

1. Brief introduction of WM24G02

SOYO-WM24G02, is the latest version of the wireless digital audio transmission module is developed by SOYO TECHNOLOGY CO. LTD. It is Hi-Fi and very good in resistance against various RF interferences, not only with the quality of the previous version, but with a I/O interface, which allows users to have more different functions. It is characterized by a lot advantages, such as highly integrated small form, high quality sound (with HDCD sound effect), powerful ability to work against different RF interferences, etc. It has the highest sampling ratio in the field and best sound effect of all our modules. The range of its input power can be as broad as 3.6—6 Volts and its audio output as high as 60mw. Its input interface is compatible with microphones and stereo frequency

2. Transmitter Module Description

- Input Mode: Audio is input from the Analog Audio Signal Input port
- A/D sample and Coder process: The Coder of Low Noise Audis will Translate the Analog Audio Signal from the Audio Port into Digital Signal with 64K Sampling rate at 16bit ,and applied the Coder program in MCU to code the data into special formula of SOYO Protocol ,
- Coder and Modulation: The MCU will code the digital signal from Coder and send the data to 2.4G Transmitter to Modulation into GFSK and transmit.
- The Crystal of 16.00MHz connect to MCU and 2.4G Transmitter IC to support the frequency interface

3. Receiver Module Description

- Output Mode: Audio is output from the Analog Audio Signal output port
- D/A output and Decoder process: The Decoder of Low Noise Audis will Translate the Digital Data from MCU into Analog Audio signal, and applied the Decoder program in MCU to Decode the data received from the 2.4G Receiver
- Decoder and Demodulation: The MCU will decode the digital data from 2.4G receiver and send the data to Decoder to translate the Data to analog audio signal.
- The Crystal of 16.00MHz connect to MCU and 2.4G receiver to support the frequency interface

4. Antenna Connect: Dipole antenna with reverse polarity SMA connector. The maximum Gain of this antenna is 2.15dBi.

5. GFSK modulation type used in this RF module whose rated RF output power is about 10dBm. The actual operational frequency is from 2402-2478MHz.