User Guide
Bluetooth Module
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Fcc ID: KKI-F-3086

F-3086 Module Specification

一. Products overview ：

F - 3086 bluetooth module for the company independent development of intelligent wireless audio data transmission products, is the low cost High efficiency of double track wireless transmission scheme, module used Taiwan and jie sound chip, for module Provides the high quality sound and compatibility, the overall performance is optimized. F - 3086 bluetooth module from the drive Way, the customer only need to put the module access application products, electricity, connecting key, can quickly achieve 。

二. Application field ：

This module is mainly used for short music transmission, which can be conveniently and notebook computers, mobile phone, PDA and digital products bluetooth device connected, realize music wireless transmission。

※Bluetooth stereo later

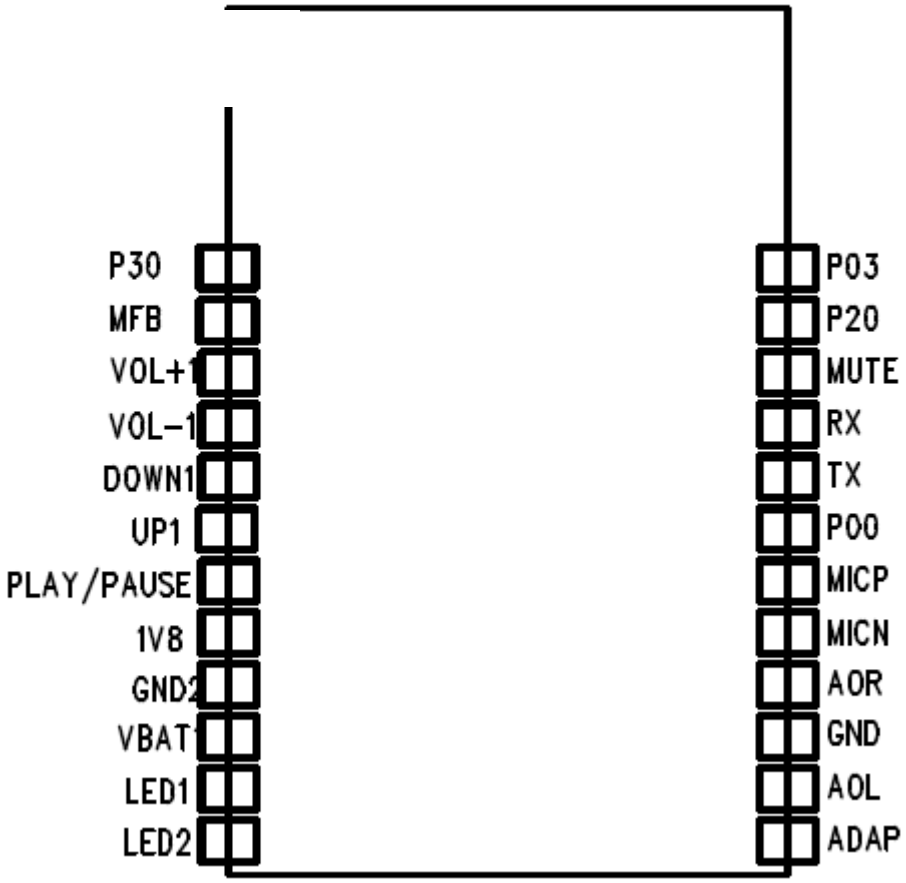
※Later bluetooth headset

※Later bluetooth wireless transmission audio

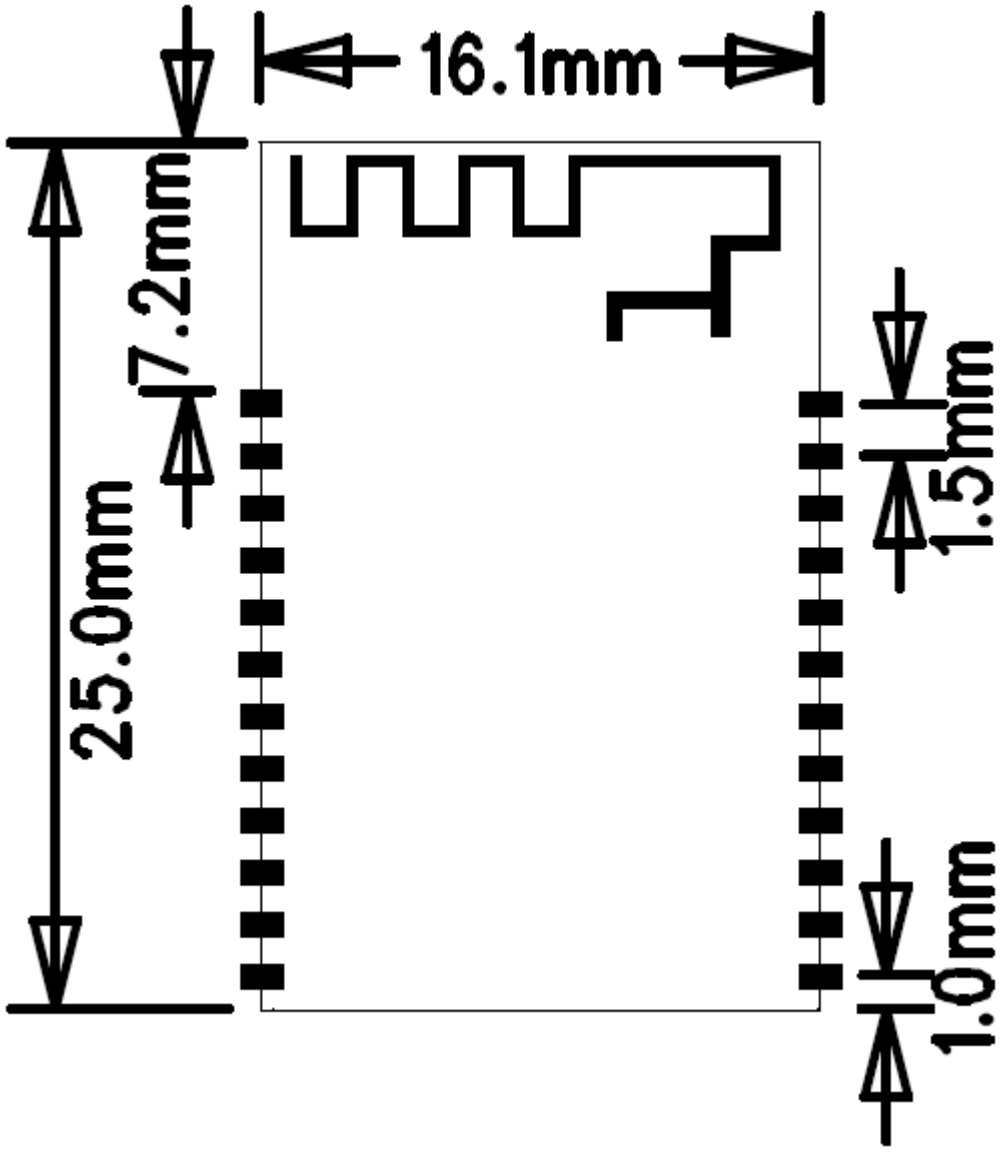
三. Performance parameters ：

Model	F-3086
Bluetooth specification	Bluetooth V3.0+EDR
Support bluetooth protocol	AVRCP 1.0，GAVDP 1.0，AVDTP 1.0，A2DP 1.0
Working current	≤30mA
Standby current	<300uA
Working voltage	3.3v—4.5v
Temperature range	-40℃ to +80℃
Wireless transmission range:	>10 米
Transmission power:	CLASS2 max 4dB
sensitivity:	-80dBm@0.1%BER
frequency range ：	2.402GHz-2.480GHz
interface:	PIO, UART
audio performance	High-performance stereo
audio signal to noise ratio:	≥75dB
distortion	≤0.1%
module size	25.00X16.00X2.00mm

四．Module feet bitmap ：


P30
MFB
VOL+1
VOL-1
DOWN1
UP1
PLAY/PAUSE
1V8
GND2
VBAT
LED1
LED2
P03
P20
MUTE
RX
TX
P00
MICP
MICN
AOR
GND
AOL
ADAP

五. Module size ：



六. Pin function declaration ：

1、Pin Configurations

PIN NO.	NAME	TYPE	FUNCTION
1	P30	Digital	Line In protect
2	MFB	Digital	Key long according to boot used/impending
3	VOL+	Audio	Volume +
4	VOL-	Audio	Volume-
5	DOWN1	Digital	Next song
6	UP1	Digital	prev
7	Play/pause	Digital	Play/pause
8	1V8	Power	LDO output 1.8V
9	GND2	Power	GND
10	VBAT1	Power	Batteries positive input
11	LED1	Sink	Light 1 control end
12	LED2	Sink	Light 2 control end
13	ADAP	Digital	adapter input
14	AOL	Audio	Left channel audio output
15	GND	Power	GND
16	AOR	Audio	right channel audio output
17	MICN	Audio	Left channel audio input
18	MICP	Audio	right channel audio input
19	P00	Digital	**Programming input/output**
20	TX	Digital	UART TX
21	RX	Digital	UART RX
22	MUTE	Digital	MUTE
23	P20	Digital	**Programming input/output**
24	P03	Digital	**Programming input/output**

note ：

1. The antenna side can not have metal

2. Not the large screen

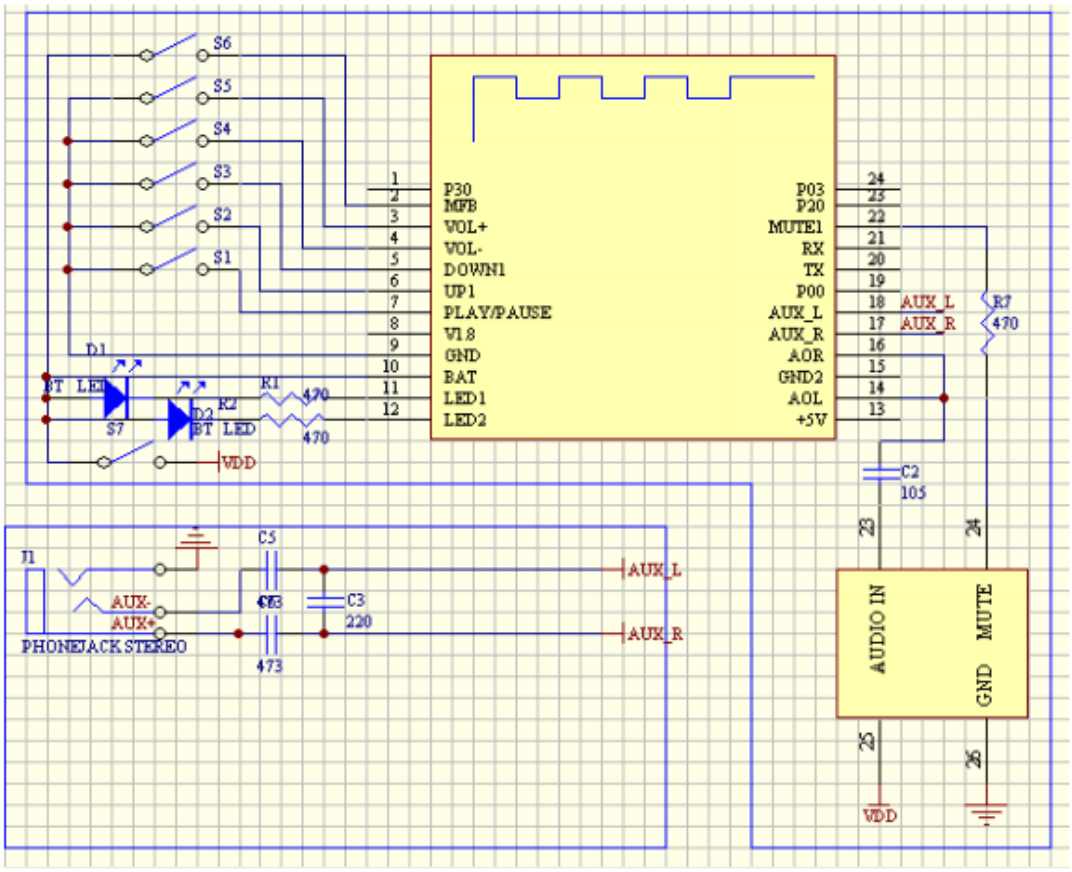
3. Should be in the module power PAD neighborhood place electrolytic capacitor.

4. Public end to noise have inhibition, need to be in power amplifier or master front increase op amp part to eliminate interference

5. Master, amplifiers, module must be ground is good, do not allow the existence island or closed loop, module to pick up

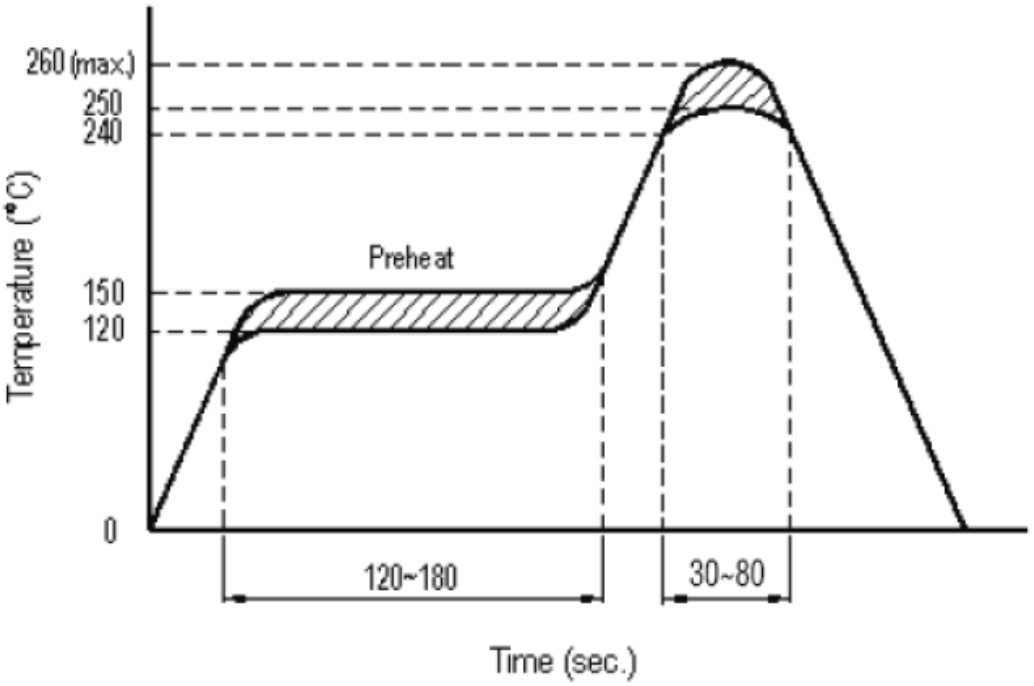
Point and master and amplifiers joint space between the potential difference must not be more than 1 mv

七. Application circuit diagram ：

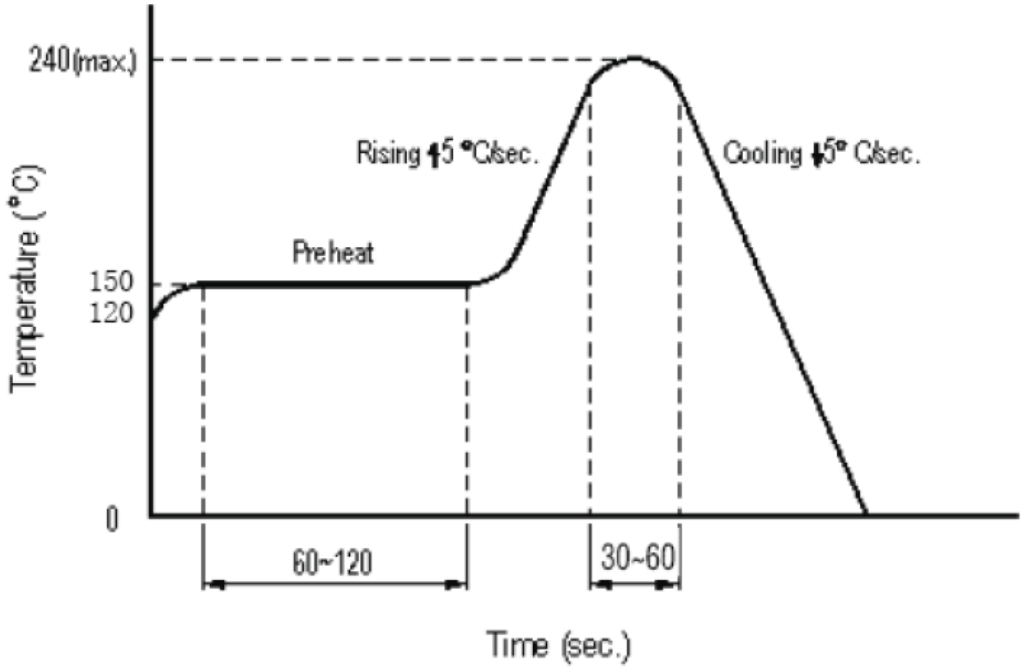


八．SMT ：

Reliability solder temperature chart



Reflow temperature chart:



九. FCC Regulatory Information.

Adherence to the following is required:

IMPORTANT: OEMs must test their final product to comply with unintentional radiators (FCC section 15.107 and 15.109) before declaring compliance of their final product to Part 15 of the FCC Rules.

The outside of device in to which the module is installed should be labeled ‘Contains TX FCC ID:KKI-F-3086’

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.