

Overview:

The GPD2846A is an integrated MP3 player IC with FM radio and Line In features with 2W mono amplifier, maximum output 3W @ 5.0V supply (recommendation : 4Ω 3W speaker).

Main Features:

Support MP3 playback formats.

Playable T card / SD card, U disk, FM, and external audio sources (LineIn), inserted after the first broadcast, but also by Mode key switch.

Automatically detects the headset is plugged in, and so by the IO port (Mute)

Switch the external power amplifier directly, without external transistor.

Support the volume size, the number of songs stored on ... T card / SD card, U disk, users can save EEPROM

It can automatically detect and decide whether an external EEPROM in EEPROM or T card / SD card, U disk, save the settings.

In an AD-key port to achieve a variety of button combinations.

There are two groups AD-key keyboard to choose from.

FM radio chip supports 3: RDA5807, BK1080 and RTC6207E.

It does not support infrared remote control, USB device mode nor USB audio mode.

Package Type: SOP16 package sheet.

3.Application:

FM radio function MP3 player, no screen mini speaker.

Description:

Working Voltage: 3.7V Lithium Battery 600MA or 5V USB Power Supply

Chip:GPD2846A

Chip Footprint:SOP16

PCB Size:34.23MM*22.33MM*1MM

with 2W Mixed mono

With Power supply ,it can play Automaticly

With LED indicator

Supports MP3 format playback

Supports USB audio mode

Supports 3 types FM radio chip : RDA5807, BK1080 and RTC6207E.

Does not support infrared remote control.

Does not support USB device mode

Pin assignment:

1 V33REG DVDD33	digital power 3.3V.
2 V50REG VMCU / BAT	lithium battery input, 3.3V ~ 5V.
3 VSSREG DVSS	Digital ground.
4 DACOL DACL	left audio signal output.
5 VCOM	center audio signal Vref, please plug 1uF capacitor

voltage.

6	DACOR DACR	right channel audio output.
7	LINEIN_R	LineInR + L LineIn left + right input.
8	IOA4	AD-key buttons.
9	IOA3	FMCLK if IOA3 pull-down resistor to ground, IOA3 will output clock signal to the outside Hanging FM radio IC. If IOA3 is vacant, FM radio IC will Shall take their 32768Hz crystal.
10	IOA2	Mute Mute: Mute the external amplifier
11	DM DM	USB of DM.
12	DP DP	USB of DP.
13	IOA0	IO-key / LED (1) plug-in LED light: Output "1" represents the lit LED. (2) as well as IO-key1. (3) as well as options, are used to define the key mode.
14	IOB1	SD_CLK: clock output T card / SD card. SD_DET: detecting whether there is an SD card is inserted, to read "0" on behalf of insertion. Please connect a 3.3KΩ resistance.
15	IOB0	SD_CMD: T card / SD card command and response. I2C_CLK: I2C the clock; the external EEPROM, and FM.
16	IOB2	SD_DAT: data input T card / SD Card / output. I2C_DAT: I2C of data; and external EEPROM FM.

AD-key function / operation

(5-1) AD-key a total of S1 ~ S8 total of eight buttons, including four buttons S1 ~ S4 MP3 playback mode (that is, U disk and play Play SD card / T card) behavior by "IOA0 / LED pin whether the external pull-up resistor" to decide.
Please V33REG pulled through the 22KΩ resistor.
We IOA0 / LED not hang Roption called "key mode a" hang Roption called "key mode two."

Key definitions:

[Prev]: Previous, played on an MP3.

[Next]: Next, play the next MP3.

[P / P]: Play / Pause, play and pause between each switch between the two.

[V +]: Volume +, increase the volume.

[V ++]: Volume ++, long press will continue to increase the volume until you release the button.

[V -]: Volume-, decrease the volume.

[V --]: Volume--, long press will continue to decrease the volume until you release the button.

[Scan]: Scan ALL FM-band, the 87.5MHz ~ 108.0MHz automatic station search once again, and the signal of the radio channels

Storage. Store up to 50 stations.

[Scan +]: 108MHz to search, from the current direction of the channel to search for the closest valid 108MHz radio station, then stopped play

The radio station.

[Scan-]: 87.5MHz to search, from the current direction of the channel to search for the closest valid 87.5MHz radio, then stopped play

The radio station.

[CH +]: Skip to the next (frequency +) saved FM radio stations.

[CH-]: Skips to the previous (frequency -) saved FM radio stations.

[RW]: Rewind, MP3 rewind.

[FF]: Fast Forward, MP3 fast forward.

[Mode]: Mode switching, in sequence : SD card / T card / U disk / FM / Line In.

Note : when selecting a mode manually, make sure the expected peripheral is actually present. For example, after selecting Line In Mode, you must insert Line In line, the IC will cut down automatically if a mode is selected but the expected peripheral is absent.

[Repeat]: In two cycle mode switch, All (the whole song cycle) Single (single cycle)?.

[EQ]: the sound field effect "Normal (normal) Classic (Classic) Bass (bass) Live (live) Rock (Shake

Button	Keys Assignment		
	Button Name	Short Press	Long Press
S1	Prev/V--	Previous	Volume--
S2	P/P/Mode	Play/Pause	Mode
S3	Next/V++	Next	Volume++
S4			
S5	P/P	Play/Pause	
S6	Repeat	Single/ whole song cycle	
S7	Mode	Mode Change	
S8	EQ	EQ Change	