Functional description / User manual

5WK50128

Continental Automotive

FCC ID:KR55WK50128 IC:7812D-5WK50128

User Manual / Functional Description

of the

Continental

Keyless Vehicle Module

Type

5WK50128 for B2yy

TABLE OF ABBREVIATIONS

LF	Low Frequency
RF	Radio Frequency
PASE	Passive Start and Entry

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1. REFERENCE DOCUMENTS

The following documents are part of this Function Description

Schematic

2. SCOPE OF THIS DOCUMENT

The document applies to the homologation of the Ford X-Carline KVM Module.

3. SYSTEM OVERVIEW

This short system description gives an overview about the functionality of the Keyless Vehicle (KV) system and from the Keyless Vehicle Module (KVM).

The vehicle and the Passive Key (PK) will communicate via challenge / response. By any request the KVM sends a challenge via the respective LF-antennas with **125 KHz** to the Passive Key. The PK's within the detection range answer via Radio Frequency (RF) transmission**.** The external RF-Receiver sends the data from the received signal via serial link to the KVM. The system will provide a specific PK detection function for inside and outside detection range.

Different failure modes and diagnostic data will be displayed to the driver from KVM via the Mid Speed CAN-Bus to display at the cluster.

For back up reasons, the Passive Key will provide a metal key blade for locking / unlocking the vehicle and for starting the engine after key is inserted in ignition switch (ignition key cylinder) and turned to crank position.

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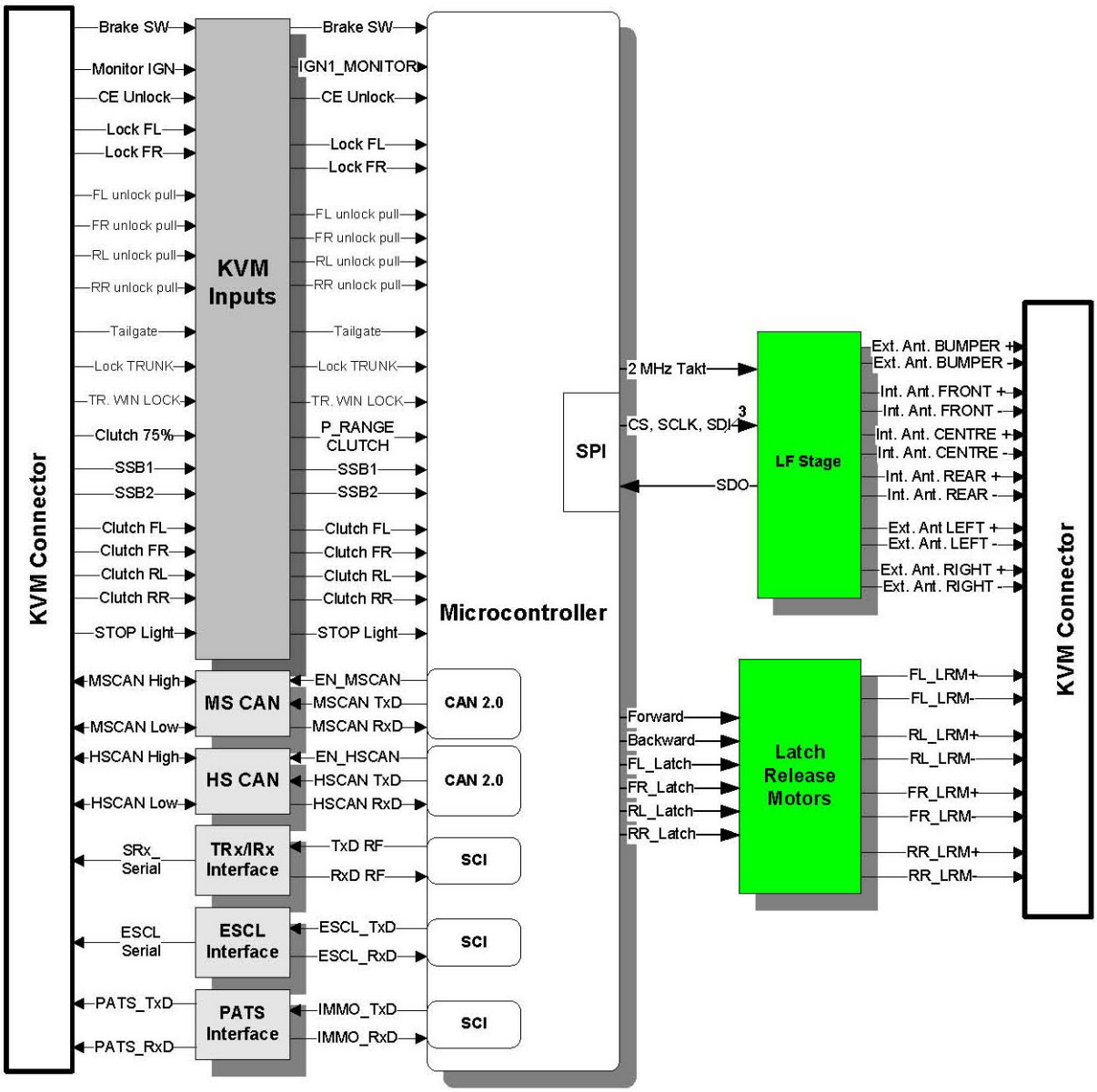
3.1. BLOCK DIAGRAM

The block diagram below shows the main electronic units of Keyless Vehicle Module:



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3.2. DUTY CYCLE

20 actuations of access control system within 24 hours with a typical transmission time of 0.08 seconds. 0.07 seconds / hour.

Transmission time T_{ON} 0.07 seconds / hours

Off time T_{OFF} 3599.93 seconds / hours

Duty Cycle: $T_{ON} / T_{(ON+OFF)}$ x 100% = 0,07 / 3.600 x 100 % = 0.02 %

3.3. LIST OF VARIANTS

5WK5 0128	Passive Go & Entry

3.4. TECHNICAL DESCRIPTION

Carrier frequency:	125 kHz +/- 1,875 kHz
Field strength:	< 42 dBµA/m @ 10 m
Modulation:	ASK
Supply voltage:	U_B = 12.8 V ± 0.2 V
Battery type	Car battery
Range:	< 2 m

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4. LABEL DESIGN CANADA, USA

Continental
5WK5 0128

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Owner Manual Canada:

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.

Owner Manual USA:

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.