

Operation Description

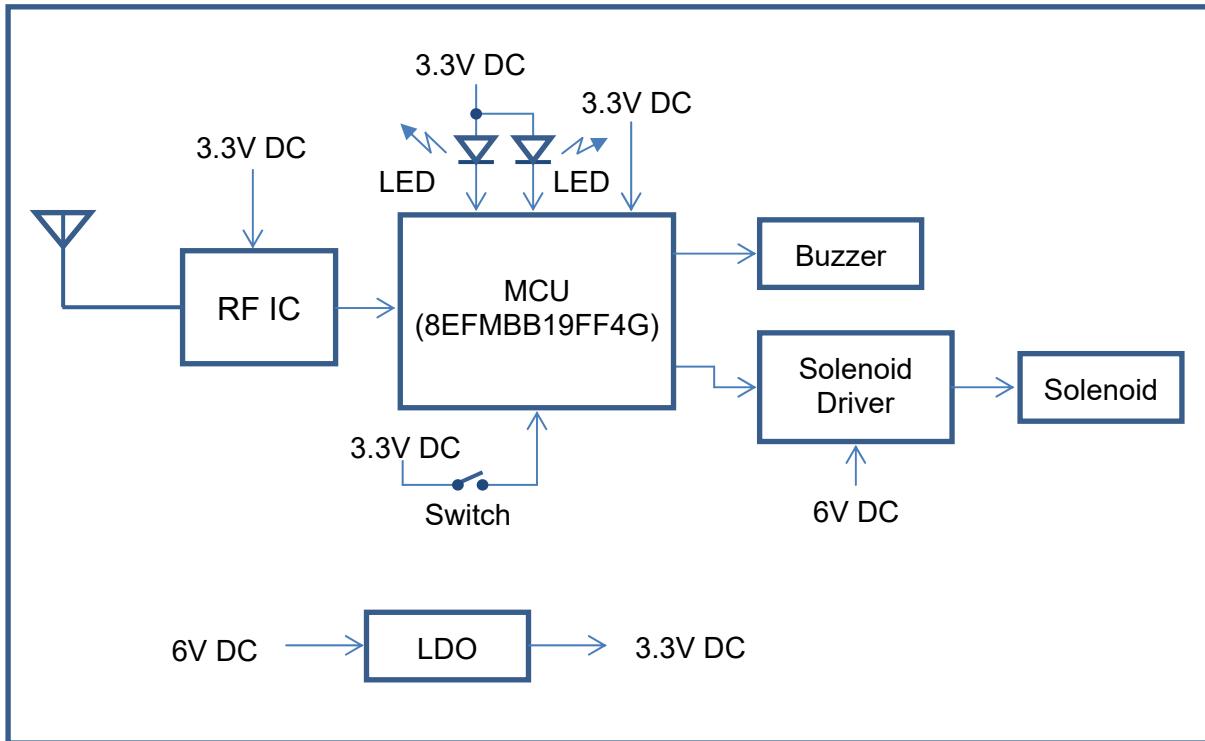
Table of contents

1. KVC200VC
 - A. KVC200VC Block Diagram
 - B. KVC200VC Operation Description
2. KVC200RM
 - A. KVC200RM Block Diagram
 - B. KVC200RM Operation Description
3. KVC200WL
 - A. KVC200WL Block Diagram
 - B. KVC200WL Operation Description

* Model Name : SVSM6766M (Serial Name : KVC200VC)
SVSMR (Serial Name : KVC200RM)
SVSMLD (Serial Name : KVC200WL)

1. KVC200VC

1.1 KVC200VC Block Diagram



1.2 KVC200VC Operation Description

KVC200VC is a device that controls the flow of water by solenoid. When RF IC receives solenoid control signals from KVC200RM or KVC200WL, the RF IC sends the received data to MCU then the MCU controls buzzer to generate beep sound and controls solenoid. The RF IC only receives signal, it does not send RF signal to KVC200RM or KVC200WL.

MCU

- 8bits C8051 core
- Operation frequency : 24Mhz
- Embedded memory : flash 8K and RAM 512bytes

RF IC

- Operation frequency : 917.5Mhz
- Receiving modulation signal : GMSK

Solenoid

- Operation voltage : DC 6V (DC 5.1V ~ 6.4V)
- Operation current : 400mA

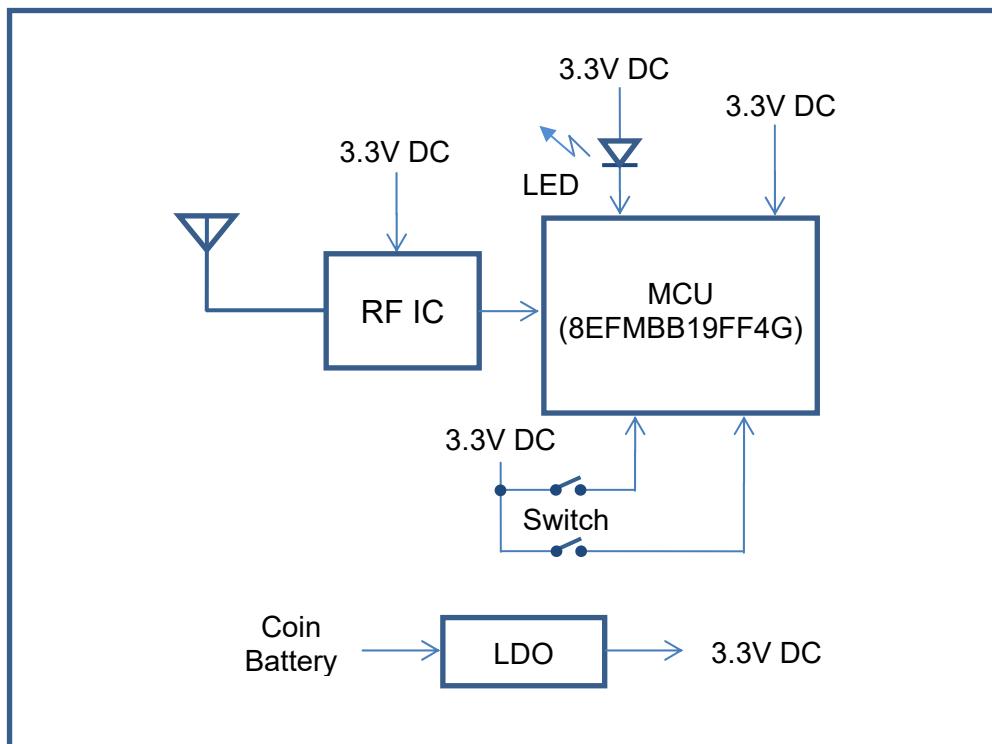
- Typical on/off signal time : 30msec
- Resistance : $15\Omega \pm 10\%$
- Fluid type : water
- Fluid temperature : $0 \sim 60^\circ\text{C}$

Buzzer

- Type : Piezo transducer
- Rated voltage : 3Vp-p
- Resonance frequency : 4Khz

2. KVC200RM

2.1 KVC200RM Block Diagram



2.2 KVC200RM Operation Description

KVC200RM is a device that transmits KVC200VC solenoid operation signal by RF. The MCU detects the switch status and controls the RF IC to generate close/open signal for the solenoid of KVC200VC.

MCU

- 8bits C8051 core

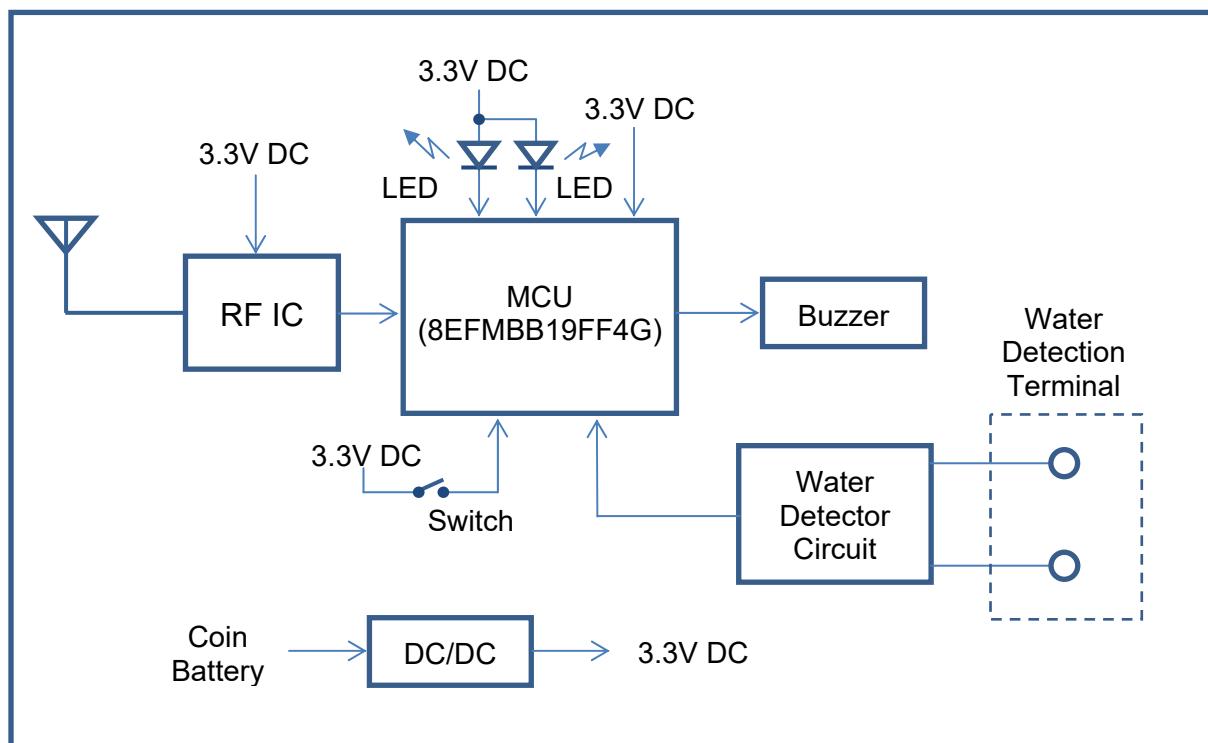
- Operation frequency : 24Mhz
- Embedded memory : flash 8K and RAM 512bytes

RF IC

- Operation frequency : 917.5Mhz
- Receiving modulation signal : GMSK

3. KVC200WL

3.1 KVC200WL Block Diagram



3.2 KVC200WL Operation Description

KVC200WL is a device that detects leakage water by water detection circuit and transmit KVC200VC solenoid operation signal by RF. The MCU receives leakage water detection signal from the circuit and controls RF IC to generate close signal for solenoid of KVC200VC and buzzer beep sound.

MCU

- 8bits C8051 core
- Operation frequency : 24Mhz
- Embedded memory : flash 8K and RAM 512bytes

RF IC

- Operation frequency : 917.5Mhz
- Receiving modulation signal : GMSK

Buzzer

- Type : Piezo transducer
- Rated voltage : 3Vp-p
- Resonance frequency : 4Khz