Hat-SPK2

SKU:U055-B



Description

The 'HAT-SPK2 is a speaker with M5SticKC PLUS, built-in MAX98357 digital audio I2S amplifier IC and 1W speaker, supporting 16-bit, 32kHz to 192kHz sample rate audio input, built-in short circuit protection and over-temperature protection, suitable for a variety of audio applications.

Features

- HIGH-QUALITY AUDIO OUTPUT: SUPPORTS 16-BIT, 32KHZ TO 192KHZ SAMPLE RATE AUDIO INPUT
- Multiple output modes: including mono and stereo, as well as audio input formats such as I2S, left-justified, and right-justified
- Stability and reliability: Built-in short-circuit protection and over-temperature protection
- Programming platforms: Arduino, uiflow

Includes

1x HAT-SPK2

Applications

- ~ Audio speakers
 - television set
 - Car audio
 - Smart speakers

Specification

Resources	Parameters	
Power output	Maximum 20W	
Signal-to-noise ratio	103dB	
Distortion rate	0.1%	
Supply voltage	4.5v-5.5v	
Operating temperature range	0-40°C	
Enter the audio format	I2S, left-aligned, right-aligned	
Sample rate	32kHz to 192kHz	
Control interface	I2C、SPI、GPIO	
Product Size	24mm × 18.6mm ×13.7mm	
Package Size	136mm × 92mm ×13mm	
Product Weight	4.6g	
Package Weight	8.1g	











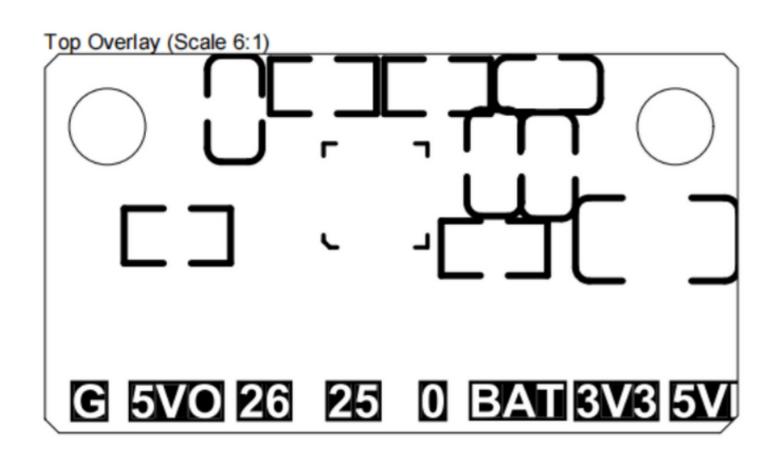


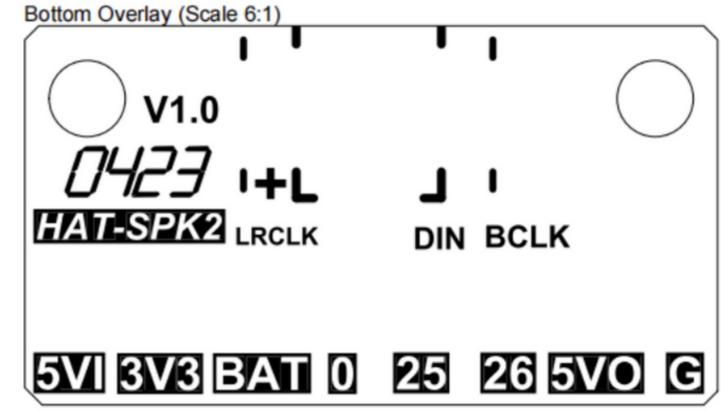


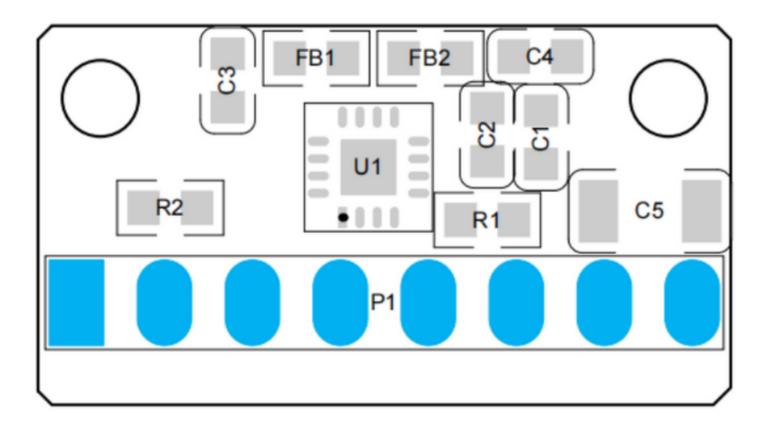
Related Link

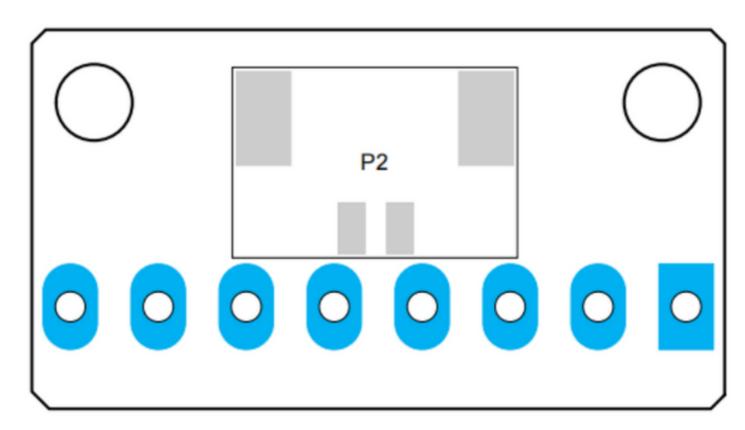
MAX98357

Schematic







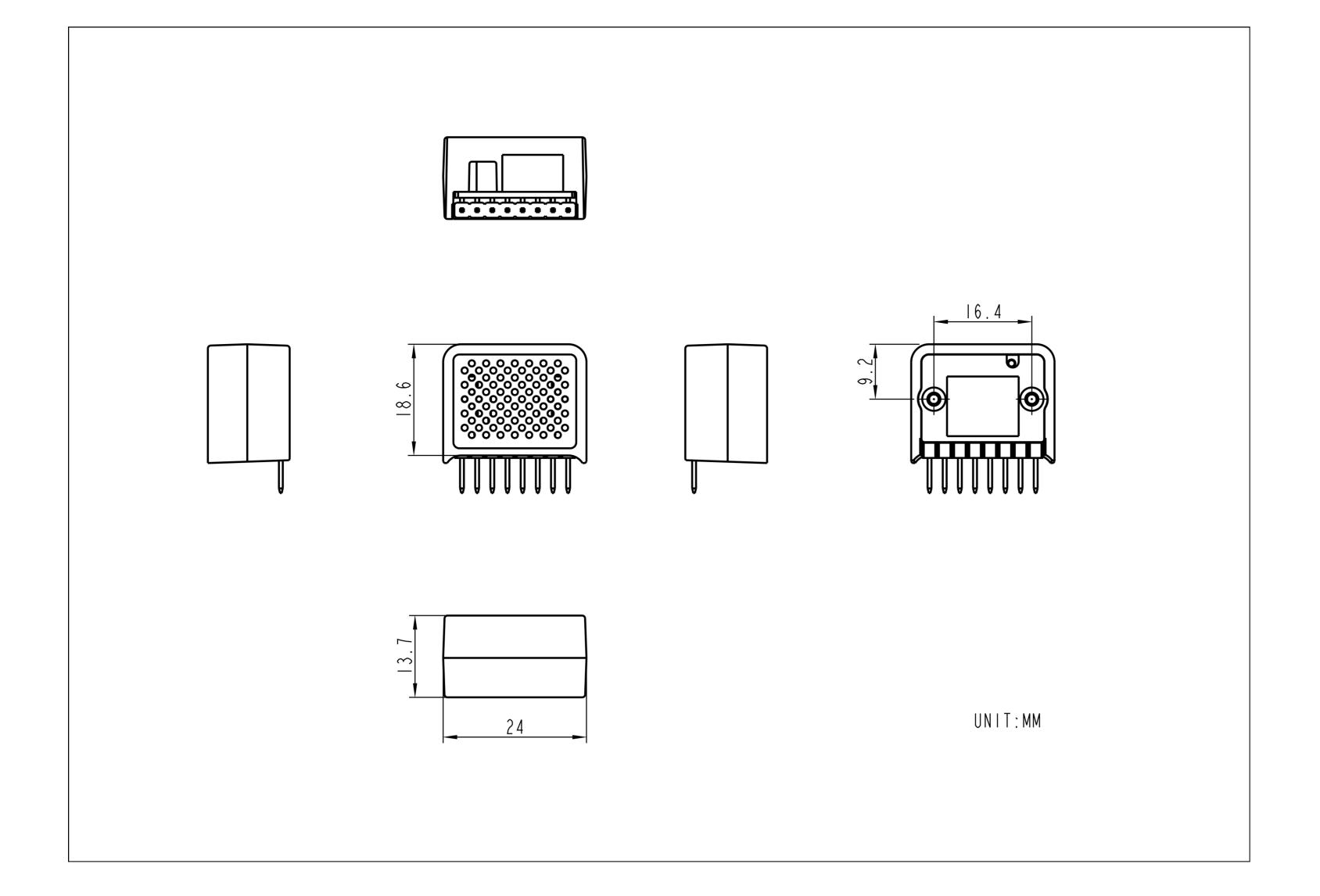


M5STACK

Comparison chart

特征	HAT-SPK2	HAT-SPK
功率输出	最大20w	最大3w
信噪比	103dB	85dB
失真率	0.1%	10%
电源电压	4.5v-5.5v	2.5v-5.5v
输入音频格式	I2S、左对齐、右对齐	单声道

Module Size



Examples

Arduino

HAT-SPK2 Arduino Example



UIFlow

HAT-SPK2 UIFlow Example

```
Title

Circle

Image

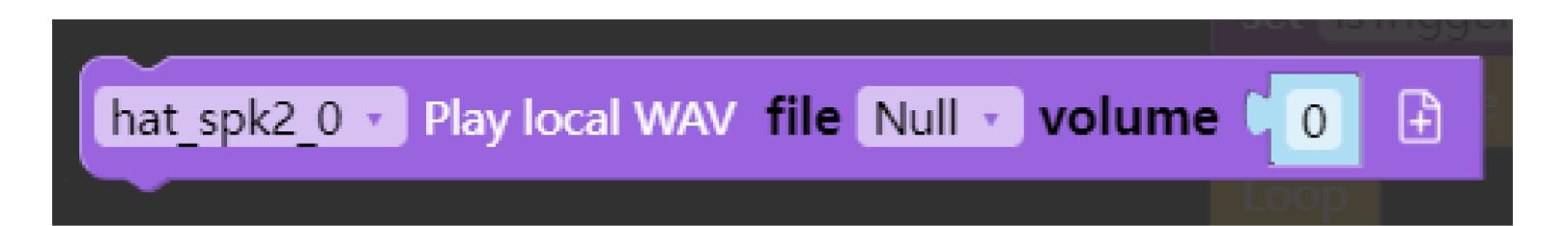
Triangle

Line
                                                                                                  Button A v wasPressed v
                                                                                                                                   Button B v wasPressed v
                                                         set vol v to 3
                                                                                                  set play to 1
                                                                                                                                    change vol v by 1
                                     Event
               MUSIC PLAYER
                                                                                                                                    if volv > 6
                                                         set play to 0
                                    ▶ UI
                 Label label2 show vol
                                                                                                                                    do set vol v to 0
                                    ► Hardwares
                                                            art timer1 v period 50 ms mode PERIODIC
                                                                                                                                    hat_spk2_0 • Play tone High G • for 1/4 • beat volume
             Volume 0
                                    ► Units
                                                                            8 × • vol •
                                                            rectangle0
                                                                                                                                                       8 × 7 vol 7
                                    ▶ Stamps
                                                                                                                                    Label label2 show vol vol
                                                           if play
                                    ► C-HAT (1)
                                                           do Set triangle0 v color Palette v
                                    ▶ loTCloud
                                                              hat_spk2_0 value left and right volume volume volver
                                      Remote+
                                                               Set triangle0 v color Palette v
                                      EzData
                                                               set play to 0
       Units Hat Stamps
                                    ▶ MediaTrans
      +
                                                          timer callback timer1
```



UIFlow Blocks

Play local WAV file



Play local WAV file



Play cloud WAV file



Play tone



Play tone

