Technical Description for Model 599220000(20-010-38-50)

This e-chat controlled UHF ASK receiver and transmitter to provide accurate and stable operation. The following units support this receiver and transmitter function properly :

1. Receiver
2. Transmitter
3. MPU
4. LCD and LCD Driver
5. SRAM
6. Keyboard

Receiver

The RX3310A is a fully integrated, amplitude-shift-keying modulation, single chip receiver. The RF signal is received from the antenna followed by band pass filter C16, C17, C18, L6. Then, the RF signal is passed to the IC with internal RF amplification. This RF signal is passed through C19, L7 to the internal mixer. After the mixer output, the IF signal is passed through C11 to the IC internal limiter and amplified by the internal Operational-Amplifier. Finally, the amplified signal is passed to the MPU.

Transmitter

The data output from the MPU is passed through R1 to transistor Q1's pin B. The SAW resonator X1 is generated 433.92MHz frequency through C4 to transistor Q1's pin B. The signal is low, then Q1 turns off (means no carrier). The signal is high, then Q1 turns on. It has carrier passed through R2, L4 to the antenna.

MPU

The MPU(SPL130) controls the circuit logic, control and other operations. It receives the signal or command from others and take the corresponding respond / feedback.

LCD and LCD Driver

The LCD Driver(SPLD112A) receives the command and data from MPU. It is capable of providing varieties of common / segment combinations for displaying the information on the LCD.

SRAM

The serial SRAM(SPRS256) is stored / output teh data for the whole system.

Keyboard

The keyboard provides the media for the user to input the information / command to the system.