Annex no. 5

Functional Description / User Manual

Functional Description

of the

Continental

Radio Frequency Transmitter

Type

## FS14

1. GENERAL DESCRIPTION OF THE RF TRANSMITTER

The FS14 is a transmitter designed to provide remote keyless entry, passive entry, passive engine start, and immobilization functionality.

Within the housing is applied an inner container, containing an lower container and container cover which are laser welded. Within the container is placed a PCB, which is the same type for all variants and containing a different number of switches.

The fobs are part of a larger system provided to VW by Continental which allows the customer to:

- Remotely lock the doors.
- Remotely unlock the doors.
- Remotely open the trunk.
- Remotely activate the alarm (panic mode).
- Remotely unlock and lock doors in passive mode (PASE).
- Start engine in passive mode (PASE).
- Start the car via fob slot (immobilization).
- Use mechanical emergency key as back-up.

2. BLOCK DIAGRAM OF THE TRANSMITTER
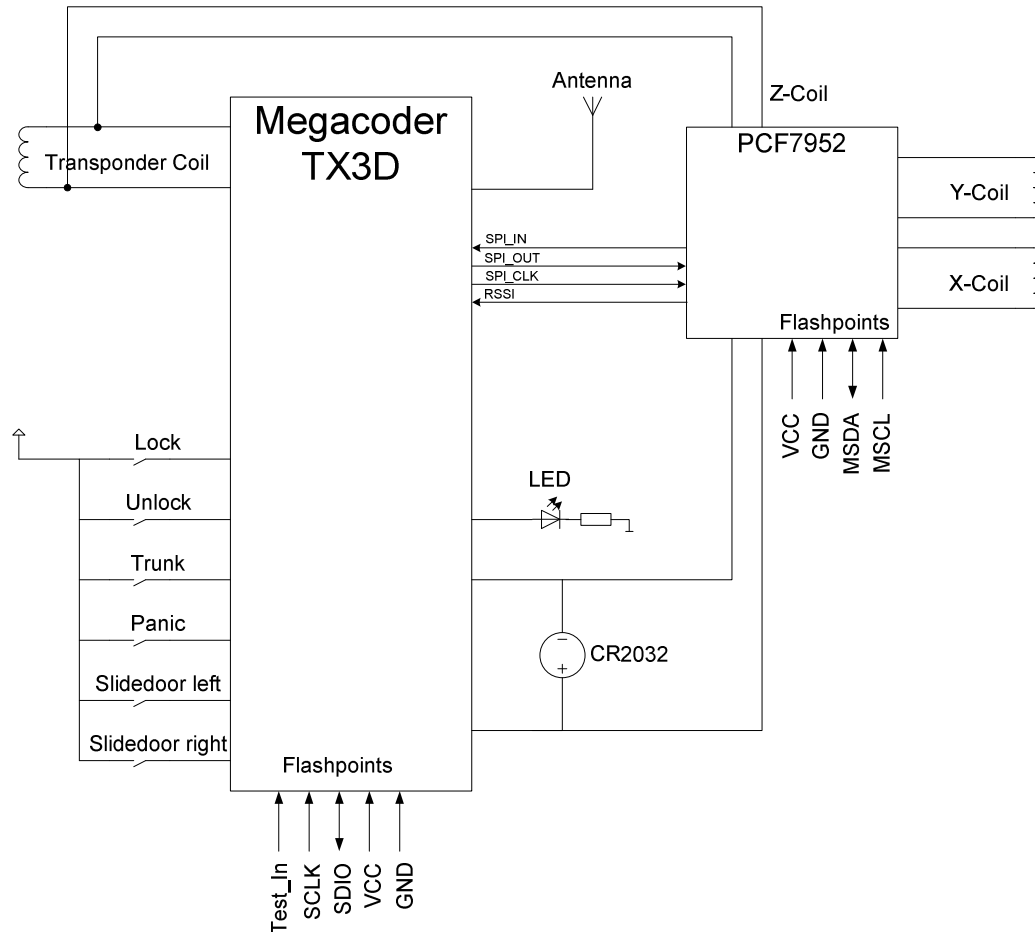
Technical Description

The components which constitute the Acura TL '09 fob are:

- Power Supply
- Microcontroller with PLL Transmitter
- Microcontroller with 3D Frontend
- User Interfaces
- LF Antenna (3D-Antenna in one SMD)
- RF Antennas
- The PCB is 4 layer Pb-Free FR4 with double-sided component placement for the key with plastic caps
- The PCB is 6 layer Pb-Free FR4 with double-sided component placement for the key with chrome caps

3. POWER SUPPLY

The Power Supply consists of a CR2032 battery with filter capacitors that provide power to the microcontroller and the RF circuit.

4. VARIANT

The fobs transmit one RF-channel.

Variant	Frequency	OEM	Modulation	Radiated Power
FS14	434,42 MHz	chromated and plastic caps	ASK	< +10dBm

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

6. LABEL DESIGN / Owner Manual

<u>Canada:</u>

Continental
Model: FS14
IC:7812D-FS14

<u>Owner Manual:</u>

This device complies with Industry Canada licence-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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Europe:

Continental
FS14
$C\epsilon$

USA:

Continental
FS14
FCC ID:KR5FS14

Owner Manual:

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 interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.