

## Module: VOICE / 170131

### Introduction

- Application: DIY project and other electronic products
- ISD1700 voice module:
- ISD1700 voice module is a simple and practical circuit board, which can know and master the ISD1700 series chip quickly.  
It is applicable to the full range of ISD1700 chip, and has the advantages of simple operation, complete functions and other features. ISD1700 series recording chip is a kind of high integration and performance chip. It can be recorded many times, sampling rate is from 4K to 12K, the range of power is from 2.4V to 5.5V. ISD1700 also has new function of recording prompt, after new recording, LED flash one time for every few seconds, and then there is new recording for user. What is more, there are 4 sound effects to prompt the users operation results, such as begin to record, stop to record, erasure, next one and all erase and so on. The recording data stored in the FLASH of chip, without any compression, so it has a better sound quality and power storage. Chip has two independent voice signal input channel, microphone input and analog signal input. In the independent button mode, when operating some function, the chip will automatically enter power-down mode to reduce power consumption. Under the SPI mode, user can make more functional operation for chip. If recording arbitrary memory address, and analog channel configuration registers (Analog Path Configuration register, APC) to reading and writing
- Module description: - Power supply: 5V
- Recording time: 6K time 75 seconds, 8K time 60 seconds
- Chips working frequency is 6KHz and 8KHz, selectable
- With power indicator, indicator LED
- The operation is simple, it can work directly and does not need the chip or other modules
- Chip control pin has led, convenient to control connection
- ISD1700 module independent work instructions (according key to instruction):
- REC: - Always hold down the REC key, at the same time, LED is bright, then speak to MIC, content of the talk will be recorded into the ISD1700 voice chip
- After finishing, taking up this key, LED will go out, pressing again as beginning to record the second period, subsequent paragraphs operates like that
- PLAY: - There are two ways of edge trigger and trigger. (Note: after recording, playback pointer stay in the final section as for start address, then it will play the last paragraph)
- (1) edge trigger: press the PLAY key to put the current period during playback, LED always twinkle until the end of playback. After playing, the playback pointer to the end of the period just the start address, the PLAY button to put just put this paragraph when pressing again.
- (2) level trigger: used to press the PLAY key chip will put all of the voice information to play, and cycle until the release of this button
- FWD: - Implementation of playback ago, press this key, the playback pointer will point to the next section, press two times, it points to the segment after the second section. During playback click this button to stop playing the current segment and then broadcast the next paragraph, if the current player is the last paragraph, then stop playing the last paragraph and play the first.
- ERASE: - The operation of single block erase is effect on only the first and last paragraph, when playback pointer is located at the first or last paragraph, clicking this button will erase the first or last paragraph. Playback pointer is jumping to the erase before the second or last second paragraph. Often click this button more than 3 seconds, it is into the "all erase operating mode", while LED flash two times, and continue to press, the LED put off when it flashes the seventh times, then you loose this key, the voice information of chip are all erased.
- RESET: - Click this button chip to perform reset operation. After resetting, play and record pointer point to the last paragraph, it means that playback indicator point to the last sections front, the recording indicator point to the last paragraph of the end. Then played the last paragraph, began to record the new last paragraph.
- VOL: - Pressing this key can modulate the output voice size of chip. Chip voice default output for maximum value, each pressing, the sound is according to 4dB to dying out. Until the minimum voice, continue to click this button, each pressing, the voice increase 4dB (Note: after implementing reset, the output sound is maximum).
- FT: - Connect FT pin and GND, continued to keep a low power conduction through mode. Operation of conduction through will make voice from the Analn end directly to the horn or AUD output. During the recording, if press FT, recorded the Analn into the speech signal, too

Dimensions: 53 x 53 x 15 mm

Weight: 0.74 oz (21 g)

For more info see datasheet:- <http://www.mantech.co.za/datasheets/products/ISD17XX.pdf>