

# ***Band Allocation Overlap and IM2 IM3 Freq Calculator User Manual***

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除了freq overlap原本功能之外, 你還可以做更多事

新增  
WiFi 2.4G  
WiFi 5G  
GSM  
GNSS  
In Band Table

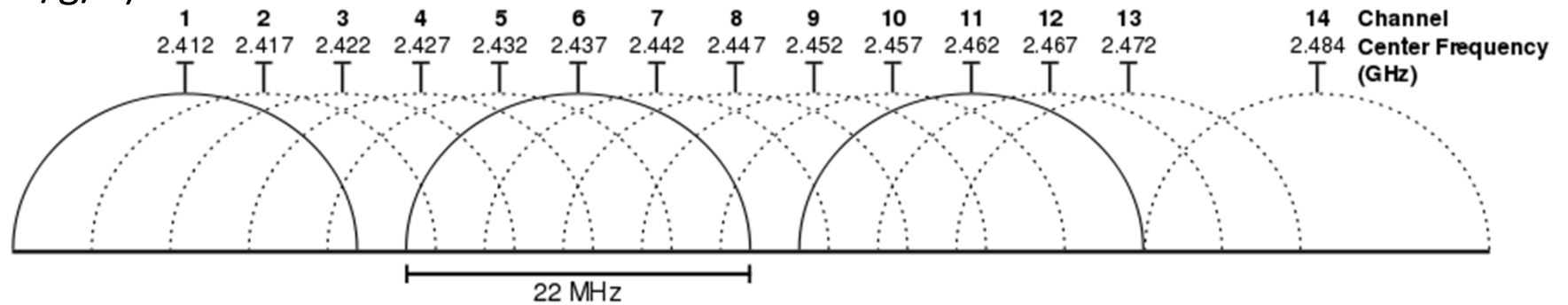
一鍵分析  
All possible IM2 IM3 freq攻擊到  
特定band的Rx

一鍵分析  
GNSS Rx受哪兩個band  
Tx IM2 IM3攻擊



只要一鍵

## 2.4 GHz (802.11b/g/n)



Channel	Frequency (MHz)			
	F - 10	Center	F + 10	Area
1	2402	2412	2422	
2	2407	2417	2427	
3	2412	2422	2432	
4	2417	2427	2437	
5	2422	2432	2442	
6	2427	2437	2447	
7	2432	2442	2452	
8	2437	2447	2457	
9	2442	2452	2462	
10	2447	2457	2467	
11	2452	2462	2472	
12	2457	2467	2477	
13	2462	2472	2482	
14	2474	2484	2494	Japan

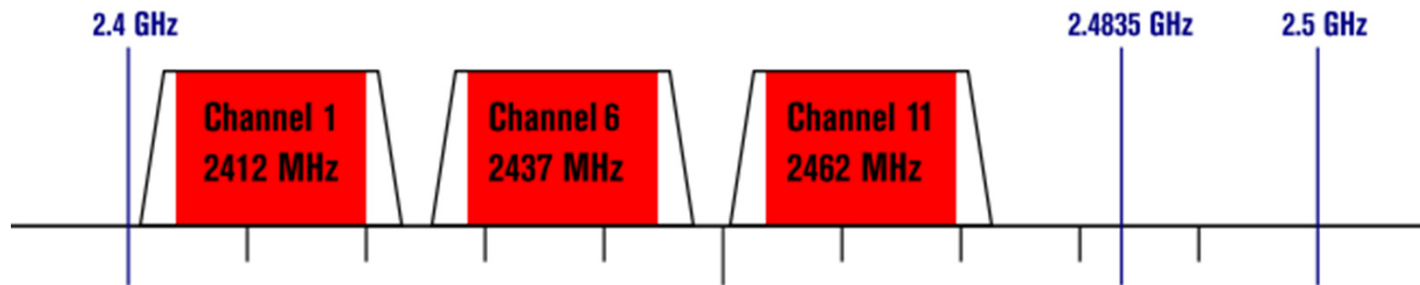
Transmission can be on a  
 22MHz (802.11b),  
 20MHz (802.11g/n), or  
 40MHz (802.11n) wide channel

# Non-Overlapping Channels for 2.4 GHz WLAN

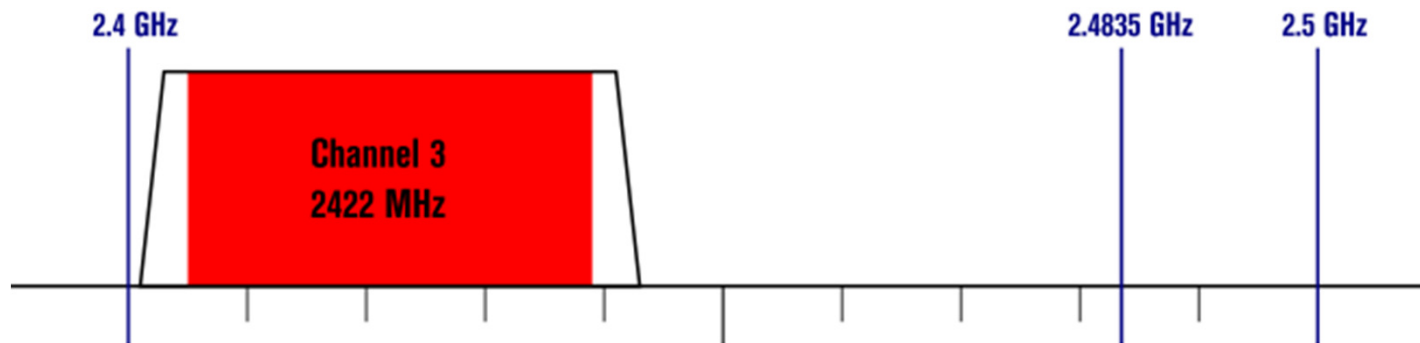
802.11b (DSSS) channel width 22 MHz



802.11g/n (OFDM) 20 MHz ch. width – 16.25 MHz used by sub-carriers



802.11n (OFDM) 40 MHz ch. width – 33.75 MHz used by sub-carriers

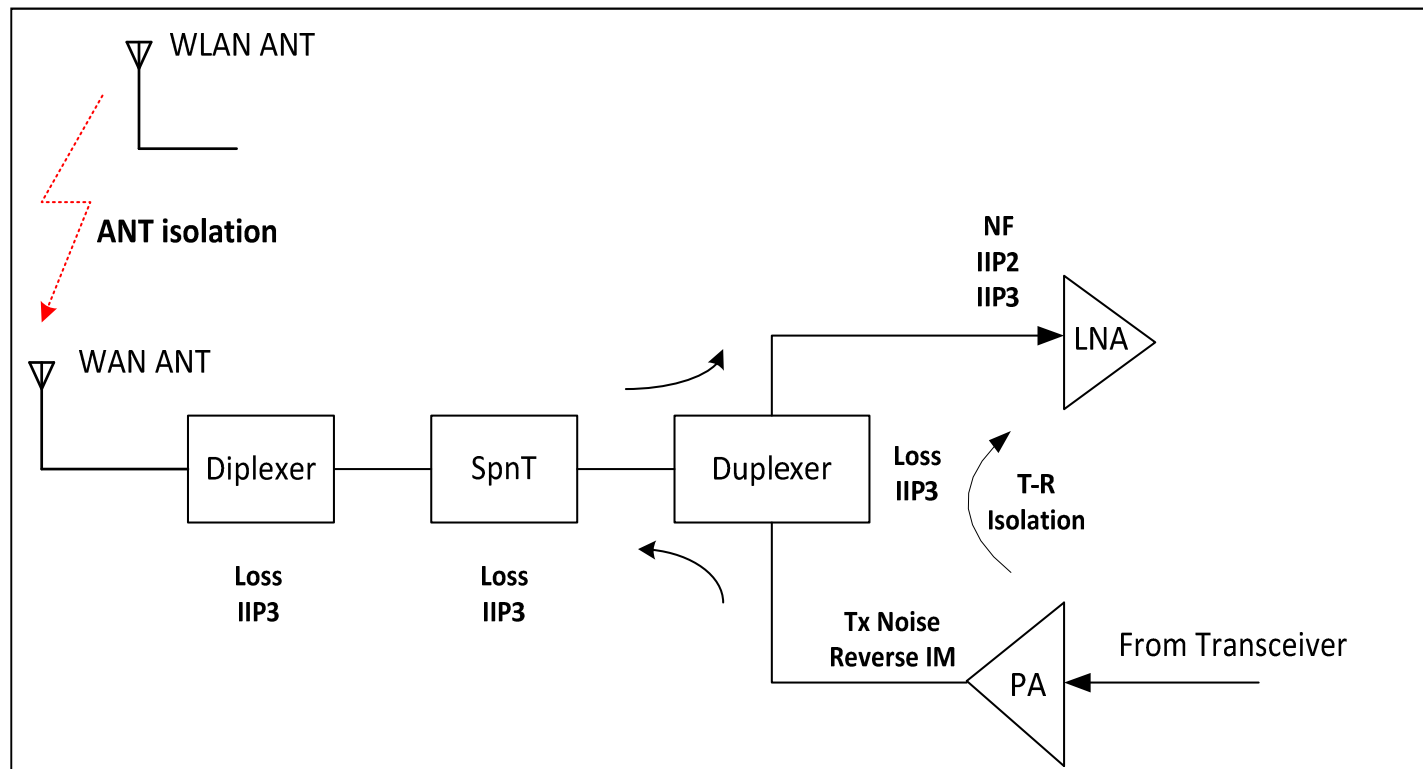


5 GHz (802.11 a/n)

Channel	Frequency (MHz)		
	F - 10	Center	F + 10
36	5170	5180	5190
40	5190	5200	5210
44	5210	5220	5230
48	5230	5240	5250
52	5250	5260	5270
56	5270	5280	5290
60	5290	5300	5310
64	5310	5320	5330
100	5490	5500	5510
104	5510	5520	5530
108	5530	5540	5550
112	5550	5560	5570
116	5570	5580	5590
120	5590	5600	5610
124	5610	5620	5630
128	5630	5640	5650
132	5650	5660	5670
136	5670	5680	5690
140	5690	5700	5710
144	5710	5720	5730
149	5735	5745	5755
153	5755	5765	5775
157	5775	5785	5795
161	5795	5805	5815
165	5815	5825	5835

Transmission can be on a  
20 or 40MHz (802.11a/n), or  
80 MHz (802.11ac) wide channel

## Case1. B7 + WLAN 2.4G



以前找IM3 2f2 - f1都要key 一堆channel, 然後EXCEL找

C7

fx

=2\*\$A7-C\$2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	LTE B7		WLAN 2.4G												
2	TX	RX	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462	2467	2472
3	2500	2620	2588	2583	2578	2573	2568	2563	2558	2553	2548	2543	2538	2533	2528
4	2505	2625	2598	2593	2588	2583	2578	2573	2568	2563	2558	2553	2548	2543	2538
5	2510	2630	2608	2603	2598	2593	2588	2583	2578	2573	2568	2563	2558	2553	2548
6	2515	2635	2618	2613	2608	2603	2598	2593	2588	2583	2578	2573	2568	2563	2558
7	2520	2640	2628	2623	2618	2613	2608	2603	2598	2593	2588	2583	2578	2573	2568
8	2525	2645	2638	2633	2628	2623	2618	2613	2608	2603	2598	2593	2588	2583	2578
9	2530	2650	2648	2643	2638	2633	2628	2623	2618	2613	2608	2603	2598	2593	2588
10	2535	2655	2658	2653	2648	2643	2638	2633	2628	2623	2618	2613	2608	2603	2598
11	2540	2660	2668	2663	2658	2653	2648	2643	2638	2633	2628	2623	2618	2613	2608
12	2545	2665	2678	2673	2668	2663	2658	2653	2648	2643	2638	2633	2628	2623	2618
13	2550	2670	2688	2683	2678	2673	2668	2663	2658	2653	2648	2643	2638	2633	2628
14	2555	2675	2698	2693	2688	2683	2678	2673	2668	2663	2658	2653	2648	2643	2638
15	2560	2680	2708	2703	2698	2693	2688	2683	2678	2673	2668	2663	2658	2653	2648
16	2565	2685	2718	2713	2708	2703	2698	2693	2688	2683	2678	2673	2668	2663	2658
17	2570	2690	2728	2723	2718	2713	2708	2703	2698	2693	2688	2683	2678	2673	2668

現在不用, 只要一鍵

WiFi 2.4G有1-14個channel, 輸入w1.....w14 or

Shamyah & Jay is so handsome! X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G						輸入Band X ---> <b>7</b>		1. 輸入Band			
						輸入Band Y ---> <b>w7</b>		2. 輸入Band			
Uplink (Tx)		Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band --> <b>0</b>	3. 輸入guard band	
Unit	MHz		MHz		MHz		MHz				
Band	Tx, low	Tx, high	Rx, low	Rx, high		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)		
7	2500.0	2570.0	2620.0	2690.0	FDD	5000.0	5140.0	7500.0	7710.0		
w7	2432.0	2452.0	2432.0	2452.0	TDD	4864.0	4904.0	7296.0	7356.0		
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Safe!!!		
7		w7	2nd					N			
			3rd					N			
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Safe!!!		
w7		7	2nd					N			
			3rd					N			
7	Rx被	7	2H Tx and	w7	Tx	IM3打中? (2f1-f2 or 2f2-f1)				Y	
7	Rx被	w7	2H Tx and	7	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N	
w7	Rx被	w7	2H Tx and	7	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N	
w7	Rx被	7	2H Tx and	w7	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N	
7	Rx被	7	Tx and	w7	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N	
7	Rx被	w7	Tx and	7	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N	
w7	Rx被	w7	Tx and	7	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N	
...	Rx被	7	Tx and	...	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N	

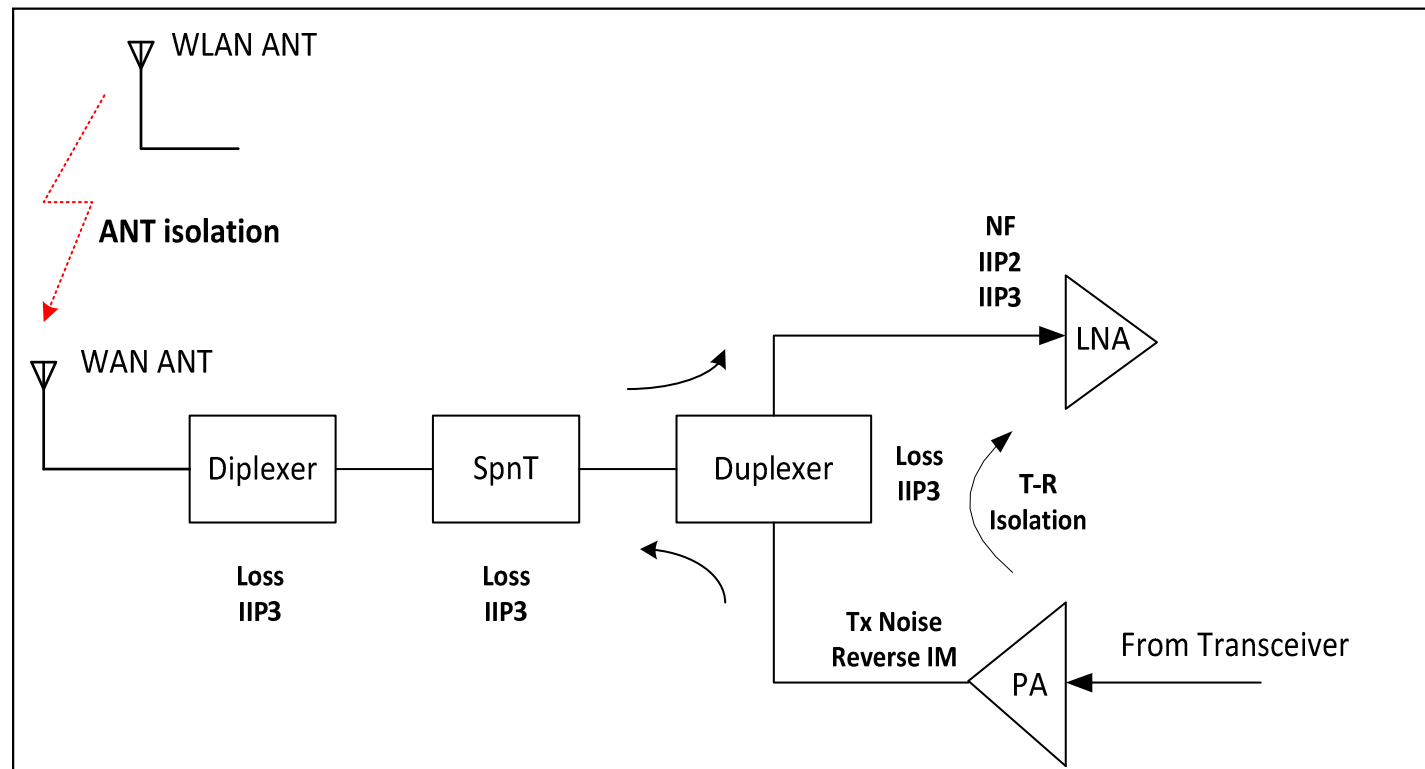
3. 4. 點此開始分析!



一個一個 channel設太麻煩, 你也可以直接輸入 wifi\_2.4G

Shamyah & Jay is so handsome!		X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G				輸入Band X --->		7	← 1.車	
						輸入Band Y --->2.		wifi_2.4G	← 2.車	
	Uplink (Tx)	Downlink (Rx)		Scheme	Tx 2nd harmonic	Tx 3rd harmonic		Guard band -->	0	← 3.車
Unit	MHz		MHz		MHz		MHz		4. 點此開始分析!	
Band	Tx, low	Tx, high	Rx, low	Rx, high	2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)		
7	2500.0	2570.0	2620.0	2690.0	FDD	5000.0	5140.0	7500.0	7710.0	
wifi_2.4G	2402.0	2494.0	2402.0	2494.0	TDD	4804.0	4988.0	7206.0	7482.0	
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)			N N N		Safe!!!	
7		wifi_2.4G	2nd							
			3rd							
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)			N N N		Safe!!!	
wifi_2.4G		7	2nd							
			3rd							
7	Rx被	7	2H Tx and	wifi_2.4G	Tx	IM3打中? (2f1-f2 or 2f2-f1)		Y		
7	Rx被	wifi_2.4G	2H Tx and	7	Tx	IM3打中? (2f1-f2 or 2f2-f1)		N		
wifi_2.4G	Rx被	wifi_2.4G	2H Tx and	7	Tx	IM3打中? (2f1-f2 or 2f2-f1)		Y		
wifi_2.4G	Rx被	7	2H Tx and	wifi_2.4G	Tx	IM3打中? (2f1-f2 or 2f2-f1)		N		
7	Rx被	7	Tx and	wifi_2.4G	2H Tx	IM3打中? (f1-2f2 or f2-2f1)		N		
7	Rx被	wifi_2.4G	Tx and	7	2H Tx	IM3打中? (f1-2f2 or f2-2f1)		N		

## Case2. B4 + WLAN 5G



同理 WLAN 5G 124 channel or

Shamyah & Jay is so handsome!					X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi 2.4G; WiFi 5G 輸入w36 - w165 or wifi 5G					輸入Band X --->	1. 4	← 1. 輸
										輸入Band Y --->	2. w124	← 2. 輸
	Uplink (Tx)		Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->	0	← 3. 輸
Unit	MHz		MHz			MHz		MHz				
Band	Tx, low	Tx, high	Rx, low	Rx, high		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)			
X 4	1710.0	1755.0	2110.0	2155.0	FDD	3420.0	3510.0	5130.0	5265.0	4. 點此開始分析!		
Y w124	5610.0	5630.0	5610.0	5630.0	TDD	11220.0	11260.0	16830.0	16890.0			
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N		Safe!!!		
4		w124	2nd					N				
			3rd					N				
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N		Safe!!!		
w124		4	2nd					N				
			3rd					N				
4	Rx被	4	2H Tx and	w124	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
4	Rx被	w124	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
w124	Rx被	w124	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
w124	Rx被	4	2H Tx and	w124	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
4	Rx被	4	Tx and	w124	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N		
4	Rx被	w124	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				Y		

一個一個 channel 設太麻煩, 你也可以直接輸入 wifi\_5G

Shamyah & Jay is so handsome!		X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G								輸入Band X --->	4	←
										輸入Band Y ---> <sup>2.</sup>	wifi_5G	←
		Uplink (Tx)	Downlink (Rx)	Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->		0	←
Unit	MHz		MHz		MHz		MHz					
Band	Tx, low	Tx, high	Rx, low		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)				
4	1710.0	1755.0	2110.0	FDD	3420.0	3510.0	5130.0	5265.0				
wifi_5G	5170.0	5835.0	5170.0	TDD	10340.0	11670.0	15510.0	17505.0				
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Safe!!!			
4		wifi_5G	2nd					N				
			3rd					N				
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Risky!!!			
wifi_5G		4	2nd					N				
			3rd					Y				
4	Rx被	4	2H Tx and	wifi_5G	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
4	Rx被	wifi_5G	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
wifi_5G	Rx被	wifi_5G	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
wifi_5G	Rx被	4	2H Tx and	wifi_5G	Tx	IM3打中? (2f1-f2 or 2f2-f1)				N		
4	Rx被	4	Tx and	wifi_5G	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				N		
4	Rx被	wifi_5G	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)				Y		

4. 點此開始分析!

### Case3. B13 + BC0

Shamyah & Jay is so handsome!				X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G						輸入Band X --->		13	
				輸入Band Y --->		BC0							
	Uplink (Tx)		Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->		0	
Unit	MHz		MHz			MHz		MHz					
Band	Tx, low	Tx, high	Rx, low	Rx, high		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)				
13	777.0	787.0	746.0	756.0	FDD	1554.0	1574.0	2331.0	2361.0				
BC0	815.0	849.0	860.0	894.0	FDD	1630.0	1698.0	2445.0	2547.0				
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Safe!!!				
13		BC0	2nd					N					
			3rd					N					
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N	Safe!!!				
BC0		13	2nd					N					
			3rd					N					
13	Rx被	13	2H Tx and	BC0	Tx	IM3打中? (2f1-f2 or 2f2-f1)		Y					
13	Rx被	BC0	2H Tx and	13	Tx	IM3打中? (2f1-f2 or 2f2-f1)		N					
BC0	Rx被	BC0	2H Tx and	13	Tx	IM3打中? (2f1-f2 or 2f2-f1)		Y					
BC0	Rx被	13	2H Tx and	BC0	Tx	IM3打中? (2f1-f2 or 2f2-f1)		N					

4. 點此開始

4. 點此開始

## Case4. B25 + B4

Shamyah & Jay is so handsome!				X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G				輸入Band X --->		25					
								輸入Band Y --->		4					
	Uplink (Tx)		Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->		0			
Unit	MHz		MHz			MHz		MHz				4. 點此開始分析!			
Band	Tx, low	Tx, high	Rx, low	Rx, high		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)						
25	1850.0	1915.0	1930.0	1995.0	FDD	3700.0	3830.0	5550.0	5745.0						
4	1710.0	1755.0	2110.0	2155.0	FDD	3420.0	3510.0	5130.0	5265.0						
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N		Safe!!!					
25		4	2nd					N							
			3rd					N							
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)				N		Safe!!!					
4		25	2nd					N							
			3rd					N							
25	Rx被	25	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)			Y						
25	Rx被	4	2H Tx and	25	Tx	IM3打中? (2f1-f2 or 2f2-f1)			N						
4	Rx被	4	2H Tx and	25	Tx	IM3打中? (2f1-f2 or 2f2-f1)			N						
4	Rx被	25	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)			Y						

你以為只有降嗎XD

往下拉

## Case4. B25 + B4

一鍵分析 GNSS(GPS + Glonass + BeiDou + Galileo) Rx 被哪兩個Tx IM3攻擊到

	fix: 1559-1606 MHz									
9	GNSS	Rx被	25	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)			N
	GNSS	Rx被	4	2H Tx and	25	Tx	IM3打中? (2f1-f2 or 2f2-f1)			Y
10	GNSS	Rx被	25	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)			N
	GNSS	Rx被	4	Tx and	25	2H Tx	IM3打中? (f1-2f2 or f2-2f1)			N



## Case5. SVLTE mode

遇到Dual Transmissions in AWS and PCS Bands攻擊GPS也找得到

Shamyah & Jay is so handsome!					X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G					輸入Band X --->	4
										輸入Band Y --->	BC1
	Uplink (Tx)	Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->	0	
Unit	MHz		MHz		MHz		MHz			4. 點此開始	
Band	Tx, low	Tx, high	Rx, low		Rx, high	2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)		
4	1710.0	1755.0	2110.0	2155.0	FDD	3420.0	3510.0	5130.0	5265.0		
BC1	1850.0	1910.0	1930.0	1990.0	FDD	3700.0	3820.0	5550.0	5730.0		
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)					N	Safe!!!	
			2nd						N		
4		BC1	3rd						N		
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)					N	Safe!!!	
			2nd						N		
BC1		4	3rd						N		

## Case5. SVLTE mode

遇到Dual Transmissions in AWS and PCS Bands攻擊GPS也找到的到

5	4	Rx被	4	2H Tx and	BC1	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
	4	Rx被	BC1	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)	Y
5	BC1	Rx被	BC1	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)	Y
	BC1	Rx被	4	2H Tx and	BC1	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
7	4	Rx被	4	Tx and	BC1	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	4	Rx被	BC1	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
8	BC1	Rx被	BC1	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	BC1	Rx被	4	Tx and	BC1	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	fix: 1559-1606 MHz							
9	GNSS	Rx被	4	2H Tx and	BC1	Tx	IM3打中? (2f1-f2 or 2f2-f1)	Y
	GNSS	Rx被	BC1	2H Tx and	4	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
C	GNSS	Rx被	4	Tx and	BC1	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	GNSS	Rx被	BC1	Tx and	4	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N

## Case6. 最常見的GPS and B13

Shamyah & Jay is so handsome!				X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G				輸入Band X --->		GPS_L1		← 1.輸入					
								輸入Band Y --->		13		← 2.輸入					
		Uplink (Tx)		Downlink (Rx)		Scheme		Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->		0		← 3.輸入	
Unit		MHz		MHz				MHz		MHz				4. 點此開始分析!			
Band		Tx, low Tx, high		Rx, low Rx, high				2*(Tx, low) 2*(Tx, high)		3*(Tx, low) 3*(Tx, high)							
GPS_L1				1574.4 1576.4		CDMA											
13		777.0 787.0		746.0 756.0		FDD		1554.0 1574.0		2331.0 2361.0							
Band		Rx被		Band		1st		Tx打中? (請考慮guard band)				N		Safe!!!			
				2nd		N											
GPS_L1				13		3rd						N					
Band		Rx被		Band		1st		Tx打中? (請考慮guard band)				N		Safe!!!			
				2nd		N											
13				GPS_L1		3rd						N					
GPS_L1		Rx被		GPS_L1		2H Tx and 13		Tx		IM3打中? (2f1-f2 or 2f2-f1)				N			
GPS_L1		Rx被		13		2H Tx and GPS_L1		Tx		IM3打中? (2f1-f2 or 2f2-f1)				Y			
13		Rx被		13		2H Tx and GPS_L1		Tx		IM3打中? (2f1-f2 or 2f2-f1)				N			
13		Rx被		GPS_L1		2H Tx and 13		Tx		IM3打中? (2f1-f2 or 2f2-f1)				N			

除了IM3, 他兄弟IM2當然也要把他找出來

Case7. SVLTE mode, 1x BC0 and LTE B4 IM2

L1	4	Rx被	4	Tx and	BC0	Tx	IM2打中? (f1-f2 or f2-f1)	N
	4	Rx被	BC0	Tx and	4	Tx	IM2打中? (f1-f2 or f2-f1)	N
L2	BC0	Rx被	BC0	Tx and	4	Tx	IM2打中? (f1-f2 or f2-f1)	N
	BC0	Rx被	4	Tx and	BC0	Tx	IM2打中? (f1-f2 or f2-f1)	Y
	fix: 1559-1606 MHz							
L3	GNSS	Rx被	4	Tx and	BC0	Tx	IM2打中? (f1-f2 or f2-f1)	N
	GNSS	Rx被	BC0	Tx and	4	Tx	IM2打中? (f1-f2 or f2-f1)	N
L4	GNSS	Rx被	4	Tx and	BC0	Tx	IM2打中? (f1+f2 or f2+f1)	N

Case8. GNSS被WiFi 2.4G and B26 IM2打到  
 外加26 Rx被WiFi 2.4G and B26 IM3打到  
 再來WiFi 2.4G Rx被B26 3<sup>rd</sup> harmonic打到

Shamyah & Jay is so handsome!				X跟Y的範圍: LTE band: 參照Band_Table CDMA band: 參照Band_Table Ex. LTE band1, 輸入1; CDMA BC0, 輸入BC0; WiFi 2.4G 輸入w1 - w14 or wifi_2.4G; WiFi 5G 輸入w36 - w165 or wifi_5G						輸入Band X --->	wifi_2.4G
										輸入Band Y --->	26
	Uplink (Tx)		Downlink (Rx)		Scheme	Tx 2nd harmonic		Tx 3rd harmonic		Guard band -->	0
Unit	MHz		MHz			MHz		MHz			
Band	Tx, low	Tx, high	Rx, low	Rx, high		2*(Tx, low)	2*(Tx, high)	3*(Tx, low)	3*(Tx, high)		
wifi_2.4G	2402.0	2494.0	2402.0	2494.0	TDD	4804.0	4988.0	7206.0	7482.0		
26	814.0	849.0	859.0	894.0	FDD	1628.0	1698.0	2442.0	2547.0		
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)					N	Risky!!!	
wifi_2.4G		26	2nd						N		
			3rd						Y		
Band	Rx被	Band	1st	Tx打中? (請考慮guard band)					N	Safe!!!	
26		wifi_2.4G	2nd						N		
			3rd						N		

4. 點此開始

4. 點此開始:

2	wifi_2.4G	Rx被	wifi_2.4G	2H Tx and	26	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
	wifi_2.4G	Rx被	26	2H Tx and	wifi_2.4G	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
2	26	Rx被	26	2H Tx and	wifi_2.4G	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
	26	Rx被	wifi_2.4G	2H Tx and	26	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
2	wifi_2.4G	Rx被	wifi_2.4G	Tx and	26	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	wifi_2.4G	Rx被	26	Tx and	wifi_2.4G	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
2	26	Rx被	26	Tx and	wifi_2.4G	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	26	Rx被	wifi_2.4G	Tx and	26	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	Y
	fix: 1559-1606 MHz							
2	GNSS	Rx被	wifi_2.4G	2H Tx and	26	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
	GNSS	Rx被	26	2H Tx and	wifi_2.4G	Tx	IM3打中? (2f1-f2 or 2f2-f1)	N
10	GNSS	Rx被	wifi_2.4G	Tx and	26	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
	GNSS	Rx被	26	Tx and	wifi_2.4G	2H Tx	IM3打中? (f1-2f2 or f2-2f1)	N
11	wifi_2.4G	Rx被	wifi_2.4G	Tx and	26	Tx	IM2打中? (f1-f2 or f2-f1)	N
	wifi_2.4G	Rx被	26	Tx and	wifi_2.4G	Tx	IM2打中? (f1-f2 or f2-f1)	N
12	26	Rx被	26	Tx and	wifi_2.4G	Tx	IM2打中? (f1-f2 or f2-f1)	N
	26	Rx被	wifi_2.4G	Tx and	26	Tx	IM2打中? (f1-f2 or f2-f1)	N
	fix: 1559-1606 MHz							
24	GNSS	Rx被	wifi_2.4G	Tx and	26	Tx	IM2打中? (f1-f2 or f2-f1)	Y
	GNSS	Rx被	26	Tx and	wifi_2.4G	Tx	IM2打中? (f1-f2 or f2-f1)	N
14	GNSS	Rx被	wifi_2.4G	Tx and	26	Tx	IM2打中? (f1+f2 or f2+f1)	N

你是不是有點愛上我XD

不是~

是愛上這套一鍵版的 ***Band Allocation Overlap and IM2 IM3 Freq Calculator*** 了呢

最後~  
還是老話一句

盡量使用  
謝謝支持  
有問題 feedback to me

To be continued...