

## DFS Client Software Configuration Attestation Letter

Date:2013/2/1

To,  
Federal Communications Commission,  
Authorization and Evaluation Division.

A) Verify that this device meets the frequency requirements of section 15.202

Ans: Redpine Signals' RS9110-N-11-03 module has the necessary software and hardware in order to conform to the DFS client requirements of FCC Part 15 Subpart E (UNII). The associated driver along with the module ensures the following in the DFS bands:

- 1) No active scanning (prior to connection or in the connected state) is ever performed.
- 2) The client doesn't initiate any transmission without initiation by a DFS master.
- 3) During operation in adhoc mode, all the channels belonging to the DFS bands are avoided, i.e neither the module initiates nor joins a network operating in the DFS band. Thereby it is ensured that no transmissions are performed in these bands altogether.

B) For client devices that have software configuration control to operate in different modes (active scanning in some and passive scanning in others) or in different bands (devices with multiple equipment classes or those that operate on non-DFS frequencies), or modular devices that configure the modes of operations through software; the applicant must provide in the application software and operations description that discuss how the software and / or hardware is implemented to ensure that proper operations modes cannot be modified by an end user or an installer.

Ans: No configuration control is given to the end-user for #1 to #3 in order not to violate any of the FCC Part 15, subpart E (UNII) DFS requirements. Apart from this, it is ensured in the firmware that irrespective of the driver's configuration, it always performs passive scan in the frequencies belonging to the DFS band. Moreover, firmware is available in the form of a binary, which uses the company's proprietary tool-chain, making it impossible for anyone to modify the code.

Below is the channel/frequency plan for the device:

Channel	Frequency(MHz)	Scan type
1	2412	Active
2	2417	Active
3	2422	Active
4	2427	Active
5	2432	Active
6	2437	Active
7	2442	Active
8	2447	Active

9	2452	Active
10	2457	Active
11	2462	Active
12	2467	Active
13	2472	Active
5GHz band		
36	5180	Active
40	5200	Active
44	5220	Active
48	5240	Active
52	5260	Passive
56	5280	Passive
60	5300	Passive
64	5320	Passive
100	5500	Passive
104	5520	Passive
108	5540	Passive
112	5560	Passive
116	5580	Passive
120	5600	Passive
124	5620	Passive
128	5640	Passive
132	5660	Passive
136	5680	Passive
140	5700	Passive
149	5745	Active
153	5765	Active
157	5785	Active
161	5805	Active
165	5825	Active



TC Wu/ Director