

Theory of operation	
<u>Product Name</u>	<u>Hotel Card Lock</u>
<u>Model</u>	<u>ALV2 S type</u>

Version 1.0

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Miwa Lock Co., Ltd.

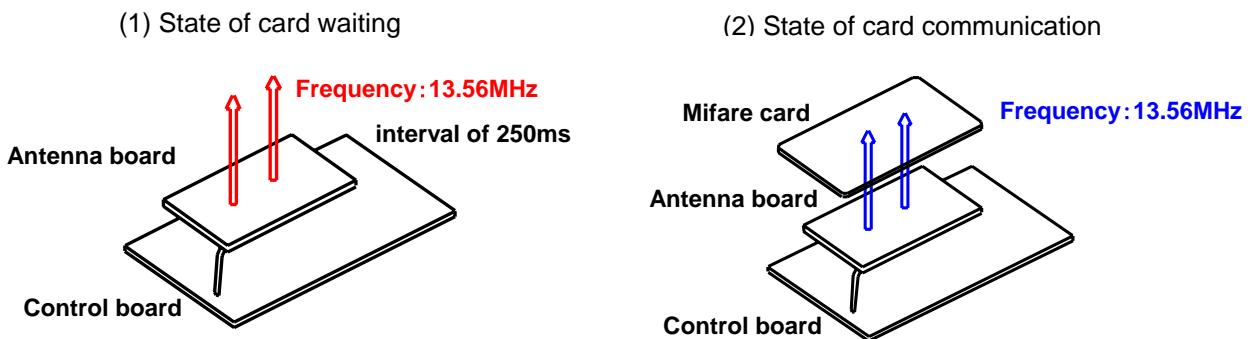
1. Outline of the ALV2 Hotel Card Lock

There are two states in this unit.

- (1) State of card waiting
- (2) State of card communication

(1) This unit radiates frequency of 13.56MHz. for 1ms at interval of 250ms to confirm the presence of the Mifare card. When this unit detects a card ,it stops the radiating frequency of 13.56MHz..

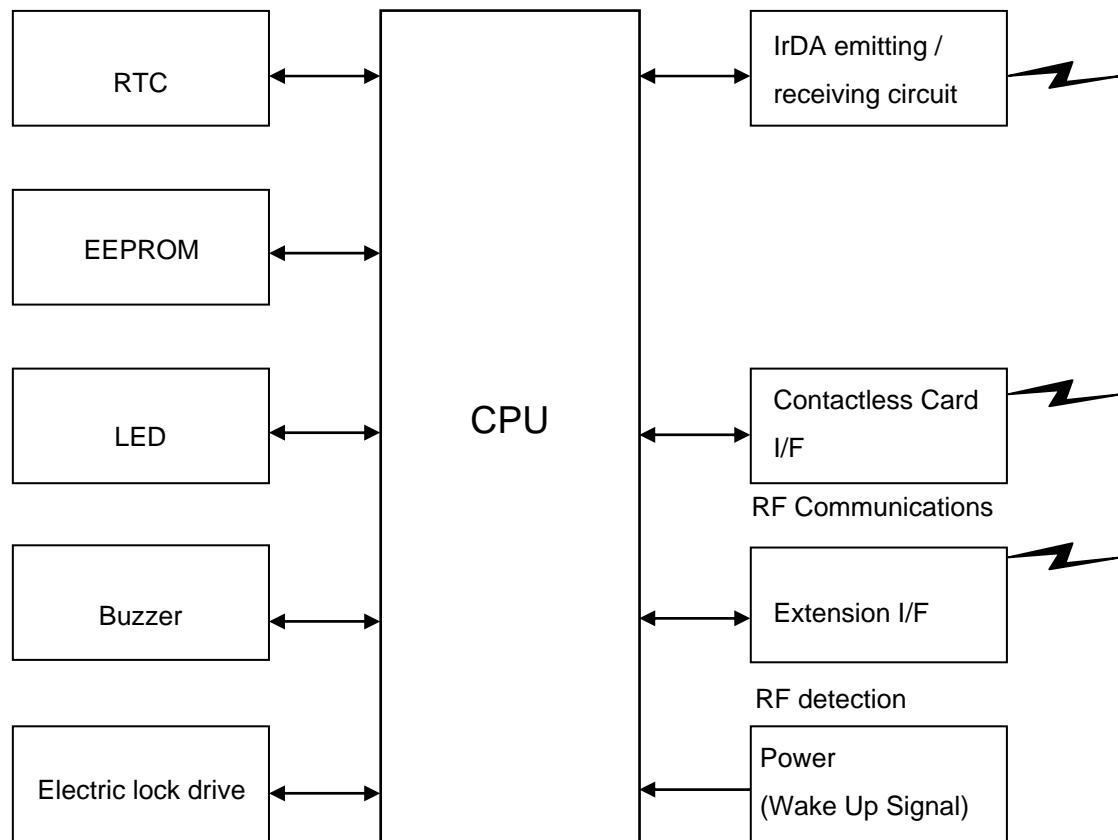
(2) Once this unit detects a card, the unit starts to communicate on frequency of 13.56MHz.



2. Device Structure

2.1. Block diagram1

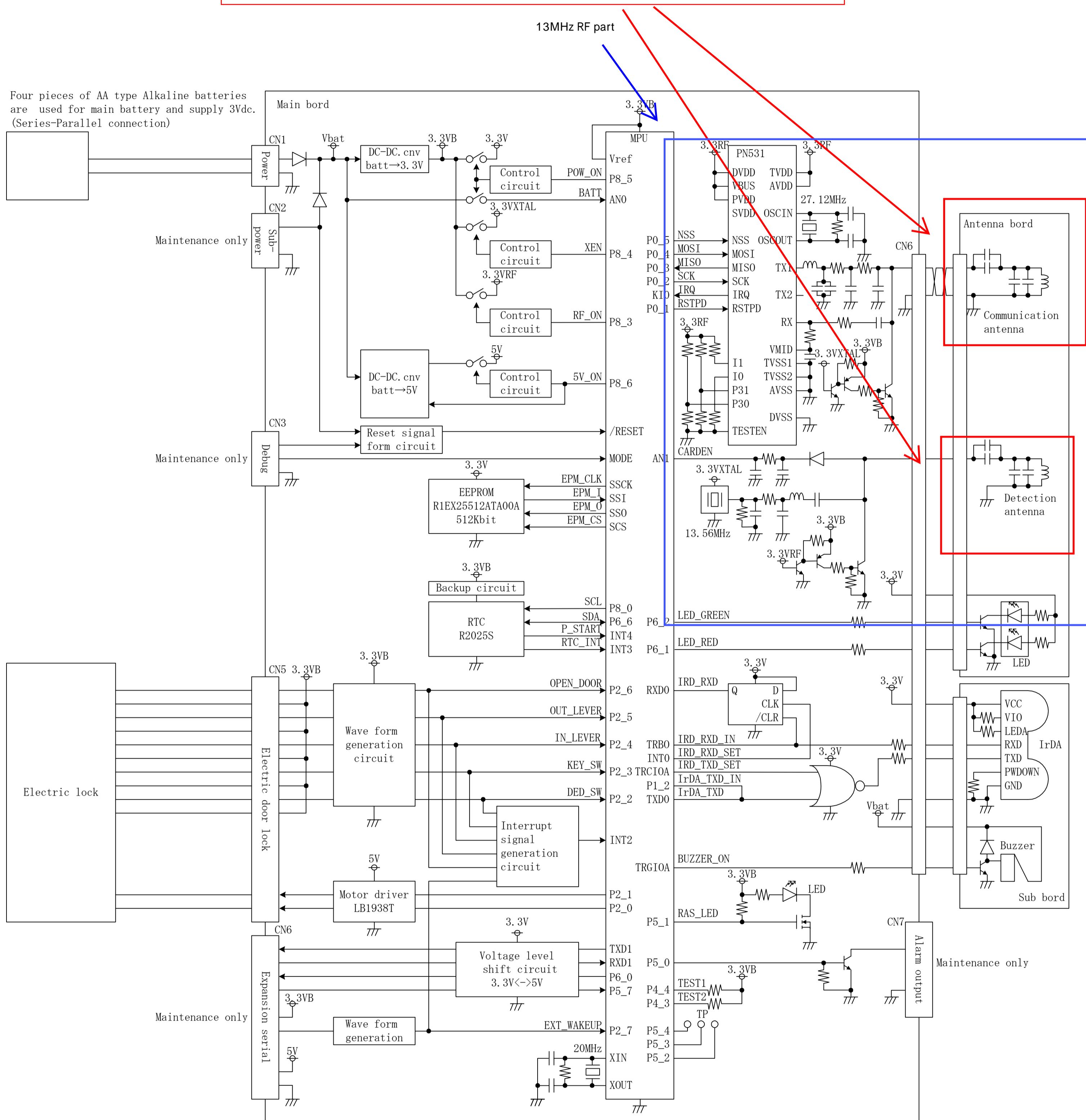
The following shows functional block diagram for card lock control components.



2.2. Block diagram2

Note:

There are two RF antenna. One is for detection, the other is for communication. They do not work simultaneously.



3.Other

- ※ Installation work is done by professional contractors.
- ※ This unit is 13.56MHz RF circuit independent.
- ※ RF circuits and RF communication circuits are not detected at the same time keep on moving.