

# RF Exposure Evaluation Report

Product Name: MD300 Mouse

Model No. : MD300

FCC ID : MSQ-MS-MD300

Applicant: ASUSTeK Computer, Inc

Address: 1F, No. 15, Lide Rd, Beitou, Taipei, 112 Taiwan

Date of Receipt : Dec. 02, 2021 Date of Declaration : Dec. 27, 2021

Report No. : 21C0090R-RFUSMPEV03-A

Report Version : V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF or any agency of the government.

The test report shall not be reproduced without the written approval of DEKRA Testing and Certification Co., Ltd. Measurement uncertainties evaluated for each testing system and associated connections are given here to provide the system information for reference. Compliance determinations do not take into account measurement uncertainties for each testing system, but are based on the results of the compliance measurement.



Issued Date: Dec. 27, 2021

Report No.: 21C0090R-RFUSMPEV03-A



| Product Name        | MD300 Mouse   |  |  |  |  |  |  |
|---------------------|---|--|--|--|--|--|--|
| Applicant           | ASUSTeK Computer, Inc   |  |  |  |  |  |  |
| Address             | 1F, No. 15, Lide Rd, Beitou, Taipei, 112 Taiwan                                       |  |  |  |  |  |  |
| Manufacturer        | ASUSTeK Computer, Inc   |  |  |  |  |  |  |
| Model No.           | MD300   |  |  |  |  |  |  |
| FCC ID.             | MSQ-MS-MD300  |  |  |  |  |  |  |
| Trade Name          | ASUS  |  |  |  |  |  |  |
| Applicable Standard | KDB 447498 D01 v06 ☐ Minimum test separation distance ≥ 20 cm ☐ For low power devices |  |  |  |  |  |  |
| Test Result         | Complied  |  |  |  |  |  |  |
| Documented By       | : Joanne Lin  |  |  |  |  |  |  |
|                     | ( Senior Project Specialist / Joanne Lin )  |  |  |  |  |  |  |
| Tested By           | : Jack 1/54   |  |  |  |  |  |  |
|                     | ( Senior Engineer / Jack Hsu )  |  |  |  |  |  |  |
| Approved By         | 7 in Sung   |  |  |  |  |  |  |
|                     | ( Manager / Tim Sung )  |  |  |  |  |  |  |



## **Revision History**

| Report No.            | Version | Description              | <b>Issued Date</b> |
|-----------------------|---------|--------------------------|--------------------|
| 21C0090R-RFUSMPEV03-A | V1.0    | Initial issue of report. | 2021-12-27         |



### 1. GENERAL INFORMATION

## 1.1. EUT Description

| Product Name              | MD300 Mouse  |  |  |  |
|---------------------------|--|--|--|--|
| Trade Name                | ASUS   |  |  |  |
| Model No.                 | MD300  |  |  |  |
| FCC ID.                   | MSQ-MS-MD300   |  |  |  |
| Frequency Range           | Bluetooth V5.2: 2402-2480MHz 2.4G wireless: 2403-2480MHz |  |  |  |
| Channel Number            | Bluetooth V5.2: 40CH<br>2.4G wireless: 78CH              |  |  |  |
| Type of Modulation        | GFSK   |  |  |  |
| Antenna Type Chip Antenna |  |  |  |  |
| Channel Control           | Auto   |  |  |  |
| Antenna Gain              | Refer to the table "Antenna List"                        |  |  |  |

#### **Antenna List**

| No. | Manufacturer | Part No.       | Antenna Type | Peak Gain         |
|-----|--------------|----------------|--------------|-------------------|
| 1   | Unictron     | H2U34W1H1Z0600 | Chip Antenna | 2.5dBi for 2.4GHz |



### 1.2. Test Facility

Site Description : Accredited by TAF

Accredited Number: 3023

Test Laboratory : DEKRA Testing and Certification Co., Ltd

Address : No. 5-22, Ruishukeng Linkou District, New Taipei City,

24451, Taiwan

Performed Location : No. 26, Huaya 1st Rd., Guishan Dist., Taoyuan City

333411, Taiwan, R.O.C.

Phone number : +886-3-275-7255

Fax number : +866-3-327-8031

Email address : info.tw@dekra.com

Website : http://www.dekra.com.tw



#### 2. RF Exposure Evaluation

### 2.1. Standard Applicable

According to 1.1307 (b)(1), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

#### 2.2. Measurement Result:

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 (Power(mW)/separation (mm)\*sqrt(f(GHz)≤3.0), SAR is required as shown in the table below where calculated values are greater than 3.0:

Operation frequency = 2450MHz and antenna separation distance = 5mm, SAR Test Exclusion Threshold = 10mW

#### Bluetooth V5.2:

| Frequency Band | Maximum Peak EIRP power |       |      | SAR Test            | Calculated Threshold |
|----------------|-------------------------|-------|------|---------------------|----------------------|
|                |                         |       |      | Exclusion Threshold | Value                |
|                | Conducted               | EIRP  | EIRP | (mW)                | (≦3 SAR is not       |
|                | (dBm)                   | (dBm) | (mW) | (IIIW)              | required)            |
| 2480           | -1.39                   | 1.11  | 1.29 | 10                  | 0.407                |

Note 1: The SAR/MPE measurement is not necessary.

Note 2: The maximum peak EIRP power is refer to report No.: 21C0090R-RFUSBLEV01-Afrom the DEKRA.

#### 2.4G Wireless:

| Frequency Band | Maximum Peak EIRP power |        | SAR Test Exclusion Threshold | Calculated Threshold Value             |
|----------------|-------------------------|--------|------------------------------|--|
|                | (dBuV/3m)               | (mW)   | (mW)                         | $(\leq 3 \text{ SAR is not required})$ |
| 2480           | 99.83                   | 2.8848 | 10                           | 0.90861                                |

Note 1: The SAR/MPE measurement is not necessary.

Note 2: The maximum peak EIRP power is refer to report No.: 21C0090R-RFUSOTHV06-A from the DEKRA.