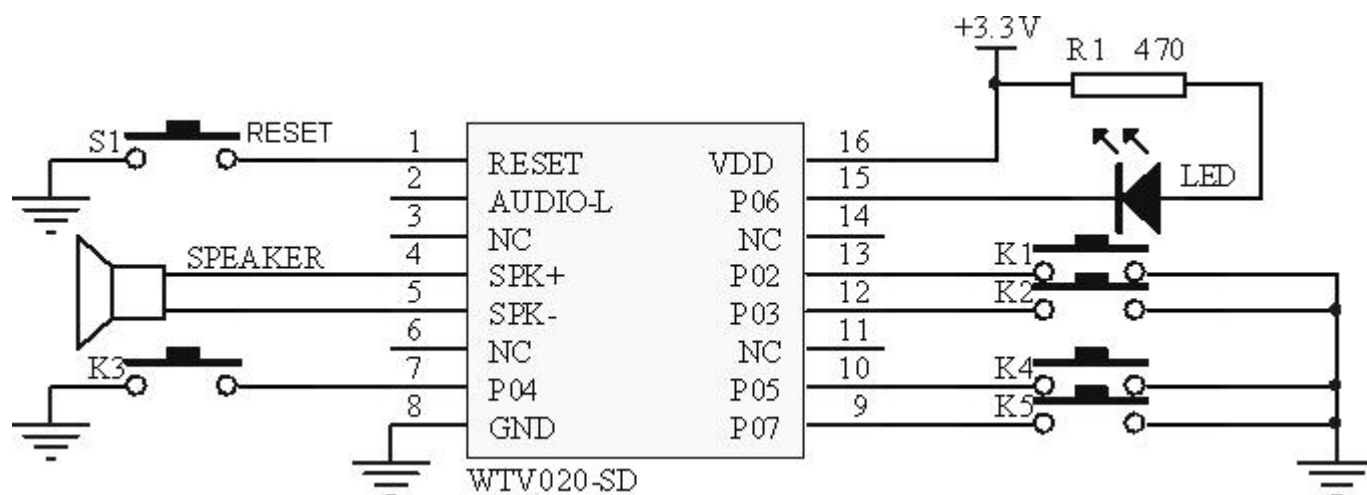


8.6.KEY MODE(5 group of voice)APPLICATION CIRCUIT(PWM OUTPUT)

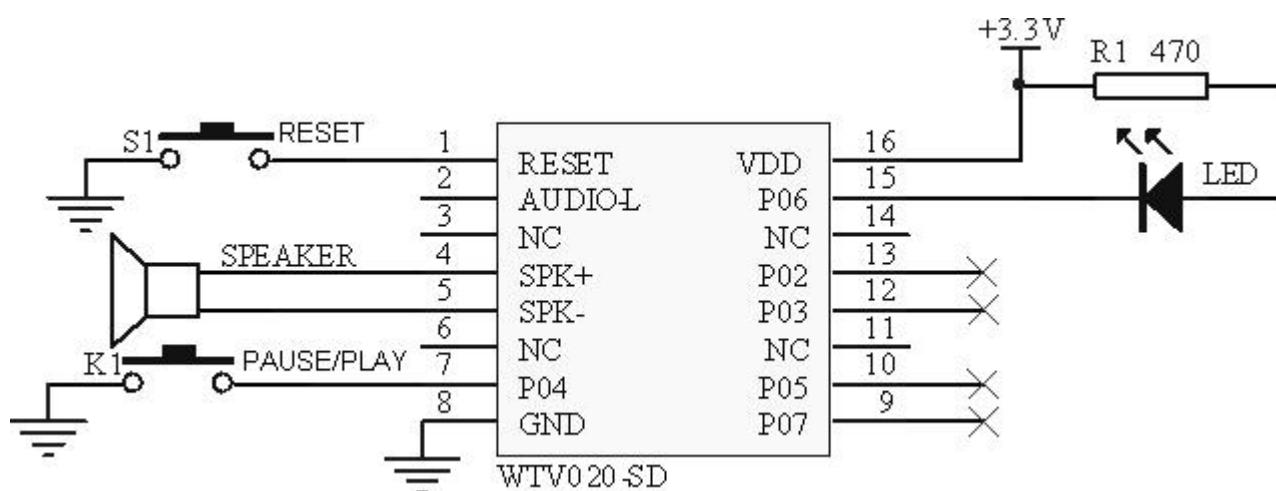


WTV020-SD-16P and WTV020-SD-20S in PWM output, "SPK+" ,"SPK-" to speaker .

In the key mode,edge trigger. GND short touch I/O to trigger voice. P02、P03、P04、P05、P07 trigger voice 1,voice 2, voice 3,voice 4,and voice 5 separately. They are edge retrigger.

The power input is DC3.3v, if DC5v input, two serial diodes (IN4001 or 4007)connect to the positive input to low the voltage.

8.7.LOOP PLAY AFTER POWER ON(EDGE TIRGGER PAUSE/PLAY) APPLICATION CIRCUIT(PWM OUTPUT)

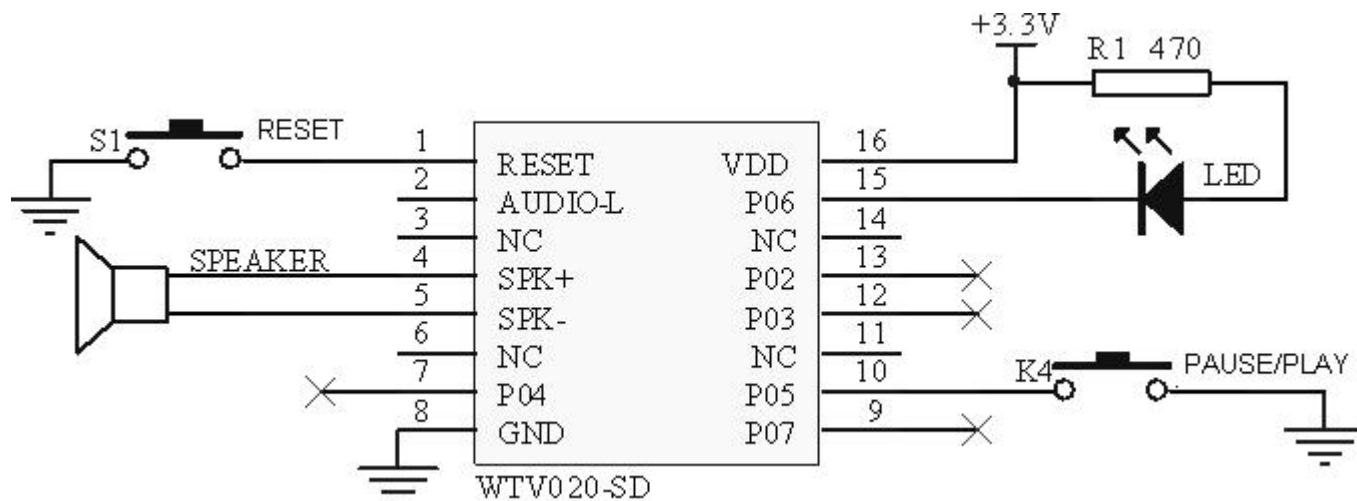


WTV020-SD-16P and WTV020-SD-20S in PWM output, "SPK+" ,"SPK-" to speaker .

In loop play mode,edge trigger. GND short touch I/O to trigger voice. P02、P03、P05、P07 are invalid, P04 trigger pause/play.

The power input is DC3.3v, if DC5v input, two serial diodes (IN4001 or 4007)connect to the positive input to low the voltage.

8.8.LOOP PLAY AFTER POWER ON (LEVEL TRIGGER PAUSE/PLAY)APPLICATION CIRCUIT(PWM OUTPUT)

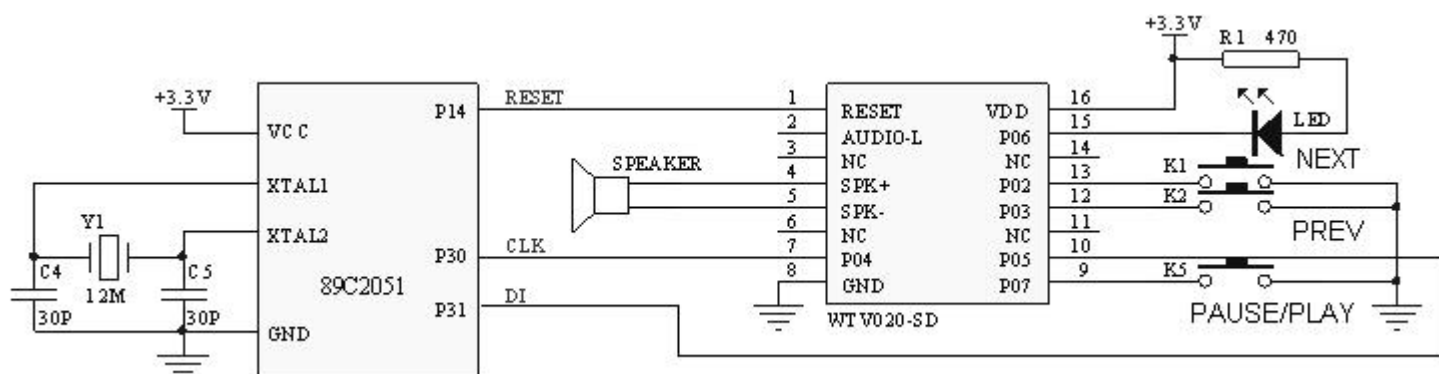


WTV020-SD-16P and WTV020-SD-20S in PWM output, "SPK+", "SPK-" to speaker .

In loop play mode,edge trigger. GND short touch I/O to trigger voice. P02、P03、P04、P07 are invalid, P05 trigger pause/play.

The power input is DC3.3v, if DC5V input, two serial diodes (IN4001 or 4007)connect to the positive input to low the voltage.

8.9.TWO LINE SERIAL MODE APPLICATION (PWM OUTPUT)



WTV020-SD-16P and WTV020-SD-20S in PWM output, "SPK+", "SPK-" to speaker .

In the two line serial mode, edge trigger. MCU control I/O, P02 is next, P03 is previous, P07 is pause/play.

The power input is DC3.3v, if DC5V input, two serial diodes (IN4001 or 4007)connect to the positive input to low the voltage.

9.VOICE FILES IN SD CARD

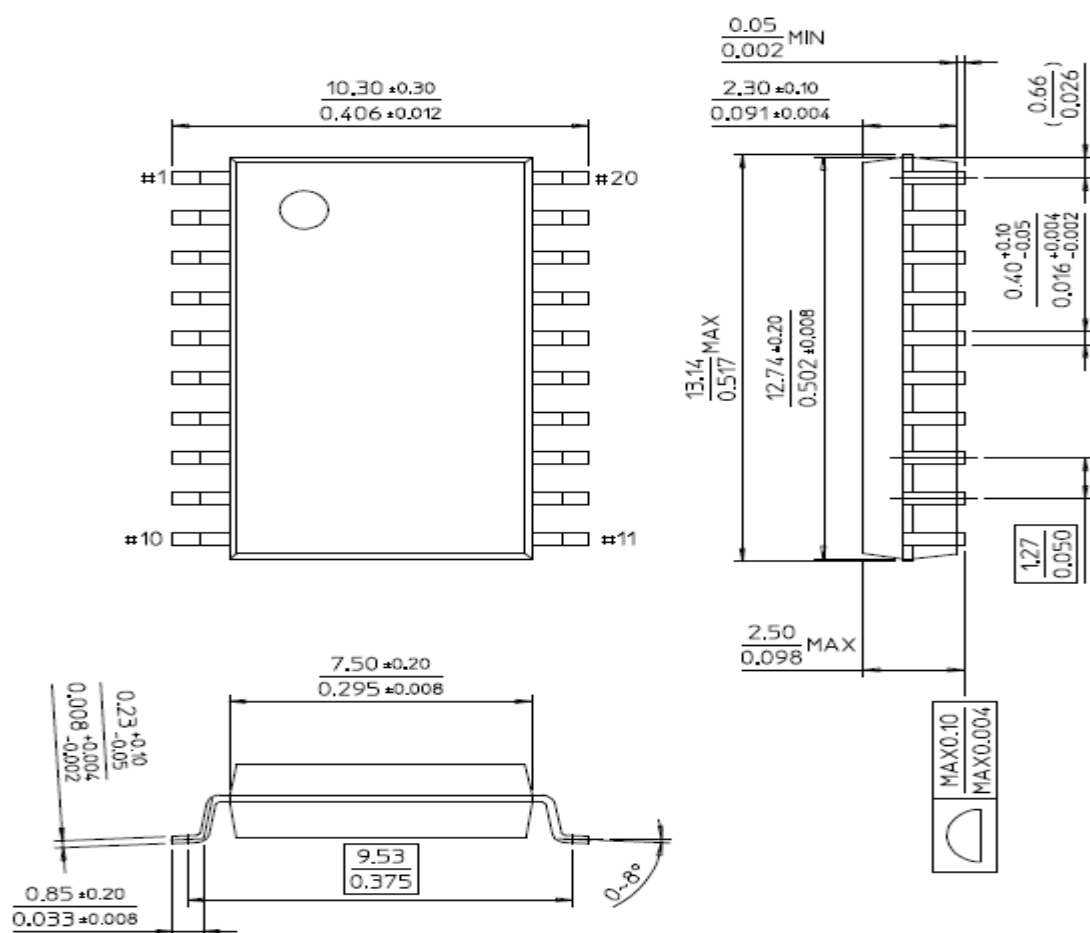
Load voice files to SD card, and rename the files in this way, for WAV format voice :0000.wav , 0001.wav, 0002.wav....., for ad4 format voice: 0000.ad4, 0001.ad4,0002.ad4 , 512 files max. In MP3 mode and Loop play mode, voice will play in order.

10. PACKAGE SIZE

10.1.WTV020SD-20S

PACKAGE: SOP20

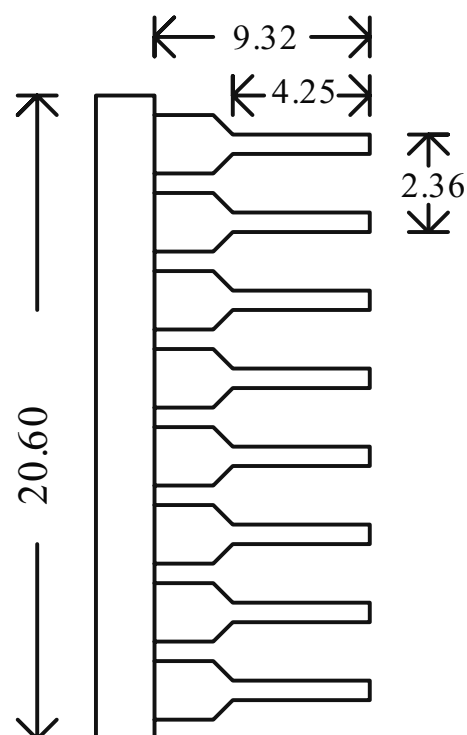
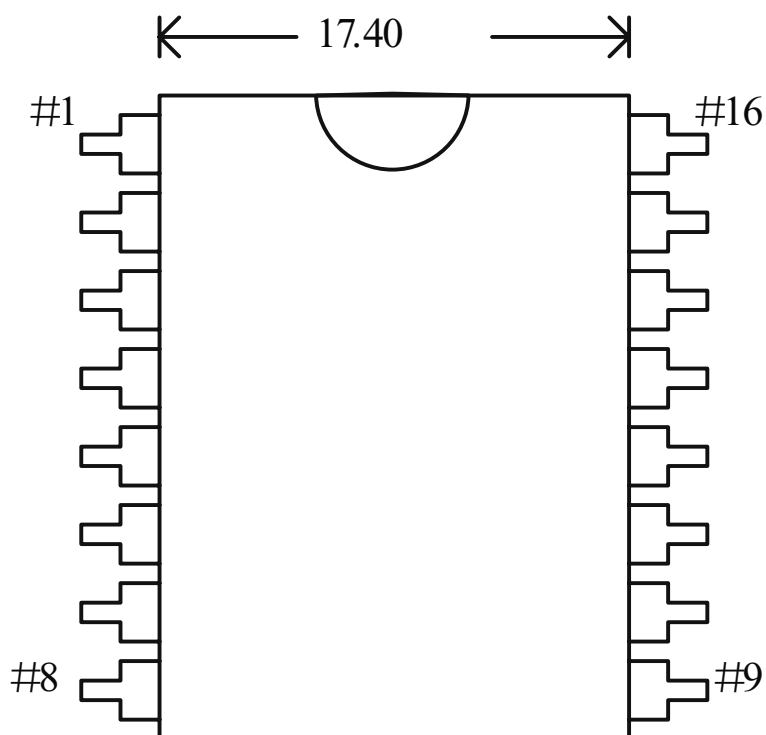
Unit: mm



10.2.WTV020-SD-16P

Package: DIP16

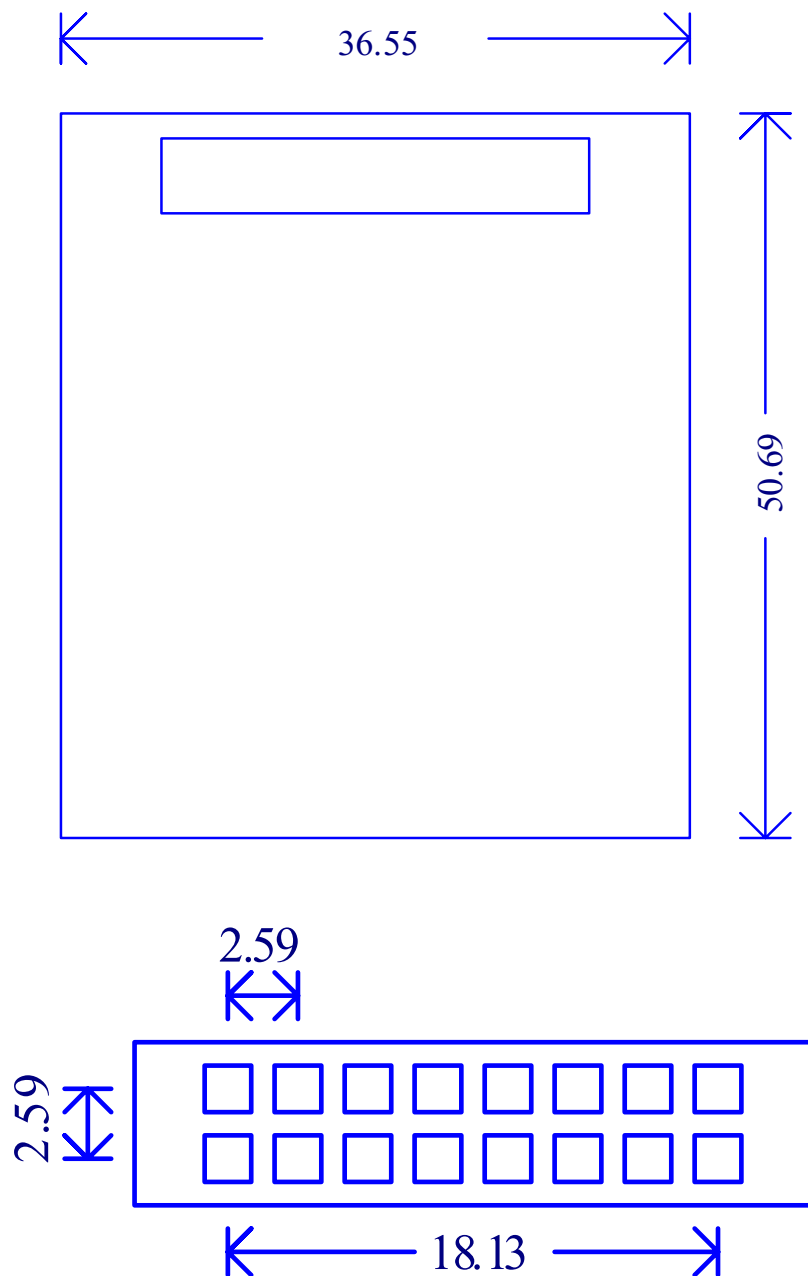
Unit: mm





10.3、WTV020-SD-20S MODULE

Unit: mm





11.SUPPLY INFORMATION

In order to save customers production cost ,and good looking, we are not only sell modules, also we can sell the chips on the module.customers can make it on their circuit board.

ITEM	PICTURE
WTV020-SD-16P	 A green printed circuit board (PCB) with a silver SD card slot in the center. The PCB has several gold-plated pins along the edges. The text "WTV020-SD" is printed vertically on the left side of the board.
WTV020-SD-20S	 A green printed circuit board (PCB) with a silver SD card slot in the center. The PCB has several gold-plated pins along the edges. The text "WTV020-SD-20S" is printed vertically on the right side of the board.
WTV020SD-20S (above two modules use this chip)	 A black integrated circuit (IC) chip with gold-plated pins. The chip has the "WT" logo and the text "WTV020SD-20S" and "NO.2 0808" printed on it.

12.VERSIONS

VERSION	DATE	DESCRIPTION
V1.3	2008-11-19	ORIGINAL