Introduction to Design Plan of Receiver

Receiver


USB Charge Port
Start Button
Receiving Antenna
USB Charge Cord

Operating Principle

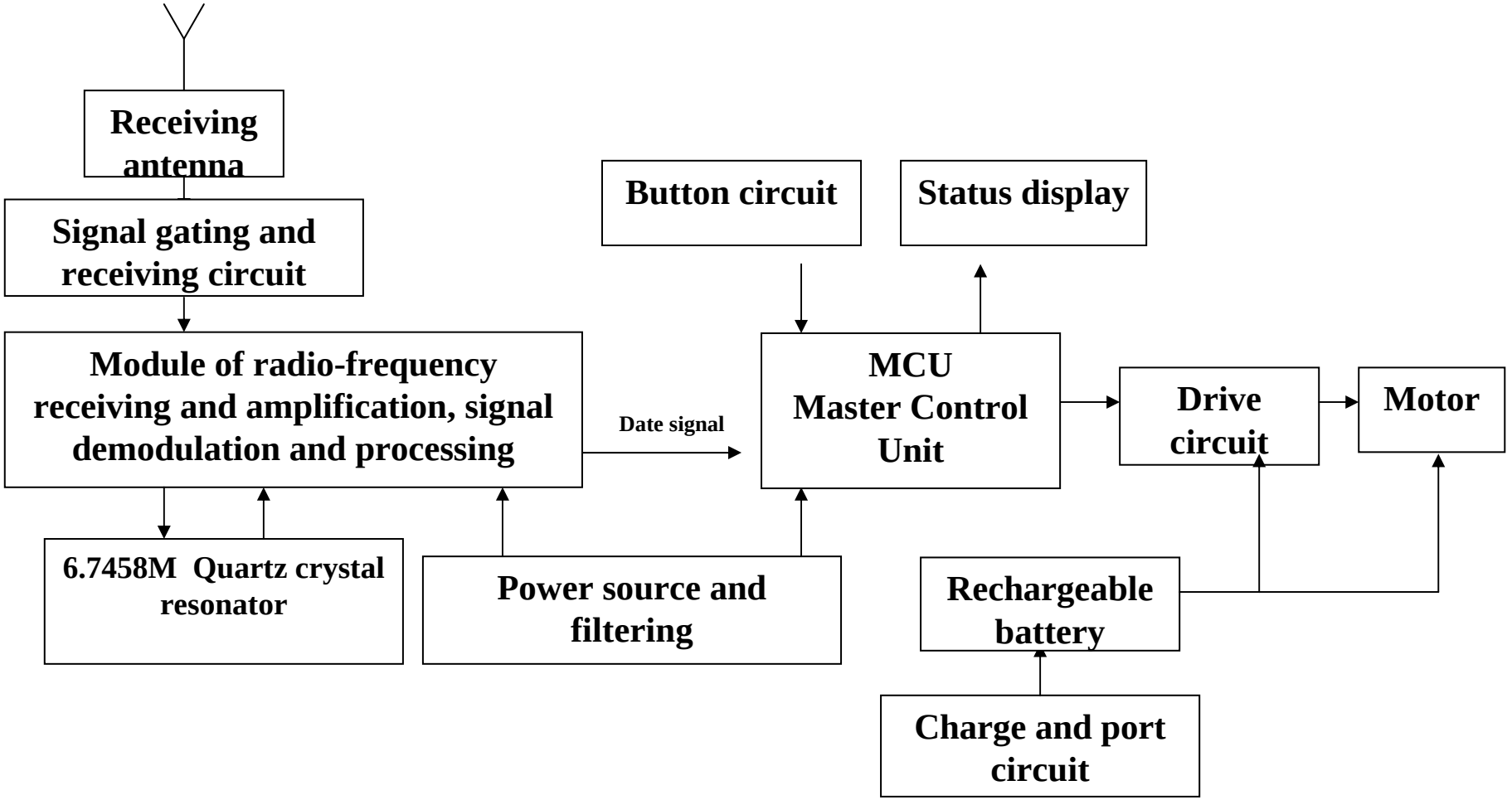
- **Signal Demodulation：**

- Receiving antenna receives high-frequency signal sent by transmitter. The signal will go through capacitive coupling, frequency-selecting circuit to receiving demodulation unit. Finally, the demodulation module demodulates the code signal from the radio-frequency signal of transmitter and the code signal will be transited to MCU as control data signal.

- **MCU（Microprocessor Control Unit）**

- MCU will conduct data analysis, including decoding and identification, on the received code signal, send relevant command, output corresponding PWM (pulse width modulation signal), so as to control the action and operating mode of vibrator.

Logic Block Diagram



Electric Parameters and Properties

- Power supply：Lithium polymer battery --- 3.7V DC
- Receiving Sensitivity ： -70DB
- Charge time：2-3 hours

Application Method

- Press Start Button on receiver, the system starts in ready mode;
- Long press ON/OFF button of remote-controller for 3 seconds, and the product begins to work；
- Press 4F button of remote-controller to select operating model of F1-F4；
- Long press ON/OFF button of remote-controller for 3 seconds again to turn off the product, then the product stop work.
- In case the receiver has not been receiving signal for 1 hour, the product will enter Sleep Mode in which control demand of transmitter will no longer be received, and the normal receiving will only be effective after pressing Start button of receiver.
- In the event of excessive low voltage of battery, please recharge the product timely.

- FCC Statement
- 1. 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.
- 2. Changes or modifications not expressly approved by the party responsible for compliance
- could void the user's authority to operate the equipment.
- **Federal Communications Commission (FCC) Statement**
- This equipment has been tested. And it found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and uses and radiates radio frequency energy and, if not installed and used in accordance with the instruction, 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 to correct the interference by one or more of the following measures:
- - Reorient or relocate the receiving antenna.
- - Increase the separation between the equipment and receiver.
- - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- - Consult the dealer or an experienced radio /TV technician for help.
- Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord be used.