

## **1.Explanation of a circuit device**

**1 - 1. ANTENNA**

**1 - 2. STEREO AUDIO INPUT**

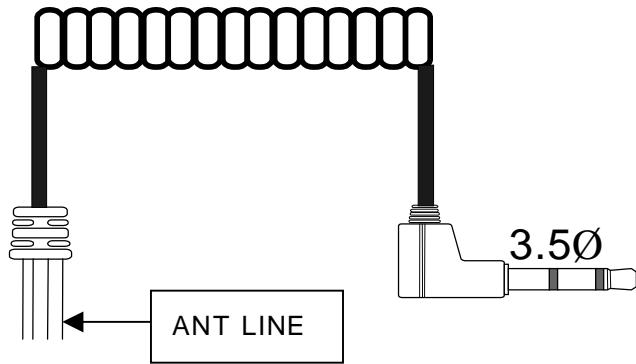
**1 - 3. POWER SECTION**

**1 - 4. VOLTAGE CONTROLLED OSCILLATOR**

**1 - 5. FM OSCILLATOR SECTION**

## Explanation of a circuit

### 1-1. ANTENNA

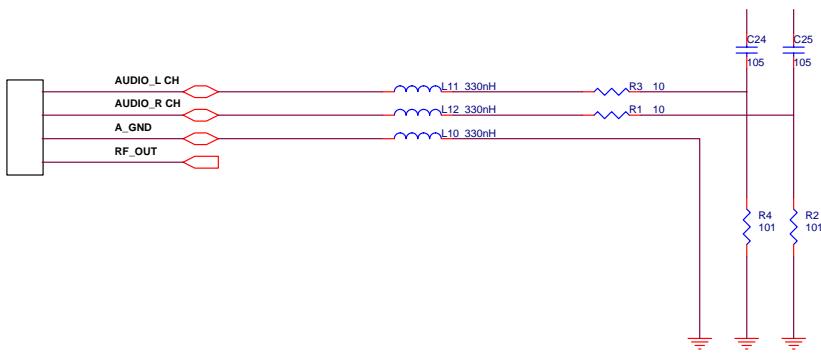


## Explanation of a circuit

ANT is consist of wire as EARJACK call code type, the device is possible to transmit a radio wave form an antenna through

### 1-2. STEREO AUDIO INPUT

## Diagram of a circuit

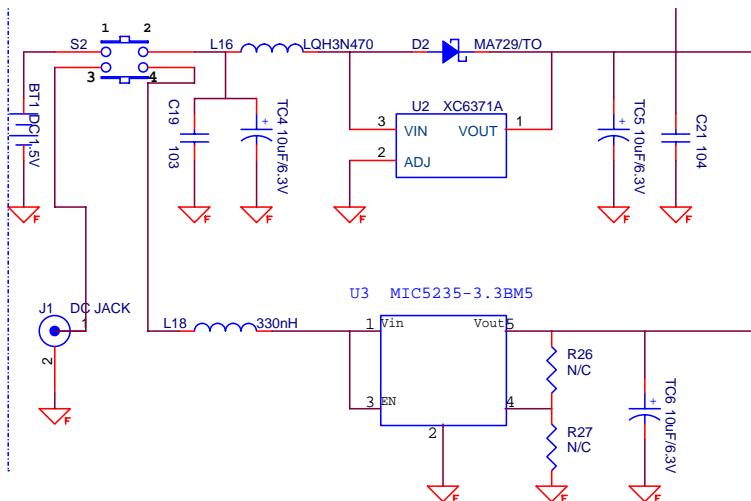


## Explanation of a circuit

Stereo L, R signals on MP3 3.5mm EARPHONE jack is confirmed by L11 and L12. The conformed signal is controlled input signal level by resistor, which are R1, R2, R3, R4 . Then Stereo L, R signals which split on 22,1PIN of BH100XXF(IC) are confirmed by C24, C25

### 1 - 3. Power section

## Diagram of a circuit



## Explanation of a circuit

Use AAA 1.5V - Battery

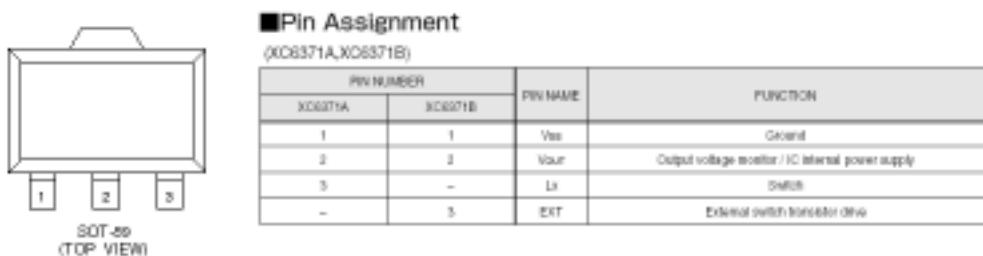
Power part as battery is consisted of XC6371A (DC/DC Converter Control IC). Input 1.5V Battery power, which is impressed by XC6371A, boost into 3.3V output. This output power supplies power for BH100XXF(IC).

Use Car cigar jack - Automobile DC12V system

Automobile system (DC12V) is impressed by DC JACK then supplies BH100XXF(IC) with constant output power

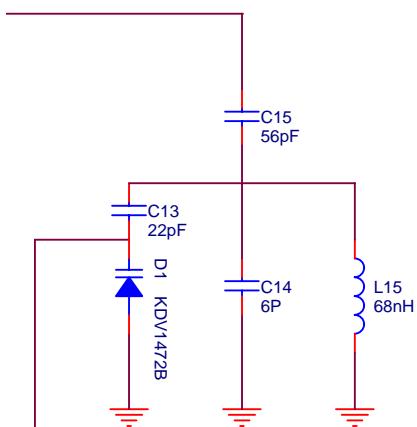
TC5 and C21 use to cut off noise from impress voltage.

## DC/DC Converter (XC6371A)



## 1-4. VOLTAGE CONTROLLED OSCILLATOR

Diagram of a circuit

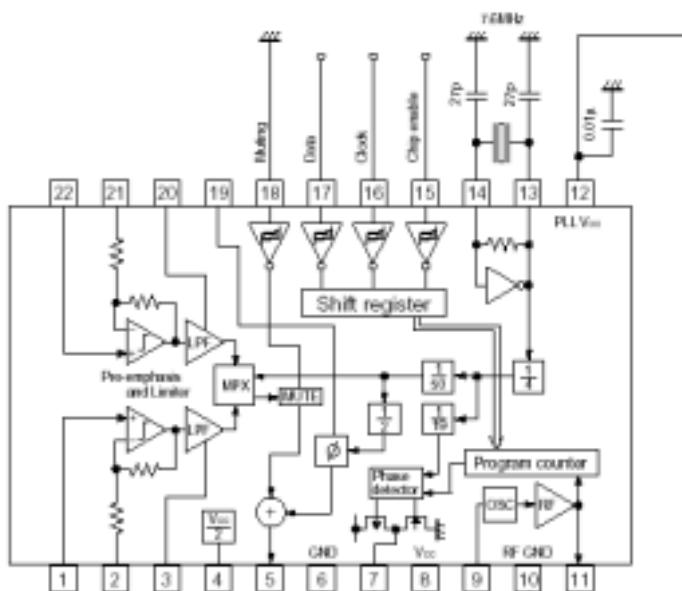


Explanation of a circuit

It is to control a voltage of VCO and to help RF output frequency set up as specific frequency. So it is to control a frequency tuning function

## 1-5. FM Oscillator Section

Diagram of a circuit



## Explanation of a circuit

FM oscillator resonate a crystal (7.6MHz) frequency and generate 19kHz and FM transmit frequency for FM signal through PLL type