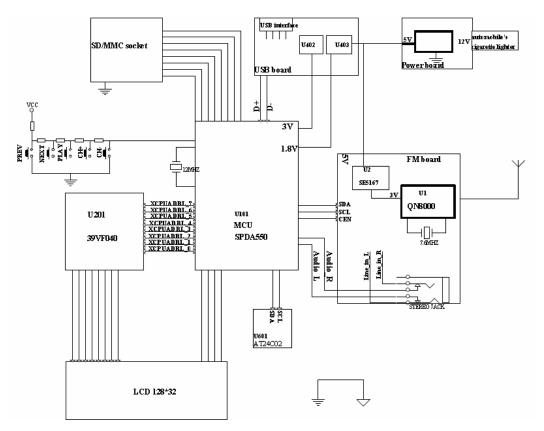
# **Circuit Description**

## 1. System introduce

EF193UE FM-Transmitter is designed to play the MP3/WMA file from the memory card/USB flash disk, then modulated RF audio carrier signal will be sent to space by antenna, the LCD Displays audio file information and frequency. Channel with 88.1~107.9MHZ, 0.2MHZ channel stepping,

# 2. Structure



#### 2.1 structure introduce

The system is consist of MCU (SPDA550A), Flash memory SST39VF040,LCD display ,FM transmitter unit(QN8000), memory card socket, USB interface, and Car cigar socket power supply (12V DC power).

## 2.2 Description

When plug USB flash disk or SD/MMC that stored MP3 files ,audio signal was processed via MCU(SPDA550A),then modulated the carrier of QN8000, LCD displays FM frequency and file information. FM unit QN8000is a low power stereo FM transmitter, modulate Audio signal (sent from audio processing unit) to RF oscillator, then send to space by one antenna. The car player will store the last frequency, track number and volume. The player also has LINE-IN function that enables you to enjoy music from the external audio device such as CD, iPod player. It will be operated player with the five keys, such as play/pause, next, previous, channel+, Channel -.

# 2.3 Power

EF193UE could get 12V DC power supply by automobile's cigarette lighter from your car.