

# **RF Exposure Report**

Report No.: SABDKX-WTW-P21080423

FCC ID: EMJDUD2201P

Test Model: UD2201p

Received Date: 2021/8/23

Test Date: 2021/8/24 ~2021/9/9

**Issued Date:** 2021/9/23

Applicant: PRIMAX ELECTRONICS LTD.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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FCC Registration /

**Designation Number:** 198487 / TW2021





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## **Release Control Record**

Issue No.	Description	Date Issued	
SABDKX-WTW-P21080423	Original release.	2021/9/23	



### 1 Certificate of Conformity

Product: Dongle

**Brand:** ALIENWARE

Test Model: UD2201p

Sample Status: Engineering sample

Applicant: PRIMAX ELECTRONICS LTD.

**Test Date:** 2021/8/24 ~2021/9/9

Standards: FCC Part 2 (Section 2.1093)

References Test Guidance: KDB 447498 D01 General RF Exposure Guidance v06

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : (1964)16 (1979), Date: 2021/9/23

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Approved by : , Date: 2021/9/23

Rex Lai / Associate Technical Manager



#### 2 Evaluation Result

Following FCC KDB 447498 D01 "General SAR test exclusion guidance"

The corresponding SAR Exclusion Threshold condition, listed below:

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where

- > f(GHz) is the RF channel transmit frequency in GHz.
- > Power and distance are rounded to the nearest mW and mm before calculation.
- ➤ The result is rounded to one decimal place for comparison The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.</p>
- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
  - a) [Threshold at 50 mm in step 1) + (test separation distance 50mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
  - b) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by ½ for test separation distances ≤ 50 mm.
  - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.



#### 3 SAR Test Exclusion Thresholds

Maximum measured transmitter power:

Function	Frequency (MHz)	Max. Radiated Field Strength (dBuV/m)	Max. Radiated Power (mW)	Min. test separation distance (mm)	SAR test exclusion calculation value <sup>(NOTE 3)</sup>	1-g SAR test exclusion thresholds	Result
GFSK	2402-2479	83.53	0.112	5	0.0347	3	Pass

#### Note:

- 1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- 2. The antenna type is Chip antenna with -2.15 dBi gain.
- 3. Calculate SAR test exclusion thresholds from condition "1" formulas.
- 4. Conducted Power = 83.53 95.2 (-2.15) = -9.52dBm

### 4 Conclusion

Since Source-base time average power is below SAR test exclusion power thresholds, the SAR evaluation is not required.

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