

# Realtek Semiconductor Corp.

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## DFS client device channel plan and software operational declaration

Date: 2014-01-16

We, **Realtek Semiconductor Corp.**, declare that the device, FCC ID: **TX2-RTL8821AU** Model Name: **RTL8821AU**, does not have "Ad Hoc on non-US frequencies" and/or "on DFS frequencies. Also, the client software and associated drivers will not initiate any transmission on DFS frequencies without initiation by a master. This includes restriction on transmissions for beacons and support for ad-hoc peer-to-peer modes.

Below is the channel / frequency plan for the device

CH	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2412	2417	2422	2427	2432	2437	2442	2447	2452	2457	2462
Scan Type	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active	Active
CH	36	38	40	42	44	48	52	54	56	58	60
Frequency (MHz)	5180	5190	5200	5210	5220	5240	5260	5270	5280	5290	5300
Scan Type	Active	Active	Active	Active	Active	Active	Passive	Passive	Passive	Passive	Passive
CH	62	64									
Frequency (MHz)	5310	5320									
Scan Type	Passive	Passive									
CH	100	102	104	106	108	110	112	116	132	134	136
Frequency (MHz)	5500	5510	5520	5530	5540	5550	5560	5580	5660	5670	5680
Scan Type	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive	Passive
CH	140										
Frequency (MHz)	5700										
Scan Type	Passive										
CH	149	151	153	155	157	159	161	165			
Frequency (MHz)	5745	5755	5765	5775	5785	5795	5805	5825			
Scan Type	Active	Active	Active	Active	Active	Active	Active	Active			

Also, on DFS channels, the WLAN driver in the device operates under the control of an AP at all times, except when in ad-hoc mode, on US non-DFS channels. The device passively scans DFS frequencies until a master device is detected. The control of this functionality is not accessible to anyone under any conditions. Furthermore, the firmware is protected by special signature and CRC checksum. Signature and CRC checksum will be calculated and verified before firmware upgrade. Unauthorized modification to firmware will lead the failure of verification thus firmware upgrade is not allowed.

Sincerely yours,



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