

Bluetooth  
2402MHz to 2480MHz

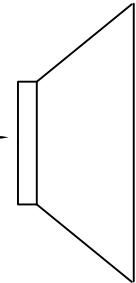
ANT

BT  
F-6008  
Bluetooth module

Audio

Amplifier  
FT2920P

Audio



SPEAKER  
4Ω 5W

LED Light

MCU  
FM8PE53

Regulator

Control Keys

3.7V 2200mAh  
Battery

5V USB Charger  
LY4057

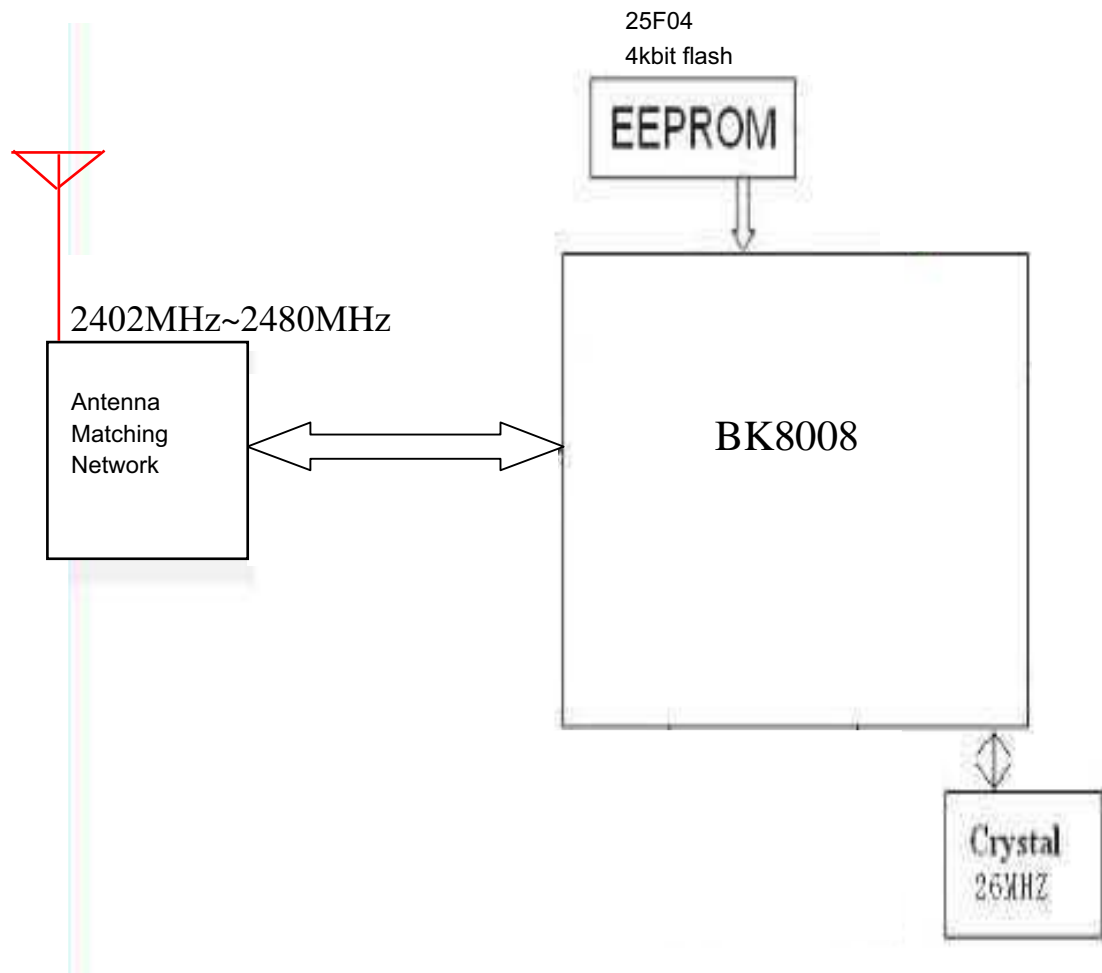
AUX IN  
L&R AUX

crystal 26MHz

1			
2			
3			
4			

GREAT POWER ENTERPRISE CO., LTD			
DESIGN	AUDITING	APPROVED	
Lin Jin			
TITLE		AWSHRTST	
NUMBER		REVISION	00
DATE	2016-7-11	SHEET	1/1

Bluetooth Module F-6008



## 1. General Description

The BK8008 chip is a highly integrated single-chip Bluetooth audio device. It integrates the high-performance transceiver, rich features baseband processor, and Bluetooth audio profile. The BK8008 cache based architecture enables it is fully programmable with any application, that it may be used for control and multimedia hybrid application. The internal dual stereo ADC converts the stereo line in input to digital audio that enables the line in use the digital equalizer. Hardware equalizer and accelerator offload the MCU, and make it suitable for low power headset application.

- Bluetooth 2.1+ EDR compliant
- -92 dBm sensitivity for 2 Mbps mode and 5 dBm transmit power
- A2DP v1.2, AVRCP v1.0 and HFP v1.5 profile
- Integrated 96 dB SNR stereo ADC and stereo DAC
- Five bands hardware equalizer
- Digital equalizer for stereo line in
- Hardware accelerator for low power
- Full duplex hands-free speakerphone
- Up to 250 mA charge controller

## 1.2. Applications

### 1.1. Features

- Operation voltage from 2.8 V to 4.2 V

- Bluetooth stereo speaker
- Bluetooth stereo headset
- Bluetooth control and multimedia hybrid

