

RF Exposure Report

Report No.: SA150203E03E

FCC ID: MAD-RU00-M03

Test Model: RU00-M04

Series Model: RU00-M04-XXXX (X= 0~9 , A~Z , Configuration Code)

Received Date: Aug. 21, 2017

Test Date: Aug. 31, 2017

Issued Date: Sep. 22, 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

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Release Control Record

Issue No.	Description	Date Issued
SA150203E03E	Original release.	Sep. 22, 2017

1 Certificate of Conformity

Product: RFID HP-SIP Module

Brand: MTI

Test Model: RU00-M04

Series Model: RU00-M04-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. 22, 2017

Wendy Wu / Specialist

Approved by :



Date: Sep. 22, 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 ²)	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 ²)*	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

$$Pd = (P_{out} * G) / (4 * \pi * r^2)$$

where

Pd = power density in mW/cm²

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 21cm away from the body of the user.
So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Antenna Type	Gain(dBi) (Include cable loss)	Antenna Connector	Cable Loss(dB)	Frequency range (MHz to MHz)
Patch	5.25	SMA Female	0.75	902~928

2.1 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
902.75 ~ 927.25	946.237	5.25	21	0.57149	0.60183

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

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