

# **EMF TEST REPORT**

Test Report No. : OT-209-RWD-011

**Reception No.** : 2008003257

**Applicant** : Continental Automotive Systems Corporation

Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea

Manufacturer : Continental Automotive Systems Corporation

Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea

Type of Equipment : Smart Key Fob

FCC ID. : SY5MQ4FGE03

Model Name : SVI-MQ4FGE03

Multiple Model Name : N/A

Serial number : N/A

Total page of Report : 7 pages (including this page)

Date of Incoming : August 26, 2020

Date of issue : September 08, 2020

#### **SUMMARY**

The equipment complies with the regulation; FCC PART 15 SUBPART C Section 15.209 and Section 15.231

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

Tested by

/ Sieon Lee / Assistant Manager

ONETECH Corp.

Reviewed by

/ Ha-Ram Lee / Manager

ONETECH Corp.

Approved by

/ Ki-Hong, Nam / General Manager

公八京

ONETECH Corp.



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# **Revision History**

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-209-RWD-011	September 08, 2020	Initial Issue	All



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## 1. VERIFICATION OF COMPLIANCE

Applicant : Continental Automotive Systems Corporation
Address : 45-29, Saeum-ro, Icheon-si, Gyeonggi-Do, Korea

Contact Person : S. M. Jang / Representative

Telephone No. : 82-31-645-4864
FCC ID : SY5MQ4FGE03
Model Name : SVI-MQ4FGE03

Serial Number : N/A

EQUIPMENT CLASS	DSC - Part 15, Security/Remote Control Transmitter
E.U.T. DESCRIPTION	Smart Key Fob
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.10: 2013
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT	
AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED	ECC DART 15 CURDART C Continu 15 200 and Continu 15 221
UNDER IC RULES PART(S)	FCC PART 15 SUBPART C Section 15.209 and Section 15.231
Modifications on the Equipment to Achieve	N .
Compliance	None
Final Test was Conducted On	3 m, Semi Anechoic Chamber

<sup>-.</sup> The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.



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## 2. GENERAL INFORMATION

## 2.1 Product Description

The Continental Automotive Systems Corporation, Model: SVI-MQ4FGE03 (referred to as the EUT in this report) is a Transmitter that it controls locking and unlocking the door of a vehicle. Product specification information described herein was obtained from product data sheet or user's manual.

CHASSIS TYPE	Plastic
TX FREQUENCY	433.92 MHz
RX FREQUENCY	125 kHz
MAX. RF OUTPUT POWER	84.60 dBμV/m
MODULATION	FSK
LIST OF EACH OSC. OR CRY. FREQ.(FREQ.>= 1 MHz)	27.6 MHz
DUTY CYCLE FACTOR	9.68 dB (Duty Cycle : 32.8 %)
ANTENNA TYPE	Built-in on the PCB in EUT
ANTEENA GAIN	-24.14 dBi
RATED SUPPLY VOLTAGE	DC 3 V from the battery

# 2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

#### 3. EUT MODIFICATIONS

-. None



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## 4. RF Exposure Evaluation

## 4.1 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.

According to the procedure, KDB 447498 D06, the standalone SAR test exclusion threshold is [(Max. Power of channel, including tune-up tolerance, mW)/(Mim. test separation distance, mm)]  $X [\sqrt{f(GHz)}] < 3$ 

**4.2 EUT Description** 

Operating Frequency Band	TX: 433.92 MHz RX: 125 kHz
MAX. RF OUTPUT POWER	$84.60~dB\mu V/m$
Antenna Gain	-24.14 dBi
Exposure	□ MPE □ SAR
Evaluation Applied	■ SAR Exemption



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#### 4.3 Test Result of SAR Exclusion for Portable Devices

[(Max. Power of channel, including tune-up tolerance, mW)/(Min. test separation distance, mm)]  $X [\sqrt{f(GHz)}]$ 

 $= (2.69/5) \text{ X} \sqrt{0.43392} = 0.35 < 3$ 

Conclusion: The SAR test exclusion threshold is less than 3, so the device meets the RF Exposure Requirement and excluded SAR Test.

Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
433.92	$3.80 \pm 0.5$	4.30	2.69	5	0.35