

INFORMATION DOCUMENT NO.

RELATING TO **SRRC** TYPE-APPROVAL
AS SEPARATE TECHNICAL UNIT

CONTENTS LIST

Information Document	(10 sheets: including this sheet)
Attachment 1 - System diagram	(6 sheet)
Attachment 2 - Drawing of the smk	(9 sheets)

SEOYON ELECTRONICS Co.,Ltd.

- 11. May. 2016 -

Title :

Information Document

NO. :

Date : 11. May. 2016

0. GENERAL

0.1. Make

SEOYON ELECTRONICS Co.,Ltd.

0.2. Model No.:SYECSMK1608

- SMART KEY SYSTEM : 설계지원파트 작성

0.3. Name and address of manufacturer

SEOYON ELECTRONICS Co.,Ltd.

424, Sinwon-ro, Danwon-gu, Ansan-Si, Kyonggi-Do, Korea.

0.4. Address of assembly plant

SEOYON ELECTRONICS Co.,Ltd.

424, Sinwon-ro, Danwon-gu, Ansan-Si, Kyonggi-Do, Korea.

Title :

Information Document

NO. :

Date : 11. May. 2016

1. PRODUCT SPECIFICATION

1.1 Scope of passive entry control, passive start control in SMART Key system.

1.1.1 SMK UNIT : It is an ECU to control the whole smart key system. It has functions such

as passive entry control, passive start control

1.1.2

RKE functions. It also has the TP for emergency authentication for passive start

2.2.3 SSB : It is a button to control engine start including power transition according to each terminal status

2.2.4 ESCL : It is the abbreviation of "Electrical Steering Column Lock" and fully controlled by SMK. It has two hall sensors to detect unlock, lock position firmly.

2.3 Specification

2.3.3 SMK UNIT

Item	Specification
Operating voltage range	DC 9 ~ 16V
Operating temperature range	-35 ~ +75°C
Storage temperature range	-40 ~ +85°C
Power Consumption	Dark Current, Max 4mA

1.2.2 FOB KEY

Item	Specification
Operating Voltage	DC 2.5 ~ 3.2V
Operating Temperature	- 10 ~ +60°C
Storage temperature range	- 40 ~ + 85°C(W/O Battery)
Modulation	FM
Frequency	433.92MHz
Code	Rolling code(Hopping algorithm)

Title :
Information Document

NO. :
Date : 11. May. 2016

1.2.3 SSB(Start Stop Button)

Item	Specification
Operating voltage range	DC 9 ~ 16V
Operating voltage range	-35 ~+75°C
Storage temperature range	-40 ~+85°C
Power Consumption	Dark Current, 0mA
Modulation	ASK
Frequency (Transmitting) (Data Receiving between Fob Key and SSB)	134.2kHz

Title :

Information Document

NO. :

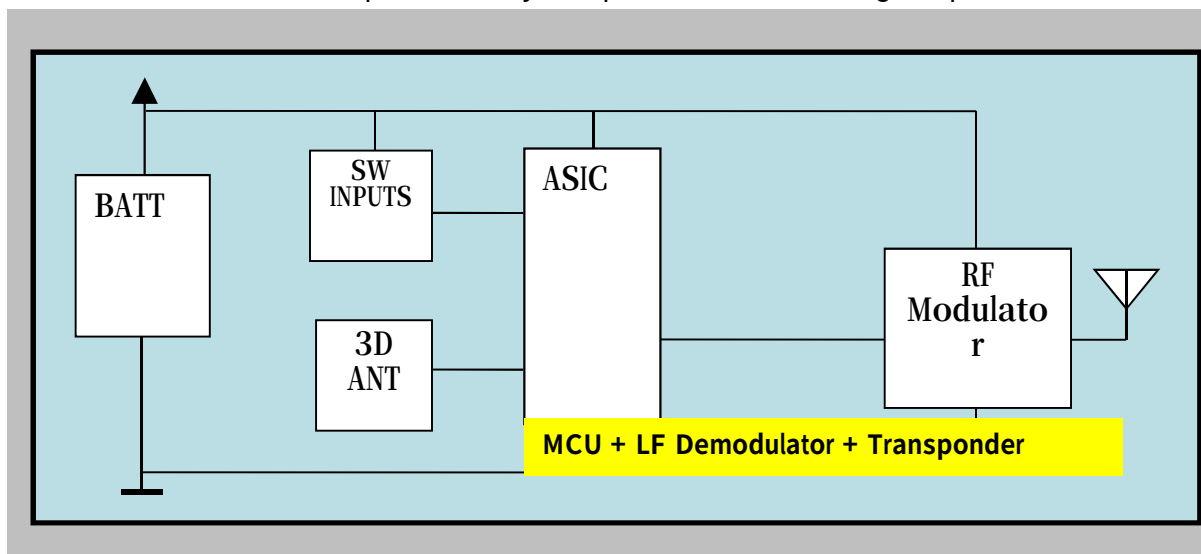
Date : 11. May. 2016

2. USER MANUAL

2.1 Operation summary

2.1.1 Fob Key

①It has the functions for passive entry and passive start including the previous RKE functions



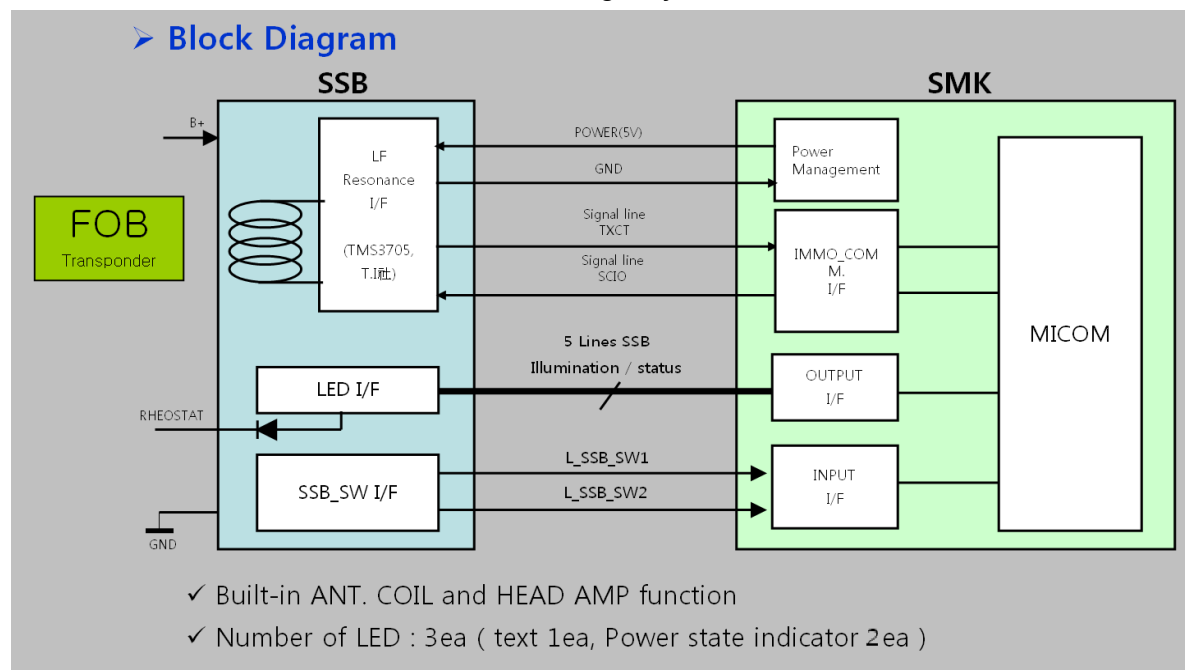
2.1.2 Immobilizer & SSB(StartStopButton) Function

①Fob Key has the TP for emergency authentication for passive start.

②It's a button to control engine start including power transition according to each terminal status

③To indicate terminal status, two LEDs for backlight and one for text illumination are used

④It also has TP coil to take action for emergency.



FCC Information

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for CLASS B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correct the interference by one or more of the following measures:

- 1.1. Reorient or relocate the receiving antenna.
- 1.2. Increase the separation between the equipment and receiver.
- 1.3. Connect the equipment into an outlet on a circuit different from that to which receiver is connected.
- 1.4. Consult the dealer or experienced radio/TV technician for help.

WARNING

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

"CAUTION : Exposure to Radio Frequency Radiation.

Antenna shall be mounted in such a manner to minimize the potential for human contact during normal operation. The antenna should not be contacted during operation to avoid the possibility of exceeding the FCC radio frequency exposure limit.

"ATTENTION: L'exposition aux rayonnements à fréquence radioélectrique.

Antenne doit être montée de telle manière à minimiser le risque de contact humain pendant l'utilisation normale. L'antenne ne doit pas être contacté pendant le fonctionnement pour éviter la possibilité de dépasser la limite de l'exposition aux fréquences radio de la FCC.

IC Information

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to The following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada RSS standard exempts de licence(s), Son utilisation est soumise à Les deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter Toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement du dispositif.