

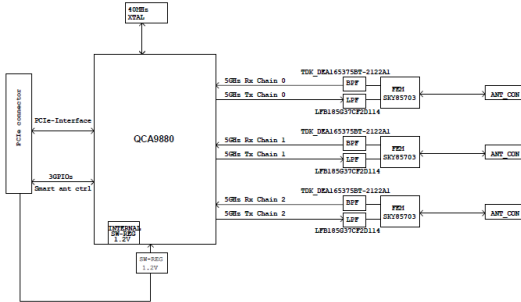
Feature



Key Features and Benefits

- QCA9880 PCI-e 3X3 solution
- External PA and LNA for Extreme Performance
- Single band support, IEEE 802.11 a/ac
- Support 20MHz, 40MHz and 80MHz Bandwidth
- Support 256 QAM Modulation
- Antenna Port Data rate up to 1.3Gbps
- PCI-e Interface
- 30x50mm size with the same mounting hole location as the standard full minicard.
- Operation temp. : 0~60 degrees C

I Block Diagram



II Current consumption

Condition	3.3V supply only	Unit
	Average	
11a Cont. Tx@ 6M 18dBm	1120	mA
11a Cont. Tx@ HT20 MCS16 (MIMO) 18dBm	1070	
11a Cont. Tx@ HT40 MCS16 (MIMO) 18dBm	980	
11a Cont. Tx@ HT20 MCS23 (MIMO) 14dBm	800	
11a Cont. Tx@ HT40 MCS23 (MIMO) 14dBm	740	
11ac Cont. Tx@ VHT40 MCS0_NSS3 18dBm	1070	
11ac Cont. Tx@ VHT80 MCS0_NSS3 18dBm	1070	
11ac Cont. Tx@ VHT40 MCS9_NSS3 14dBm	750	
11ac Cont. Tx@ VHT80 MCS9_NSS3 14dBm	750	
Idle	80	
Standby	260	

(Typical level, with +/- 50mA tolerance)

III Average TX power

(Typical power level per chain (dBm), with +/-2 dB tolerance)

IEEE 802.11 a/ac												
20MHz BW	MHz			40MHz BW	MHz			80MHz BW	MHz			
	CH36 ~ 48	CH52 ~ 64	CH100 ~ 165		CH36 ~ 48	CH52 ~ 64	CH100 ~ 165		CH36 ~ 48	CH52 ~ 64	CH100 ~ 165	
6Mbps	18	18	18	HT40 MCS0	18	18	18	VHT MCS0	18	18	18	
9Mbps	18	18	18	HT40 MCS1	18	18	18	VHT MCS1	18	18	18	
12Mbps	18	18	18	HT40 MCS2	18	18	18	VHT MCS2	18	18	18	
18Mbps	18	18	18	HT40 MCS3	18	18	18	VHT MCS3	18	18	18	
24Mbps	18	18	18	HT40 MCS4	18	18	18	VHT MCS4	18	18	18	
36Mbps	18	18	18	HT40 MCS5	18	18	18	VHT MCS5	18	18	18	
48Mbps	18	18	18	HT40 MCS6	18	18	18	VHT MCS6	18	18	18	
54Mbps	16	16	16	HT40 MCS7	16	16	16	VHT MCS7	16	16	16	
HT20 MCS0	18	18	18	VHT40 MCS8	14	14	14	VHT MCS8	14	14	14	
HT20 MCS1	18	18	18	VHT40 MCS9	14	14	14	VHT MCS9	14	14	14	
HT20 MCS2	18	18	18									
HT20 MCS3	18	18	18									
HT20 MCS4	18	18	18									
HT20 MCS5	18	18	18									
HT20 MCS6	18	18	18									
HT20 MCS7	16	16	16									
VHT20 MCS8	14	14	14									

IV Sensitivity

(Typical 3 chains combined sensitivity level (dBm), with +/-2 dB tolerance)

IEEE 802.11 a/ac												
20MHz BW	MHz			40MHz BW	MHz			80MHz BW	MHz			
	CH36 ~ 48	CH52 ~ 64	CH100 ~ 165		CH36 ~ 48	CH52 ~ 64	CH100 ~ 165		CH36 ~ 48	CH52 ~ 64	CH100 ~ 165	
6Mbps	-95	-95	-95	HT40 MCS0	-92	-92	-92	VHT MCS0	-90	-90	-90	
9Mbps	-94	-94	-94	HT40 MCS1	-91	-91	-91	VHT MCS1	-89	-89	-89	
12Mbps	-93	-93	-93	HT40 MCS2	-90	-90	-90	VHT MCS2	-87	-87	-87	
18Mbps	-90	-90	-90	HT40 MCS3	-85	-85	-85	VHT MCS3	-82	-82	-82	
24Mbps	-88	-88	-88	HT40 MCS4	-82	-82	-82	VHT MCS4	-79	-79	-79	
36Mbps	-85	-85	-85	HT40 MCS5	-78	-78	-78	VHT MCS5	-75	-75	-75	
48Mbps	-78	-78	-78	HT40 MCS6	-77	-77	-77	VHT MCS6	-74	-74	-74	
54Mbps	-76	-76	-76	HT40 MCS7	-76	-76	-76	VHT MCS7	-72	-72	-72	
HT20 MCS0	-94	-94	-94	VHT40 MCS8	-71	-71	-71	VHT MCS8	-68	-68	-68	
HT20 MCS1	-92	-92	-92	VHT40 MCS9	-70	-70	-70	VHT MCS9	-67	-67	-67	
HT20 MCS2	-90	-90	-90									
HT20 MCS3	-86	-86	-86									
HT20 MCS4	-83	-83	-83									
HT20 MCS5	-78	-78	-78									
HT20 MCS6	-77	-77	-77									
HT20 MCS7	-76	-76	-76									
VHT20 MCS8	-72	-72	-72									

V Dimension

