
BU72435 Board User Manual

1. Brief



BU72435 experiment board is used C8051F310 High-speed 8-bit CPU Driver BU72435 chip voice system. BU72435 is a set of USB, SD card, DAC and control system in one of the MP3 decoder chip. Through the IIC and buttons to control the chip from the USB memory and SD Card memory to read MP3 files, insert the headset will be able to enjoy the wonderful music after. Learning board code entirely open, contains a detailed comment. Welcome tertiary students and engineering staff ordered to study.

2. Characteristics

- 1)BU72435 is a set of USB, SD card, DAC and control system in one of the MP3 decoder chip. Through the IIC and buttons to control the chip from USB and SD card reader MP3 files.
- 2) BU72435 to support the three in the control mode. Are independent of the mode of a key control, as a slave by the host through the IIC mode control to achieve the effect of a control mode 2, through the IIC by the host control the play order of the mode 3. In this study, the control panel using the mode 2 mode.
- 3) BU72435 the quickest speeds of up to 12Mbps within the integration of the USB host module, support U disk player
- 4) Support SD card playback, support SPI mode, support for MMC and mini-SD card, SDHC card support, support SD Card V1.01 File System
- 5) file decoder: Supports FAT16 and FAT32, support for long file names VFAT, the number of each folder to play the file up to 65534, the number of folders up to 65534, each folder can contain the largest sub-folders 65534 , play with the catalog folder contains up to 8 layers, play

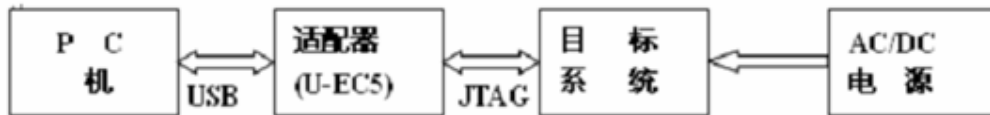
GuangZhou HongLan <http://www.gzhonglan.com>

Phone: 020-81934745 Sales: 13544322593 Technical support: 13544376154

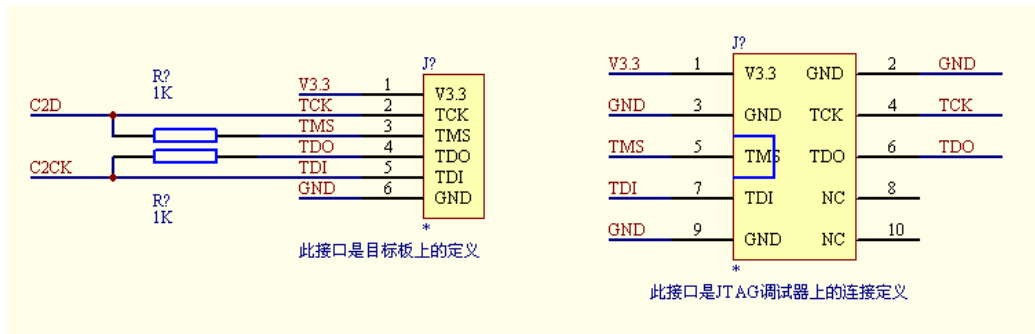
file format support: *. mp3, *. mp2 and *. mp1, supports a maximum 64-byte file or folder name, to support the maximum file 2G bytes

6) MP3 decoder: Using Frequency: 8K, 16K, 32K, 11.025K, 22.05K, 44.1K, 12K, and 48K, bit rates from 8 to 320kbps and variable bit rate, support ID3TAG V1.0, V1.1, V2.2 and V2.4

3. U-EC5 Emulator connection



JTAG connection:



Object board JTAG pin define:

Pin1 : 3.3V Pin2 : TCK Pin3 : TMS
Pin4 : TDO Pin5 : TDI Pin6 : GND

U-EC5 Emulator JTAG pin define:

Pin1 : 3.3V Pin2 : GND Pin3 : GND Pin4 : TCK Pin5 : TMS
Pin6 : TDO Pin7 : TDI Pin8 : NC Pin9 : GND Pin10: NC

4. Key Control

BU72435 experiment board provides seven keys for audio playback control.

PLAY : start playing music
PAUSE : pause playing music
STOP : stop playing music
VOLUP : increase the volume
VOLDOWN: reduce the volume
FF : the former a player
FB : After a player
DEV : U disk, SD card playback device to switch options

GuangZhou HongLan <http://www.gzhonglan.com>

Phone: 020-81934745 Sales: 13544322593 Technical support: 13544376154

5. Open Source

BU72435 learning board is used C language driver C8051F310 control BU72435 voice chip. Code detailed comments, transplant easily. All source code public.

```

088 void main(void)
100 {
101     McuInit(); //MCU初始化
102     EA = 1; //Global interrupt disable
103     while (1)
104     {
105         if (KEY_DEV==0)
106         {
107             BU72435_CHNG_DEV(); //改变播放源
108             KeyDelay();
109         }
110         else if (KEY_PB==0)
111         {
112             BU72435_PB_PLAY(); //向后一首
113             KeyDelay();
114         }
115         else if (KEY_FF==0)
116         {
117             BU72435_FF_PLAY(); //向前一首
118             KeyDelay();
119         }
120         else if (KEY_VOLDOWN==0)
121         {
122             BU72435_VOLDOWN(); //减小音量
123             KeyDelay();
124         }
125         else if (KEY_VOLUP==0)
126         {
127             BU72435_VOLUP(); //加大音量
128             KeyDelay();
129         }
130         else if (KEY_STOP==0)
131         {
132             BU72435_STOP(); //停止
133             KeyDelay();
134         }
135         else if (KEY_PAUSE==0)
136         {
137             BU72435_PAUSE(); //暂停
138             KeyDelay();
139         }
140     }
141 }

```

6. Contact us

BU72435 study board, Foundation of Guangzhou Hong Lan independently developed products. Developers and institutions are welcome to study health order. We will provide perfect products and services and technical forces to support.

GuangZhou HongLan <http://www.gzhonglan.com>

Phone: 020-81934745

Sales: 13544322593 13544376154

Technical support: 13544376154