×2 2.4GHz 802.11b/g/n 5GHz 802.11a/n/ac dual-band WLAN applications (dual-band non-concurrent)
- Supports 20MHz, 40MHz and 80MHz (only 5GHz) bandwidths at 2.4GHz and 5GHz frequencies
- Support 2x2 MIMO
- Support 3.3V power supply and 5.0V power supply
- 48 MHz reference clock
- Standard Mini-PCIe package available
- Use external FEM (only 5GHz) to support high output power and better receiver sensitivity
- RF interface: IPEX

Note: ① in the USB2.0 interface verification.

Pin Description

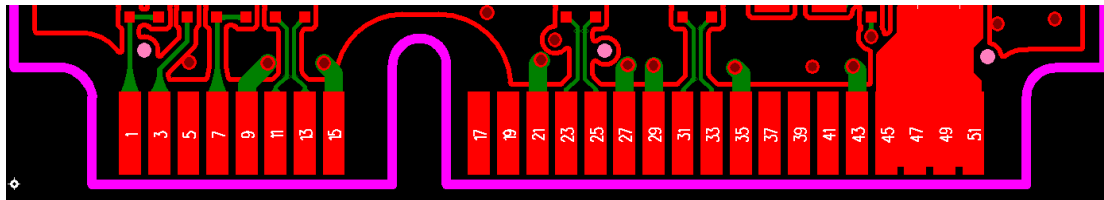
Pin#	Pin Name	I/O	Description
1	WAKE_L	Input	Active low
2	3.3V	Power	3.3V Power Supply /1A ^②
3	RESERVED	NC	Chip off or reset, active low
4	GND	GND	GND
5	RESERVED	NC	
6	1.5V	NC	
7	CLKREQ_L	I/O	PCIe Clock request, active low
8	UIM_PWR	DATA	USB RD-
9	GND	GND	GND
10	UIM_DATA	DATA	USB RD+
11	REFCLK-	I/O	PCIe Negative electrode reference clock
12	UIM_CLK	NC	
13	REFCLK+	I/O	PCIe Positive electrode reference clock
14	UIM_RESET	NC	
15	GND	GND	GND
16	UIM_VPP	NC	
17	UIM_C8	NC	
18	GND	GND	GND
19	UIM_C4	NC	
20	W_DISABLE_L	I/O	GPIO16
21	GND	GND	GND
22	PERST_L	I/O	PCIe Reset, active low
23	PERN0	DATA	PCIe Data Bus
24	3.3VAUX	Power	3.3V Power Supply /1A ^②
25	PERP0	DATA	PCIe Data Bus R-
26	GND	GND	GND
27	GND	GND	GND
28	1.5V	NC	
29	GND	GND	GND
30	SMB_CLK	DATA	USB TD-
31	PETN0	DATA	PCIe Data Bus T-
32	SMB_DATA	DATA	USB TD+
33	PETP0	DATA	PCIe Data Bus T+
34	GND	GND	GND
35	GND	GND	GND
36	USB_D-	DATA	USB_D-
37	RESERVED	NC	
38	USB_D+	DATA	USB_D+
39	RESERVED	NC	
40	GND	GND	GND
41	RESERVED	NC	
42	LED_WWAN_L	NC	
43	GND	GND	GND
44	LED_WLAN_L	NC	GPIO20
45	RESERVED	Power	5V Power Supply /1A ^③
46	LED_WPAN_L	NC	
47	RESERVED	Power	5V Power Supply /1A ^③
48	1.5V	NC	
49	RESERVED	Power	5V Power Supply /1A ^③
50	GND	GND	GND
51	RESERVED	Power	5V Power Supply /1A ^③
52	3.3V	Power	3.3V Power Supply /1A ^②

Note:

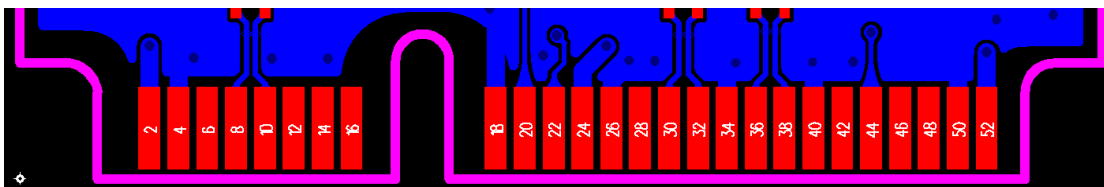
- ② 3.3V / 1A power supply pins for the 2,24 and 52
- ③ 5V / 1A power supply pins for the 45,47,49 and 51

Pin order:

Front:



Back:



Electrical Characteristics

The RF output power and data rate are listed below:

	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	-89dBm	+/- 2dBm
	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	21dBm	+/- 2dBm	54 Mbps	-73dBm	+/- 2dBm
	HT20 MCS0(combination)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7(combination)	23dBm	+/- 2dBm	HT20 MCS7	-71dBm	+/- 2dBm
	HT40 MCS0(combination)	27dBm	+/- 2dBm	HT40 MCS0	-89dBm	+/- 2dBm
	HT40 MCS7(combination)	23dBm	+/- 2dBm	HT40 MCS7	-68dBm	+/- 2dBm
11a/n	6 Mbps	24dBm	+/- 2dBm	6 Mbps	-91dBm	+/- 2dBm
	54 Mbps	21dBm	+/- 2dBm	54 Mbps	-73dBm	+/- 2dBm
	HT20 MCS0(combination)	27dBm	+/- 2dBm	HT20 MCS0	-91dBm	+/- 2dBm
	HT20 MCS7(combination)	23dBm	+/- 2dBm	HT20 MCS7	-70dBm	+/- 2dBm
	HT40 MCS0(combination)	27dBm	+/- 2dBm	HT40 MCS0	-88dBm	+/- 2dBm
	HT40 MCS7(combination)	23dBm	+/- 2dBm	HT40 MCS7	-68dBm	+/- 2dBm
11ac	VHT20 MCS0(combination)	27dBm	+/- 2dBm	VHT20 MCS0	-91dBm	+/- 2dBm
	VHT20 MCS8(combination)	22dBm	+/- 2dBm	VHT20 MCS8	-67dBm	+/- 2dBm
	VHT40 MCS0(combination)	27dBm	+/- 2dBm	VHT40 MCS0	-87dBm	+/- 2dBm
	VHT40 MCS9(combination)	21dBm	+/- 2dBm	VHT40 MCS9	-64dBm	+/- 2dBm
	VHT80 MCS0(combination)	27dBm	+/- 2dBm	VHT80 MCS0	-85dBm	+/- 2dBm
	VHT80 MCS9(combination)	21dBm	+/- 2dBm	VHT80 MCS9	-60dBm	+/- 2dBm

Mechanical Information

