



Shen Zhen Shi Xin Zhong Xin Technology Co., Ltd

Address: Block 3, Dong Huan Industrial Park, Sha Jing Town, Bao' an District, Shenzhen
0755-84736169

tel : 0755-29179480/1 FAX:

web: www.c-chip.com.cn

F-6888 V1.1 manual

一、INTRODUCTION:

F-6888 is the Bluetooth 4.1+EDR module for intelligent wireless audio transmission products designed by our company and qualified by SIG with QDID: 79808. F-6888 also is the low cost stereo audio Bluetooth solution with high performance. The main chip uses BK3254 chip, providing the high quality and best compatibility. Without any driver, you can connect the module with your device to enjoy the high quality music easily. **Support smart voice prompt and report function; with TF card play function; with U drive play function; support internal LINE-IN; external FM 收音.**

二、APPLICATION:

F-6188 is used for Bluetooth audio transmission and it is convenience to connect with mobile phone .personal computer.PDA and other digital products with Bluetooth hardware to enjoy the music wirelessly The major application are included

- ※ Bluetooth speaker
- ※ Bluetooth stereo headset
- ※ hand-free phone
- ※ Bluetooth speaker with data transmission

三、FEATURES:

Bluetooth Profiles

- ※ Bluetooth V4.1 specification support
- ※ A2DP v1.2
- ※ AVRCP v1.4
- ※ HFP v1.5
- ※ AVCTP v1.3
- ※ SPP v1.2
- ※ GAVDP v1.2
- ※ AVDTP v1.2

四、PARAMETERS:

MODE	F-6888 V1.1
BLUETOOTH	Bluetooth V4.1
SUPPLY VOLTAGE:	DC3.3-4.2V
SUPPORT BLUETOOTH Profile	HFPV1.5, A2DPV1.2,AVRCPV1.4, GAVDP v1.2, AVDTP v1.2, SPP v1.2, AVCTP v1.3
WORKINGCURRENT	≤45mA
STANDBY CURRENT	<500uA
TEMPERATURE RANGE	-40°C to +80°C
WIRELESS TRANSMISSION RANGE:	>10m
TRANSMISSION POWER:	CLASS2, 4dbm
SENSITIVITY:	-80dBm<0.1%BER
FREQUENCY RANGE:	2.402GHz-2.480GHz
Interface:	I2C, SPI and UART interface

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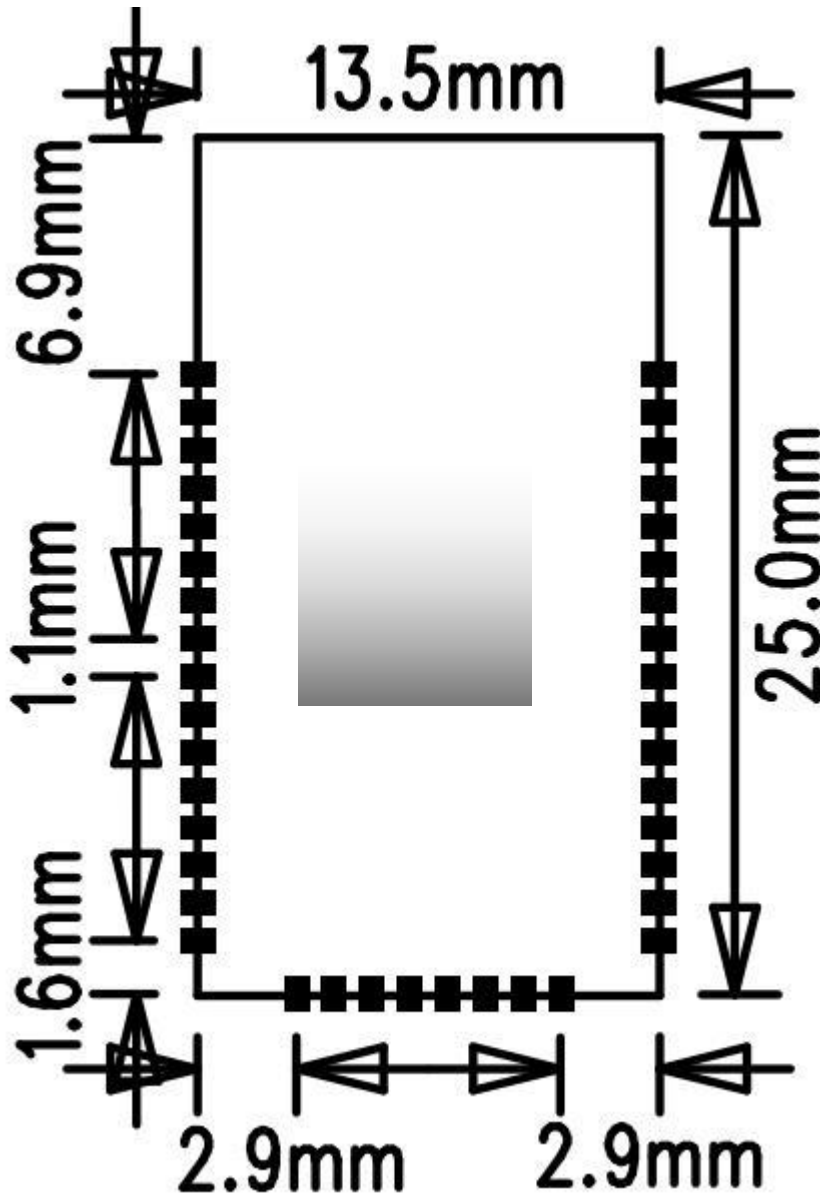
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AUDIO PERFORMANCE	SBC algorithm
THE AUDIO SNR:	≥75dB
MODULE SIZE	25X13.5X1.8MM

五、OUTLIN DEMENSION:



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六、DEVICE PIN OUTDIAGRAM

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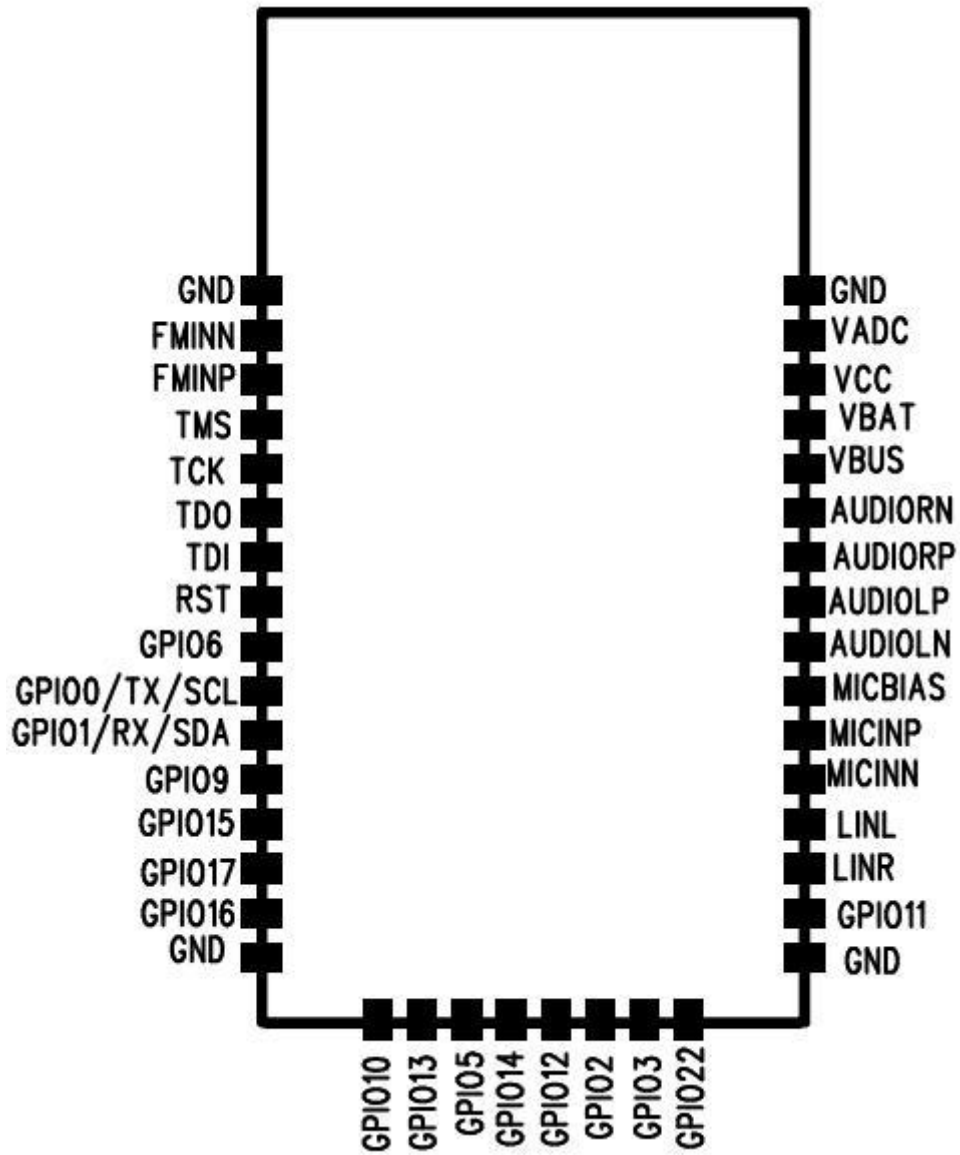


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七、PIN DEFINITION:

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Pin	Symb	I/O	Description
1	GND	GND	RF_GND
2	FMINN	FMINN	FMINN
3	FMINP	FMINP	FMINP
4	TMS(GPIO19)	Digital I/O	JTAG pin
5	TCK(GPIO18)	Digital I/O	JTAG pin
6	TDO(GPIO21)	Digital I/O	JTAG pin
7	TDI(GPIO20)	Digital I/O	JTAG pin
8	RSTN	Digital I/O	JTAG pin / Reset pin-low active
9	GPIO6	Digital I/O	GPIO6
10	GPIO0(TX)	Digital I/O	UART TX
11	GPIO1(RX)	Digital I/O	UART RX
12	GPIO9	Digital I/O	GPIO9
13	GPIO15	Digital I/O	GPIO15
14	GPIO17	Digital I/O	GPIO17
15	GPIO16	Digital I/O	GPIO16
16	GND	GND	Ground connect battery negative
17	GPIO10	Digital I/O	GPIO10
18	GPIO13	Digital I/O	GPIO13
19	GPIO5	Digital I/O	GPIO5
20	GPIO14	Digital I/O	GPIO14
21	GPIO12	Digital I/O	GPIO12
22	GPIO2	Digital I/O	GPIO2
23	GPIO3	Digital I/O	GPIO3
24	GPIO22	Digital I/O	GPIO22
25	GND	GND	GND
26	GPIO11	Digital I/O	GPIO11
27	LINR	AUX_INPUT	LINR
28	LINL	AUX_INPUT	LINL
29	NC	NC	NC
30	MICINP	MIC+	MICP
31	VMIC	VMIC	VMIC
32	AGND	AGND	AGND
33	AUDIOLP	Audio output	Left channel audio output positive
34	AUDIORP	Audio output	Right channel audio output positive
35	AGND	AGND	AGND

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36	VDD3IO	VDD3IO	VDD3IO
37	VBAT	Power supply	Power supply
38	VCC	Power	VCC
39	ADC	Power	GPIO4
40	GND	GND	GND

八、NOTICE:

In order to better SNR, please pay attention to the hardware design of PA, DC booster and the module power circuit to avoid influencing module

九、APPLICATION NOTES:

A. The signal strength is depending on the environment of Bluetooth application, such as wood and metal will block the transmission signal to get the shorter transmission distance.

B. Because of metal will block the signal transmission, it is recommend not to using the metal housing.

C. PCB layout guideline: no any copper existed in the antenna area of the module.

十、APPLICATION CIRCUIT:

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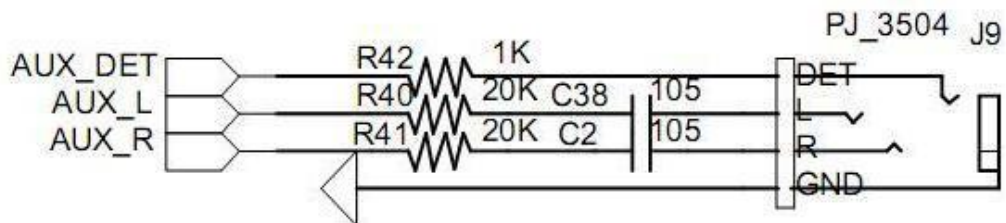
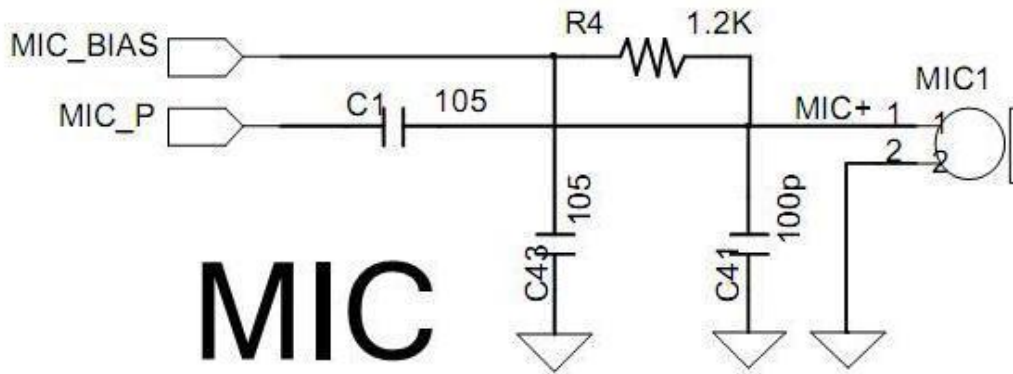
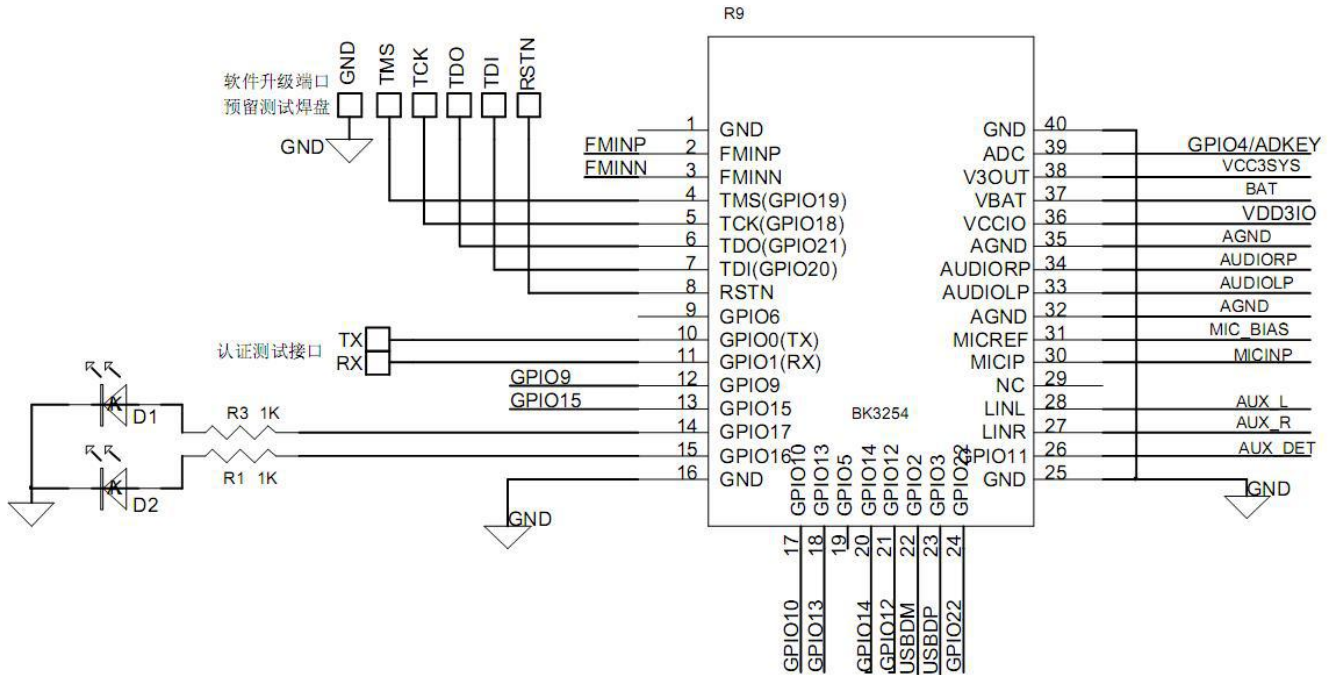


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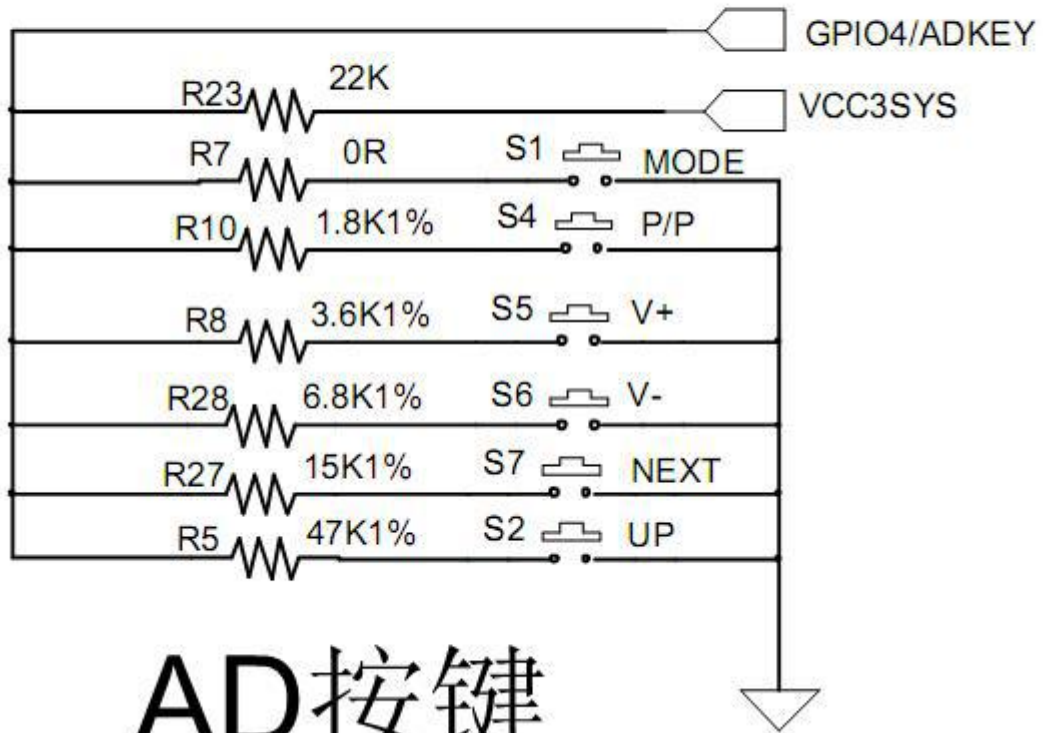


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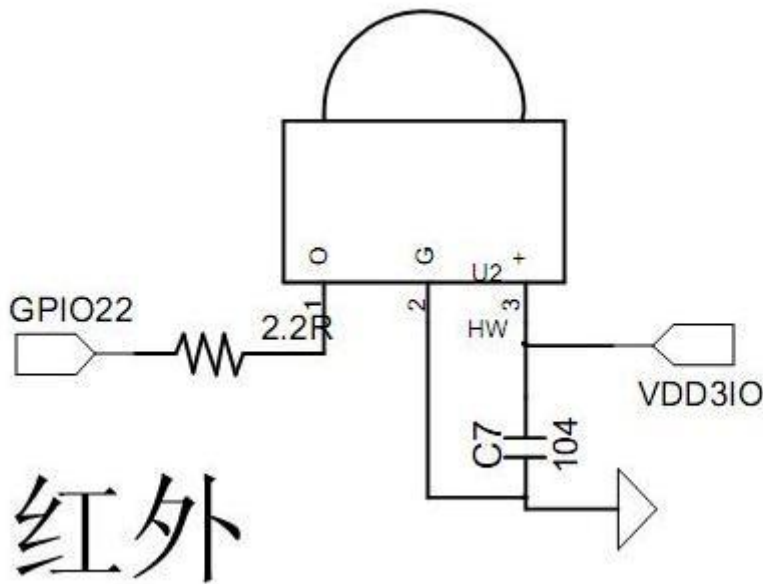
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AD按键



红外

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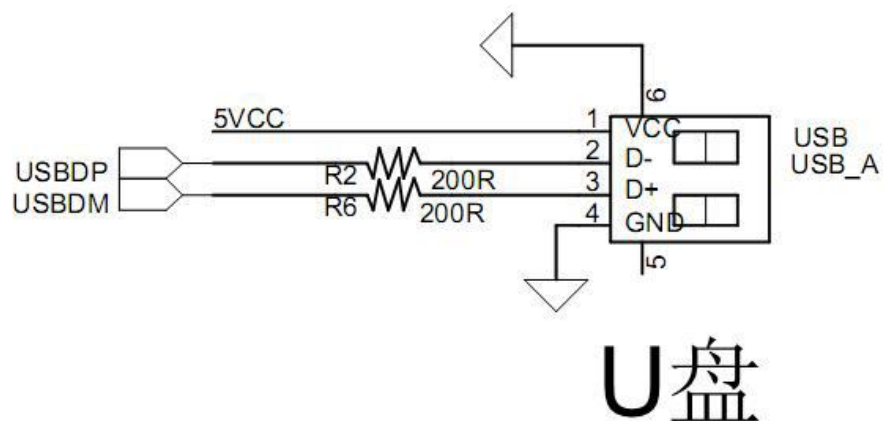
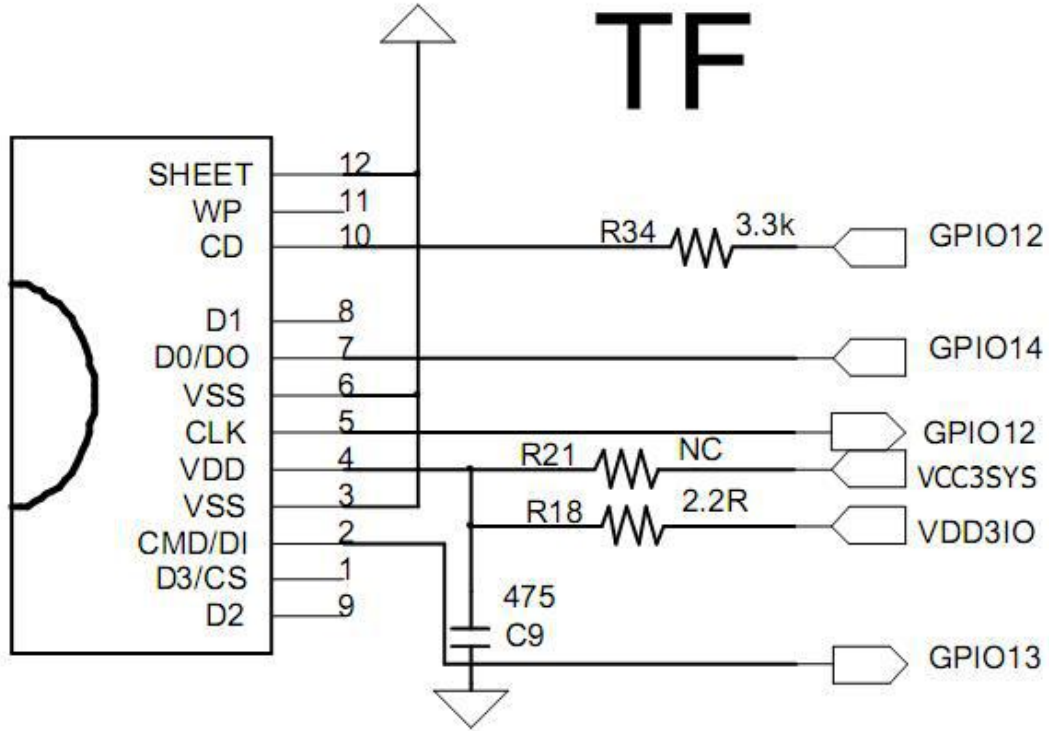


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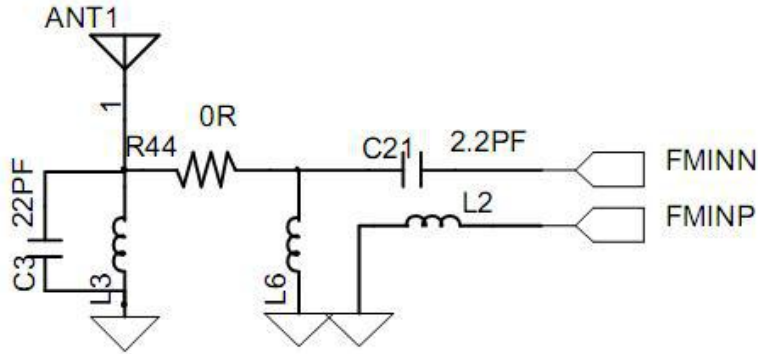


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FM_ANT

NOTE: 1. AUX_DET PIN have to be one 1K resistor .

2. SD card have to choose the specific device IO

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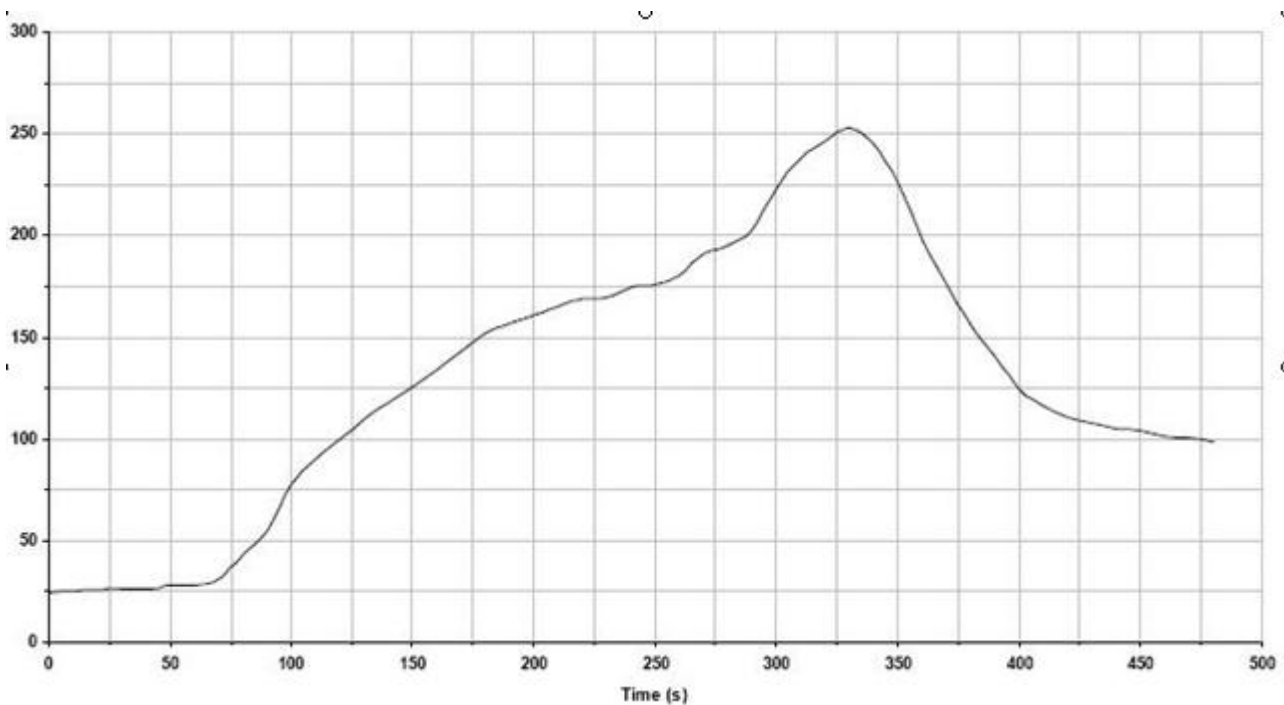
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十一、THE REFLOW TEMPERATURE



Key features of the profile:

- Initial Ramp=1-2.5°C/sec to 175°C equilibrium
- Equilibrium time=60 to 80 seconds
- Ramp to Maximum temperature (250°C)=3°C/sec Max
- Time above liquidus temperature(217°C): 45 - 90 seconds
- Device absolute maximum reflow temperature: 250°C

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