

Features:

- **Qualcomm Atheros QCA9880**
- **Antenna: U.FL * 3 for 3T3R**
- **Data Rates: allows link speeds up to 1.3GMbps**
- **Support Linux driver**

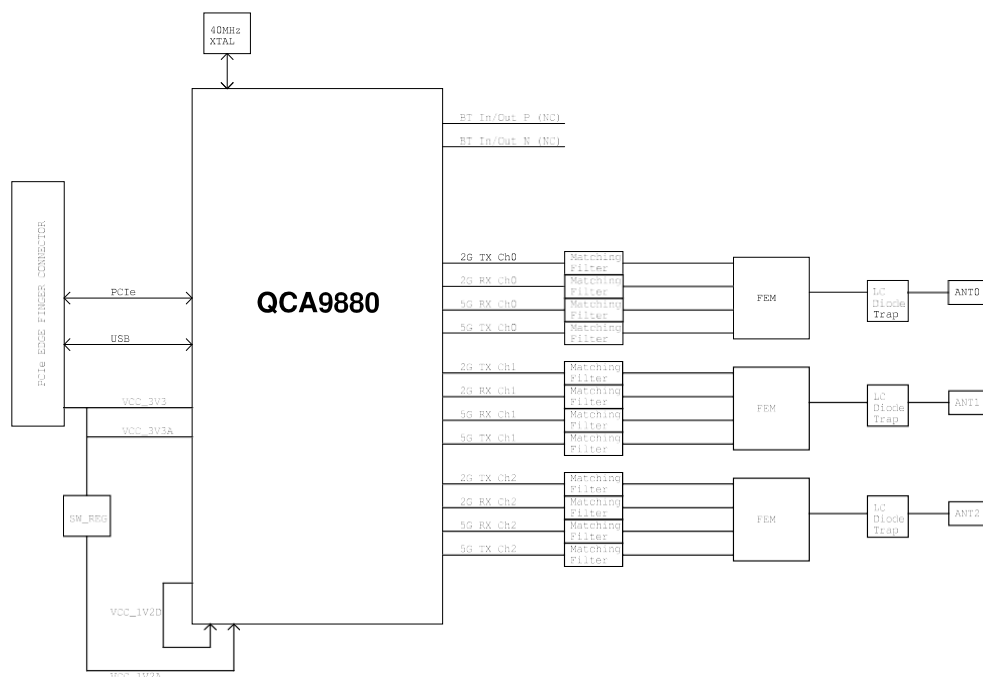
WPEA-352ACN

802.11 ac/abgn Dual-Band 3T3R Mini PCIe Module

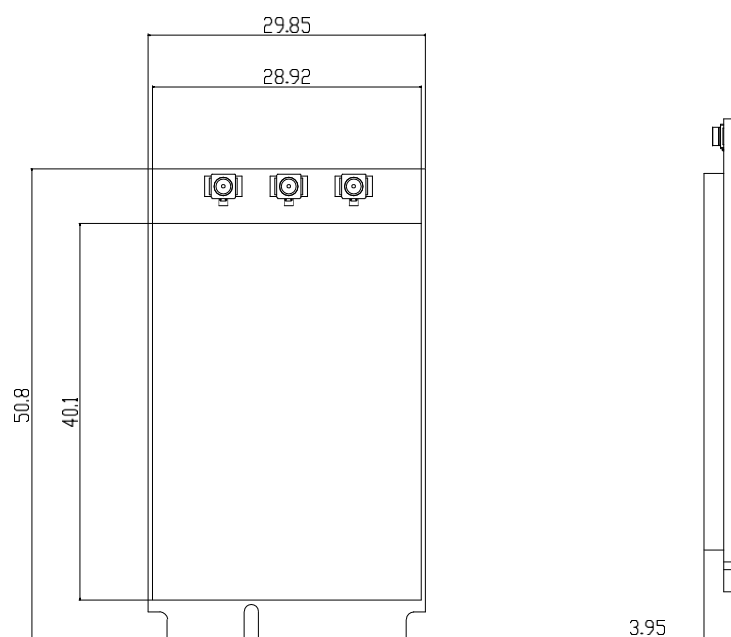


System	
Standards:	IEEE 802.11ac/abgn (3T3R)
Chipset:	Qualcomm Atheros QCA9880-BR4A
Data Rate:	802.11b: 11Mbps / 802.11a/g: 54Mbps / 802.11n: 450Mbps / 802.11ac: 1.3Gbps
Operating Frequency:	IEEE 802.11ac/abgn ISM Band, 2.400GHz ~ 2.4835GHz, 5.150MHz ~ 5.825MHz *Subject to local regulations
Interface:	Mini PCI Express
Form Factor:	Mini PCI-e
Antenna:	3 x UFL connector for 3T3R
Modulation:	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11a/g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
Operating Voltage:	3.3V ± 9% I/O supply voltage
Temperature Range:	-20°C to +65°C (Operating) / -30°C to +75°C (Storage)
Humidity (Non-Condensing):	Operating Humidity (non-condensing): 10% ~ 85% Storage Humidity (non-condensing): 5% ~ 90%
Power Consumption:	Continue TX: 1250mA(Max.) / Continue RX: 350mA(Max.)
Dimension (in mm):	50.8 x 29.85 x 3.95 mm (± 0.5mm)
Weight (g):	≤ 8g
Driver Support:	Linux
Security	64/128-bits WEP, WPA, WPA2, 802.1x

Block Diagram



Mechanical Dimension (mm)



Pin Assignment

Pin#	Pin Name	Description	Pin#	Pin Name	Description
1	WAKE_L(NA)	Output and open Drain active Low signal. This signal is used to request that the system return from a sleep/suspended state to service a function initiated wake event.	2	+3.3V	+3.3V
3	No Connection	-	4	GND	GND
5	No Connection	-	6	No Connection	-
7	CLKREQ_L	Output for reference clock request signal	8	No Connection	-
9	GND	GND	10	No Connection	-
11	REFCLK-	Input signal for PCI Express differential reference clock (100 MHz)	12	No Connection	-
13	REFCLK+	Input signal for PCI Express differential reference clock (100 MHz)	14	No Connection	-
15	GND	GND	16	No Connection	-
17	No Connection	-	18	GND	GND
19	No Connection	-	20	W_DISABLE_L	Input and active low signal. This signal is used by the system to disable radio operation on add-in cards that implement radio frequency applications. When implemented, this signal requires a pull-up resistor on the card
21	GND	GND	22	PERST_L	Input signal for functional reset to the card
23	PERn0	PCI Express x1 data interface: one differential receive pair	24	+3.3V	+3.3V
25	PERp0	PCI Express x1 data interface: one differential receive pair	26	GND	GND
27	GND	GND	28	No Connection	-
29	GND	GND	30	No Connection	-
31	PETn0	PCI Express x1 data interface: one differential transmit pair	32	No Connection	-
33	PETp0	PCI Express x1 data interface: one differential transmit pair	34	GND	GND

Pin Assignment

Pin#	Pin Name	Description	Pin#	Pin Name	Description
35	GND	GND	36	No Connection	-
37	GND	GND	38	No Connection	-
39	No Connection	-	40	GND	GND
41	No Connection	-	42	No Connection	-
43	GND	GND	44	LED_WLAN_L (OPT)	Output and open drain active low signal. This signal is used to allow the PCI Express Mini Card add-in card to provide status indicators via LED devices that will be provided by the system
45	No Connection	-	46	No Connection	-
47	No Connection	-	48	No Connection	-
49	No Connection	-	50	GND	GND
51	No Connection	-	52	+3.3V	+3.3V

*NA→No active, OPT →Optional