Realtek Semiconductor Corp.

Federal Communications Commission 7435 Oakland Mills Road Columbia MD 21046

Subject: Requesting Class II permissive change for FCC ID: TX2-RTL8852BE To Whom It May Concern:

The purpose of this letter is to request a Class II Permissive change for FCC ID: TX2-RTL8852BE, original granted on 08/13/2021.

The major change field under this application is:

- 1. The subject approved module is being used in a portable configuration- a Notebook Computer ((Brand name/Model: Lenovo/Lenovo Slim 7 16ARH7, Lenovo Slim 7 16ARH7xxxxxx, (The "x" in the model name can be 0 to 9, A to Z, a to z, "-" or blank, it represents different sales customer code, all models only name difference)). SAR testing was performed to demonstrate RF compliance.
- 2. The difference compared with the original module design is antenna change. Two groups antennas are used for the subject approved module in the Notebook Computer as below listed.

Original module:

Ant. Set	RF Chain No.	Brand	Model	Ant. Net Gain (dBi)	Frequency Range (GHz)	Ant. Type	Connector Type	Cable Length (mm)
1	Chain 0	ARISTOTLE	RFA-27-JP326- MHF4300	3.5	2.4~2.4835	PIFA	i-pex(MHF)	300
				5	5.15~5.85			
				5	5.875~7.125			
	Chain 1	ARISTOTLE	RFA-27-JP326- MHF4300	3.5	2.4~2.4835		i-pex(MHF)	300
				5	5.15~5.85	PIFA		
				5	5.875~7.125			
2	Chain 0	ARISTOTLE	RFA-27-C38H1- MHF4300	3	2.4~2.4835		i-pex(MHF)	300
				5	5.15~5.85	Dipole		
				5	5.875~7.125			
	Chain 1	ARISTOTLE	RFA-27-C38H1- MHF4300	3	2.4~2.4835		i-pex(MHF)	300
				5	5.15~5.85	Dipole		
				5	5.875~7.125			

For Notebook computer:

Antenna Specification:

	Ant.	Brand	P/N	Type	Frequency Range (MHz)	Gain (dBi)
	Main Ant	ShenZhen ZhongTianXun Communication Technolgy Shares Co.,LTD (ZTX)	2.00005087	PIFA Antenna	2400-2500	1.51
					5150-5350	1.71
					5470-5725	1.93
					5725-5850	1.92
	Aux Ant		2.00005087	PIFA Antenna	2400-2500	1.47
					5150-5350	1.07
* 0					5470-5725	1.65
Antenna Information					5725-5850	1.65
	Main Ant	Shenzhen South Star Technology Co., LTD (South Star)	N12-7822-R0A	PIFA Antenna	2400-2500	0.31
					5150-5350	0.89
					5470-5725	1.71
					5725-5850	-0.24
	Aux Ant		N12-7822-R0A	PIFA Antenna	2400-2500	-0.17
					5150-5350	1.52
					5470-5725	1.68
					5725-5850	-0.83

3. For the Notebook Computer, since it is client without DFS radar detection capability, detection threshold as set to the module remains identical, and would deactivate the link as it is operated with AP only, DFS test can be excluded.

Please contact me if you have any questions or need further information regarding this application.

Best Regards

Name: Dana Liaw

Funtion: Project Manager

Date: 2022/05/11