



summary

CS8679E is a 2x20W stereo; in the case of monophonic use; it can output up to 35W high-efficiency Class D audio power amplifier circuit. Advanced EMI suppression technology allows the use of cheap ferrohydrogen bead filters at the output port to meet EMC requirements. CS8679E audio power amplifier is designed for systems that need to output high-quality audio power. It uses surface mount technology and only requires a small number of peripheral devices to enable the system to have high-quality audio output power.

CS8679E has built-in over-current protection, short-circuit protection and over-heat protection, which effectively protect the chip from being damaged under abnormal working conditions. CS8679E can drive 8 speakers with loads as low as 4Ω and can provide up to 33W of continuous power; CS8679E has an efficiency of up to 92%, so no additional heat sink is needed when playing music.

CS8679E is available in a small EQA16 package, which is the same size as ESOP8E and can save customers considerable PCB area. Its rated operating temperature range is -40°C to 85°C .

describe

- Output power @ single channel

PO at 10% THD+N, VDD = 12V@RL = 4Ω

PO at 10% THD+N, VDD = 15V@RL = 4Ω

PO at 10% THD+N, VDD = 16V@RL = 4Ω

- Output power@stereo

PO at 10% THD+N, VDD = 12V@RL = 4Ω

PO at 10% THD+N, VDD = 13V@RL = 4Ω

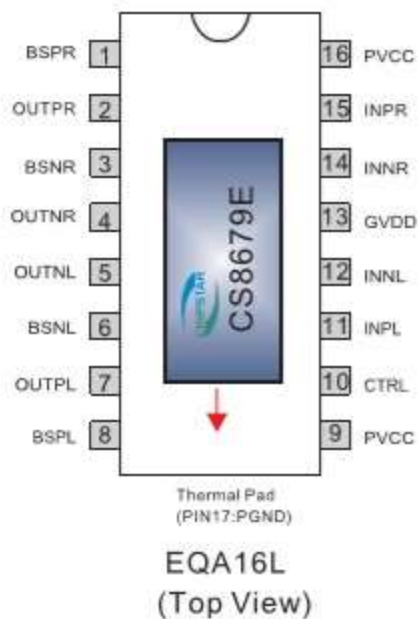
PO at 1% THD+N, VDD = 15V@RL = 4Ω

- Large power supply voltage range 5V~18V
- Efficiency up to 92%, no heat sink required
- Fixed 40x gain, integrated 10K input resistor, 400K feedback resistor
- Spread spectrum function
- Audio system with filter network, standby current less than 20mA
- No filter function
- Output pins facilitate wiring layout
- Good short circuit protection and temperature protection with self-recovery function
- Good distortion and anti-chatter function
- Differential input

Applications

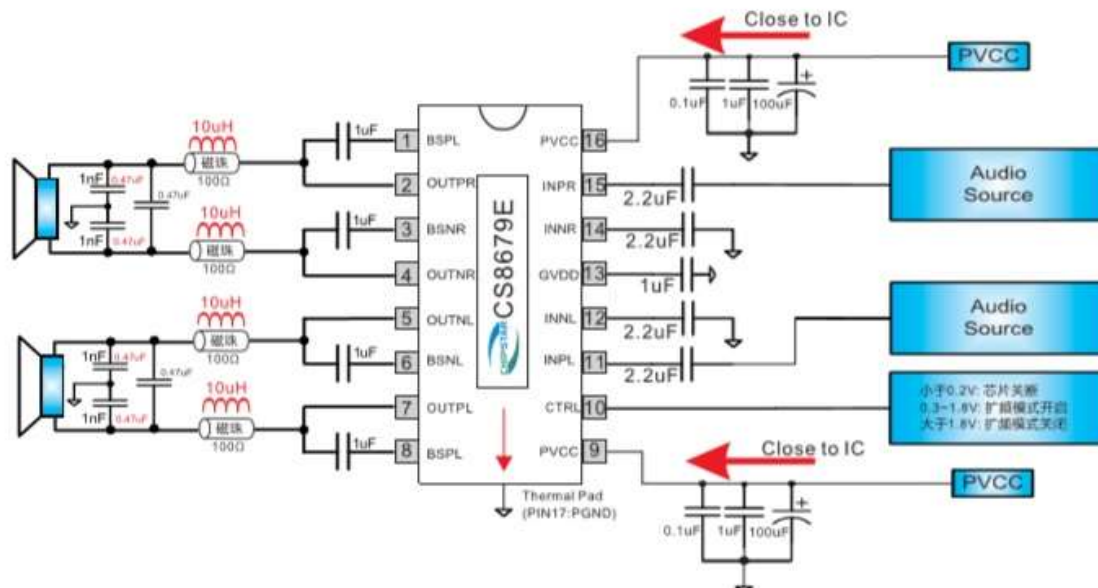
. Sound amplification equipment. Home audio systems

Pin arrangement and definition



序号	说明	属性	功能
1	BSPR	I	右声道正输出上管自举
2	OUTPR	O	右声道输出正端
3	BSNR	I	右声道负输出上管自举
4	OUTNR	O	右声道输出负端
5	OUTNL	O	左声道输出负端
6	BSNL	I	左声道负输出上管自举
7	OUTPL	O	左声道输出正端
8	BSPL	I	左声道正输出上管自举
9	PVCC	P	功率电源
10	CTRL	I	待机逻辑;扩频选择控制端,TTL 逻辑电压允许到PVCC
11	INPL	I	左声道音源输入正端
12	INNPL	I	左声道音源输入负端
13	GVDD	P	上管栅驱动电压
14	INNR	I	右声道音源输入负端
15	INPR	I	右声道音源输入正端
16	PVCC	P	功率电源
17	PGND	P	功率地(散热片)

Typical application diagram



备注: 12V以下的供电系统, 磁珠+1nF以及电感10uH+0.47uF均可过FCC的B级测试

图1 单端输入立体声输出典型应用图

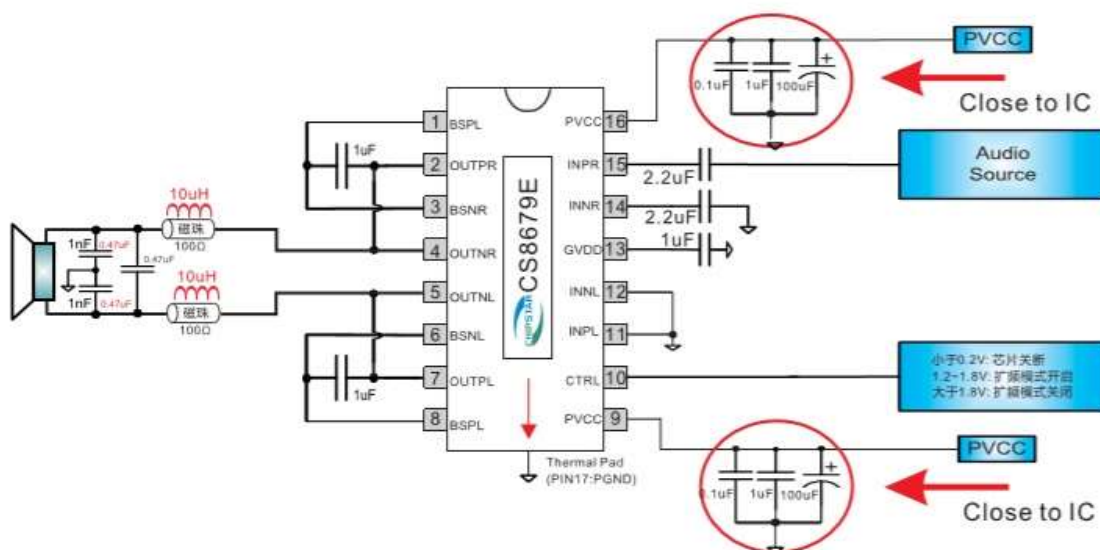


图2 单端输入,PBTL 输出单声道典型应用图

