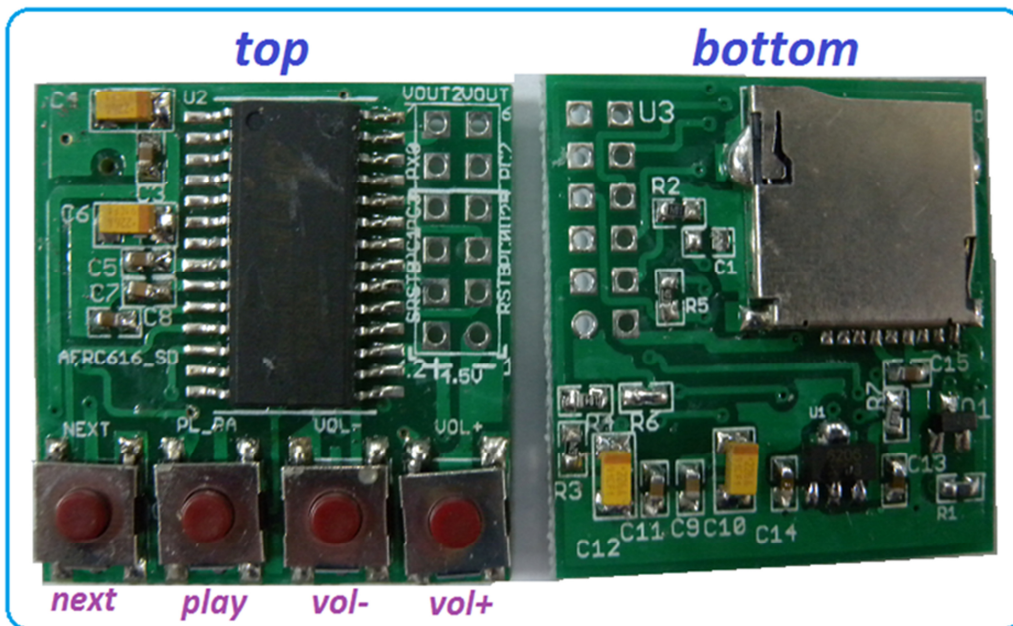# aFRC616-SD demo board user manual

- *Part no. : aFRC616-SD*
- *Vcc : 3V ~ 5.0V*
- *demo board size = 30 x 31 mm*
- *Memory : micro SD card 1G bits supplied by Aplus only*
- *Function : SBT mode and MP3 mode*
- *10,000 insertion/removal cycles*
- *Voice duration :*

	ULAW8-12K	PCM16-12K	PCM16-24K
Micro SD – 1Gb	164min.	82min.	41min.
Source file	8BIT-12K or higher Mono WAV file		

Use the SD Voice Compiler to compile and download the sound files to the SD Card. Then following the steps below to playback the sounds depending on the mode you have selected.

SBT mode :

1. **SBT** (play key) : Sequential x N (max. 64) --- 1 → 2 → ….. → N → 1 → …..
2. **LOCK** (next key) : Keep playing in loop the voice selected by SBT
3. **VOL** (vol- key) : 8 Levels of volume control (Default :Maximum)

    8 → 7 → 6 → 5 → 4 → 3 → 2 → 1(min.) → 8 (max.) → 7 → ……

Note :

Support enable/disable POWER ON LOOP; enable/disable SBT LOOP when compile

MP3 mode :

1. **PLAY/PAUSE** key :   Play or Pause the contents in al voice groups contents.
2. **NEXT** key :   Play all contents of the next voice groups.
3. **VOL+** key : volume + 1 (8 Levels of volume control (Default :Maximum))
4. **VOL-** key : volume – 1 (8 Levels of volume control (Default :Maximum))
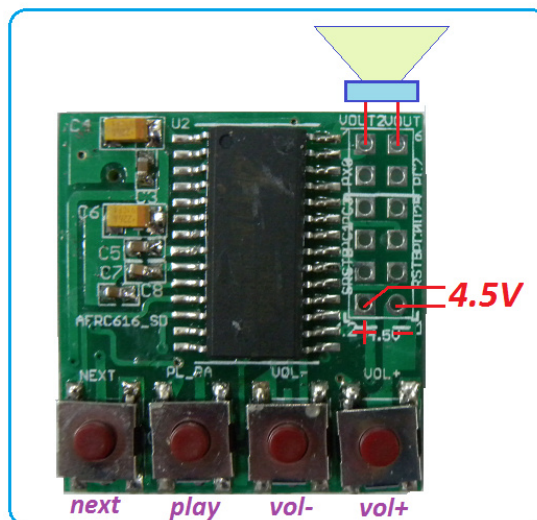
SPI Mode :

Connect the demo board to your MCU using the pins PC2, PC3 and PC0 as showing in the following figure. Refer to the SPI circuit in the AFRC616_Micro SD datasheet.

1. **/CS:** (Chip Select) to initiate the command word input
2. **SCK:** (Serial Clock) to clock-in the command word at rising edge
3. **SDI:** (Data-In) to input the command bits
4. **SDO**: (Data-Out) NC
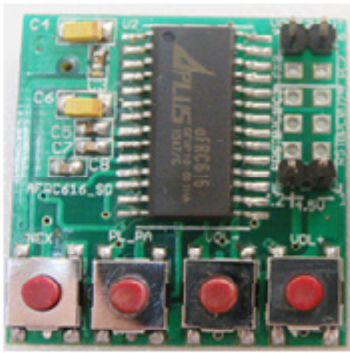5. **/BUSY**: (Busy Signal) to feedback response
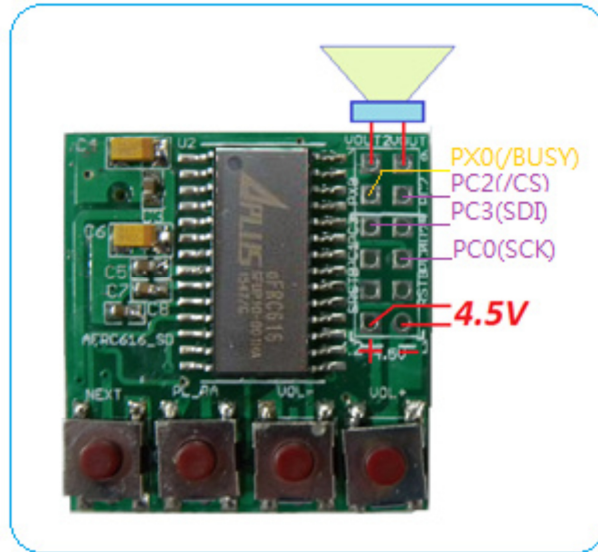
▪ *Demo board circuit :*
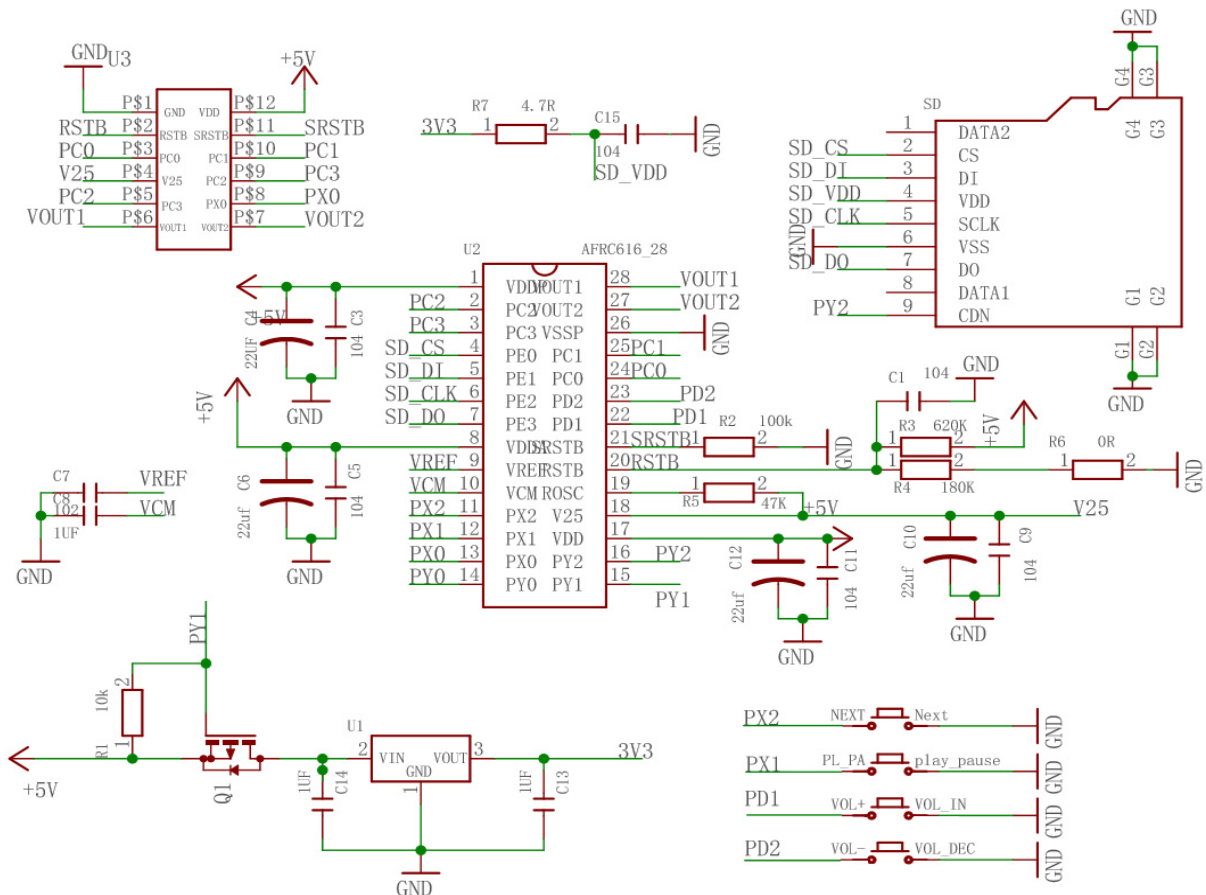
Optional

Add Extra 1.4 Watt Audio Amplifier AP4890K (AFRCSDAMP2)

(aFRC616-SD)

(aFRCSDAMP2)