



**DIGI INTERNATIONAL**

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November 22, 2021

Federal Communications Commission  
Authorization and Evaluation Division  
7435 Oakland Mills Road  
Columbia, Maryland 21046

**Re: Test data reuse of authorized equipment for FCC ID: MCQ-WPQ618 and IC: 1846A-WPQ618**

To whom it may concern:

I would like to request test data reuse of the authorized device (FCC ID: MCQ-WPQ618, original grant date: 2021/11/15) for a new device (FCC ID: MCQ-EX50W & IC: 1846A-EX50W).

The new device is based on the original device's unmodified PCBA and antennas, with an added enclosure and an authorized cellular module. The differences are shown in the table 1 as below.

Table 1			
Diff	Original	New	Remarks
	FCC: MCQ-WPQ618 IC: 1846A-WPQ618	FCC: MCQ-EX50W IC: 1846A-EX50W	
1	Without enclosure, PCBA only	With enclosure, and authorized cellular module	The original and the variant share the same PCBA and antennas. An enclosure was added, and an authorized cellular module was pre-installed into the reserved M.2 connector on the PCBA.

According to the declaration above, this new device will reuse the test data of the original device. Spot checks were performed according to KDB 484596 D01v01. For details, please refer to table 2 below.



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Table 2				
Frequency and Part Rules	Test Items of FCC Part Rule	Original report No.	New report No.	Spot check remarks
2412~2462MHz  Part 15.247  RSS-247	6dB Bandwidth	2106RSU040-U1  2106RSU040-C1	2106RSU041-U1  2106RSU040-C1	Not verified
	99% Bandwidth			Not verified
	Output Power			Verified output power
	Power Spectral Density			Not verified
	Band Edge / Out-of-Band Emissions			Not verified
	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)			Verified Radiated Emissions
	AC Conducted Emissions 150kHz - 30MHz			Not verified
5125~5250MHz  5250~5350MHz 5470~5725MHz 5725~5850MHz  Part 15.407  RSS-247	26dB Bandwidth	2106RSU040-U2  2106RSU040-C2	2106RSU041-U2  2106RSU040-C2	Not verified
	6dB Bandwidth			Not verified
	Maximum Conducted Output Power			Verified output power
	Peak Power Spectral Density			Not verified
	Frequency Stability			Not verified
	Undesirable Emissions			Verified Radiated Emissions
	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)			Tested with omni antennas
	AC Conducted Emissions 150kHz - 30MHz			Not verified



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**Result:** All verified result are within limits of the original data.

If you have any questions regarding this application, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "H. Remmert".

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Name: Harald Remmert

Title: Sr. Director of Engineering