

## RF Exposure Report

**Report No.:** SA170809E06

**FCC ID:** MAD-RU00-M06

**Test Model:** RU00-M06

**Series Model:** RU00-M06-XXXX (X= 0~9 , A~Z , Configuration Code)

**Received Date:** Aug. 09, 2017

**Test Date:** Aug. 31, 2017

**Issued Date:** Sep. 21, 2017

**Applicant:** Microelectronics Technology Inc.

**Address:** 1, Innovation Road II, Hsinchu Science-based Industrial Park, Hsinchu,  
Taiwan, R.O.C.

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

**Lab Address:** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan R.O.C.

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### Release Control Record

Issue No.	Description	Date Issued
SA170809E06	Original release.	Sep. 21, 2017

## 1 Certificate of Conformity

**Product:** RFID PCA MODULE PCIE M.2 UHF US/JP BAND

**Brand:** MTI

**Test Model:** RU00-M06

**Series Model:** RU00-M06-XXXX (X= 0~9 , A~Z , Configuration Code)

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Microelectronics Technology Inc.

**Test Date:** Aug. 31, 2017

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

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 EMC characteristics under the conditions specified in this report.

**Prepared by :**



**Date:**

Sep. 21, 2017

Wendy Wu / Specialist

**Approved by :**



**Date:**

Sep. 21, 2017

May Chen / Manager

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz ; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

So, this device is classified as **Mobile Device**.

### 2.4 Antenna Gain

Antenna Net Gain(dBi)	Antenna Type	Connector type	Frequency range	Cable Loss(dB)
5.25	Patch	SMA Female	902MHz~928MHz	0.75

## 2.1 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
902.75 ~ 927.25	554.626	5.25	20	0.36960	0.61816

Note: Limit of Power Density=  $f/1500$

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