

# WT588FM01(Push Button) Specification

Version: V1.04



## Note :

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## 1. Characteristics

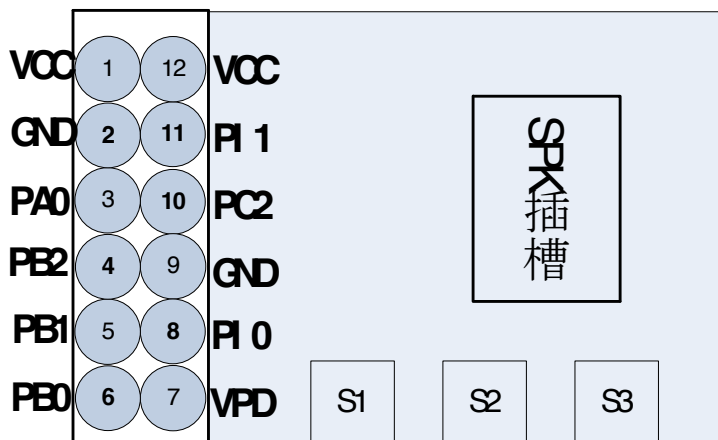
- Working voltage: 2.0V ~ 5.5V
- Automatically enter sleep mode when not working
- The button function has the functions of long-press recording, short-press short-button playback, long-press short-button loop playback, and long-press hold non-loop playback functions
- The power amplifier pushes the speaker directly, with high volume, high fidelity, power saving, 0.5 W/8ohm
- With recording and playback prompt function, can be connected to LED display
- Sampling frequency 16KHz, bit rate support 12kbps, 16 kbps (standard key program default), 24kbps
- Single module can record, the longest recording is 70S under 12kbps bit rate; the longest recording is 50S under 16kbps bit rate
- The longest recording is 30S under 24kbps bit rate

## 2. Customized Functions

If the standard functions of the module cannot meet the needs of customers, the module can be developed to customize some functions. If you need to develop custom functions, you need to list the required functions first, and then send it to our salesperson for him to submit for evaluation. After the evaluation is passed, an engineer will contact the customer to carry out research and development of corresponding functions. Some common functions are listed below:

1. Increase the number of recording segments and the corresponding button functions, such as adding 5 segments of recording, next song button and so on.
2. Change the power-on default control method, for example, when the module is powered on, it starts to play recorded files in a large loop.

### 3. Pin Description



WT588FM01

| NO | IO PORT      | Description   |
|----|--------------|---|
| 1  | VCC          | 2.0~5.5V power supply (pin 1, pin 7 and pin 12 are all the same power supply)   |
| 2  | GND          | GND   |
| 3  | PA0          | Not used yet, can cooperate with customers to develop and customize   |
| 4  | PB2/S3/PLAYL | Button interface, play recording when PB0 is high level (cannot play in loop), play stop when it is low level (playback will stop when it turns to low level when it is halfway through)                  |
| 5  | PB1/S2PLAYE  | Button interface, PB1 has a high level of 30ms, play a recording PB1 has a high level that lasts for 2s, and the recording is played in a loop, and the playback is stopped when the power is turned off. |
| 6  | PB0/S1/REC   | Button interface, record when PB2 is high level, stop recording when low level or capacity is full  |
| 7  | VPD          | .0~5.5V power supply (pin 1, pin 7 and pin 12 are all the same power supply)  |
| 8  | PI0          | BUSY  |
| 9  | GND          | GND   |
| 10 | PC2          | Not used yet, can cooperate with customers to develop and customize   |
| 11 | PI1          | Not used yet, can cooperate with customers to develop and customize   |
| 12 | VCC          | 2.0~5.5V power supply (pin 1, pin 7 and pin 12 are all the same power supply)   |

Note: the key is valid at high level

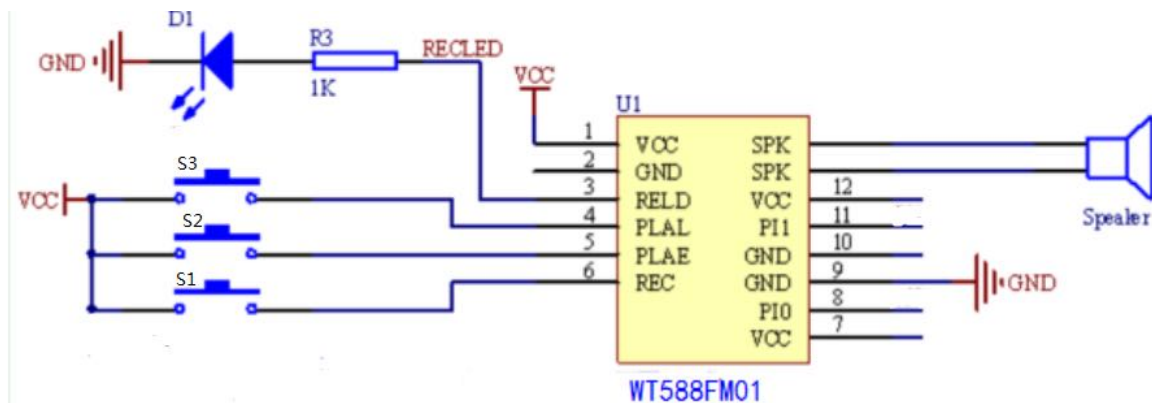
## 4. Electrical parameters

| MARK                  | RANGE     | UNIT |
|-----------------------|-----------|------|
| VDD~GND voltage       | +2.0~+5.5 | V    |
| Recording current     | 6.5       | mA   |
| Play current          | 86.7      | mA   |
| stand-by current      | <3        | uA   |
| Operating temperature | -20 ~ +75 | °C   |
| Module size           | 38.5*42.8 | mm   |

### 4.1. Button control function

| IO Port          | Function   |
|------------------|--|
| PB0/S1/REC       | Button interface, record when PB2 is high level, stop recording when low level or capacity is full   |
| PB1/S2/PLAY<br>E | Button interface, PB1 has a high level of 30ms, play a recording<br>PB1 has a high level that lasts for 2s, and the recording is played in a loop, and the playback is stopped when the power is turned off. |
| PB2/S3/PLAY<br>L | Button interface, play recording when PB0 is high level (cannot play in loop), play stop when it is low level (playback will stop when it turns to low level when it is halfway through)                     |

## 5. Application Circuit



Note: There are buttons on the module itself, you can choose to use the buttons on the module, or you can use external buttons, the VCC voltage is 2.0~5.5V.

## 6. Package Size Chart

