## **Operational Description**

The device is a dual band wireless Access Point which operates at 2.4 and 5GHz band and supports IEEE 802.11 a / b / g / n / ac transmission modes. 80+80 MHz mode is not supported. This device is not capable of transmitting simultaneously in more than one Part 15 band between 5 and 6 GHz and therefore not subject to the PBA as defined in KDB 644545.

RF main chip		RTL8197	RTL8197			
Frequen	cy range (I	MHz) 2412~2462	2412~2462 / 5180~5240 / 5745~5825			
Modulati	on type	DBPSK, DQ BPSK, QPS	DBPSK, DQPSK, CCK BPSK, QPSK, 16QAM, 64QAM,256QAM			
Oscillatir	ng frequen	cy (MHz) 40				
Antenna	type	PCB antenn	PCB antenna , 2dBi gain			
Channel	frequency					
Mode	Channel	Frequency(MHz)	Mode	Channel Frequency(MHz)		
11b 11g HT20	1	2412		36	5180	
	2	2417		40	5200	
	3	2422		44	5220	
	4	2427	11a	48	5240	
	5	2432	HT20	149	5745	
	6	2437	VHT20	153	5765	
	7	2442		157	5785	
	8	2447		161	5805	
	9	2452		165	5825	
	10	2457		38	5190	
	11	2462	HT40	46	5230	
HT40	3	2422	VHT40	151	5755	
	4	2427		159	5795	
	5	2432		42	5210	
	6	2437	11100	155	5775	
	7	2442				
	8	2447				
	9	2452				

Data transmission is always initiated by software, which is then pass down through the MAC , through the digital and analog baseband, and finally to the RF chip. Several special packets (ACKs, CTS , PSPoll, etc) are initiated by the MAC. There are the only ways the digital baseband portion will turn on the RF transmitter, which it the turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets are being transmitted.