M.KUMARASAMY
COLLEGE OF ENGINEERING
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 & ISO 14001:2015 Certified Institution
Thalavapalayam, Karur – 639 113.

DESIGN OF SMALL AUDIO BUG DEVICES

BY

MIDHUN.R
KAVINESH. A.S
BALAKUMAR.A
MOHAMED ANAS. S

GUIDED BY

Mr. L. RAMESH

ABSTRACT

- A device that produces frequency modulated signals is known as an FM bugger.
- It is a component of a radio system that spreads an electromagnetic signal with the help of an antenna.
- Typical FM broadcasts operate in the 88–108 MHz frequency band.

- Commercial FM radio stations are given frequencies between 88 and 108 MHz, which is the intended frequency range of broadcast.
- FM receivers can function in the very high frequency bands in which AM interference is frequently very strong.
- The FM bugger is a tool that provides

INTRODUCTION

- Audio spy bugging devices are used by intelligence agents in different parts of the world. These devices can help hear conversations from a distance. Their size is extremely small which helps them fit into a pocket and even inside a pen.
- Similarly, we designed an FM audio bug spy device whose range is up to 1km(or even more). The audio is both transmitted and received via frequency modulation.

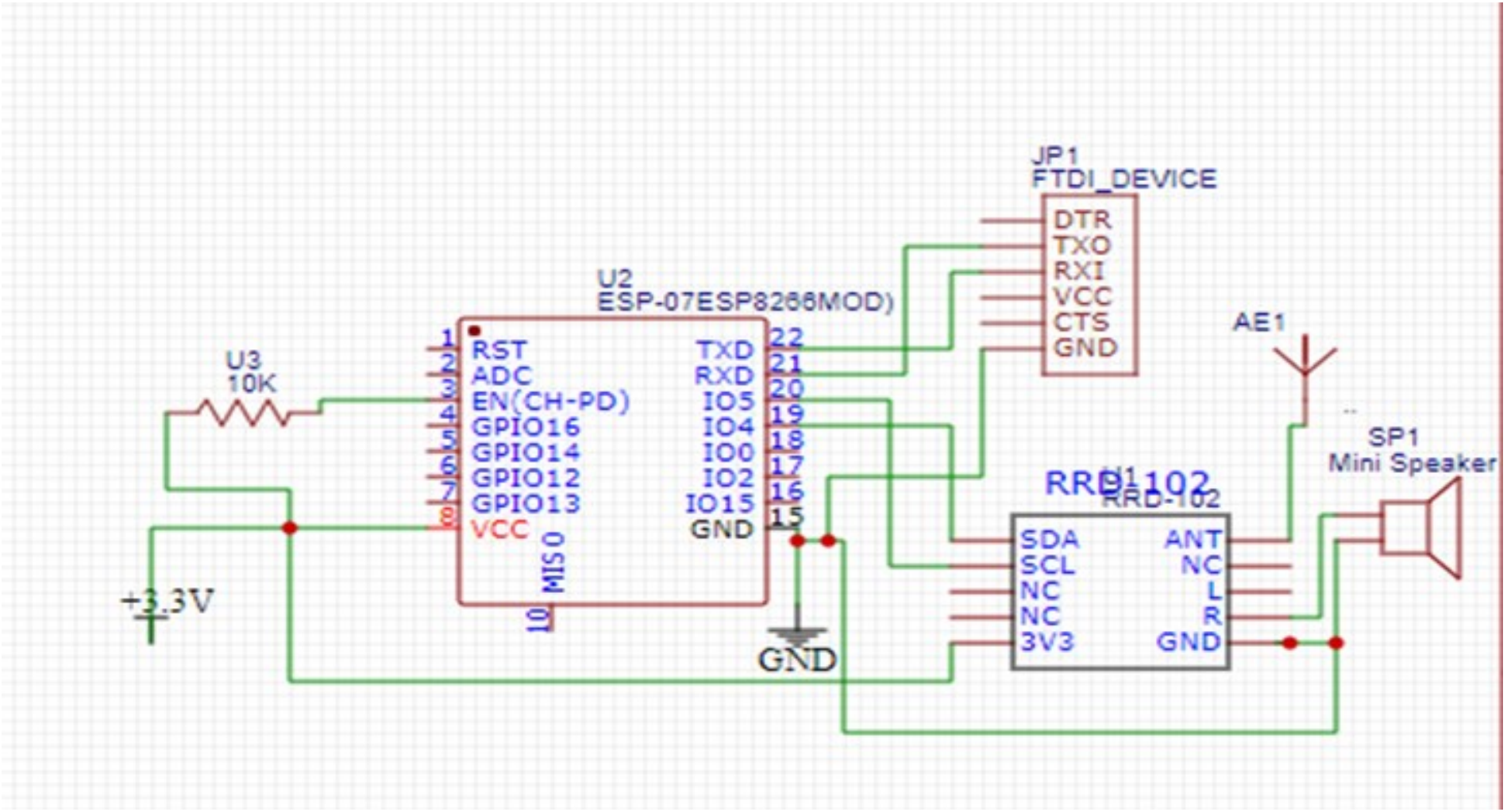
PROPOSEL METHOD

- The audio transmitter used here has a mic and 3 pins as seen in the above circuit. The Vcc and GND pins are connected to a 3.3V rechargeable battery that powers the transmitter module. The third pin is to connect the antenna for the transmitting range to be extended.
- The case that is being used to place the transmitter in, needs to have tiny holes, such that the mic can capture the sound.

HARDWARE REQUIREMENT

- FM Audio Transmitter
- RDA5807M FM Receiver
- ESP 8266 12F
- 3.3V Battery

BLOCK DIAGRAM



CONCLUTION

- The audio transmitter FM device is powered-on and hidden in the desired location. The ESP and FM radio receiver device are plugged and the serial port is opened. After scanning the range of FM channels, the channel for the right frequency is selected.
- In other words, this means, the FM channel of the audio bugging device is selected, and you can now hear what is being talked about at the place the transmitter is placed


thank you!