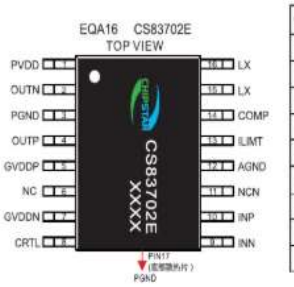
应用

便携式蓝牙音箱

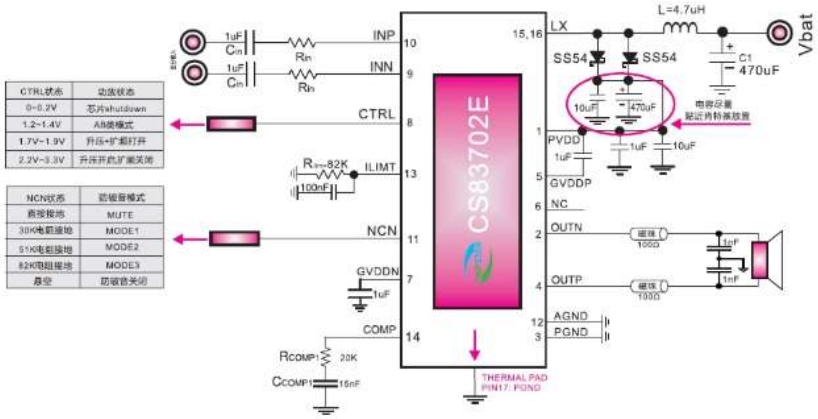
拉杆音箱

引脚排列及定义



管脚	说明	I/O	功能	管脚	说明	I/O	功能
1	PVDD	电源	功率电源端	9	INN	输入	音频信号输入负端
2	OUTN	输出	音频信号输出负端	10	INP	输入	音频信号输入正端
3	PGND	地	功率地	11	NCN	输入	防破音控制管脚
4	OUTP	输出	音频信号输出正端	12	AGND	地	模拟地
5	GVDDP	电源	上管栅驱动电压	13	ILIMIT	输入	电感峰值电流限制管脚
6	NC	—	空脚	14	COMP	输入	外部补偿管脚
7	GVDDN	电源	下管栅驱动电压	15	LX	输入	开关切换管脚,连接外部电感器
8	CTRL	输入	关断控制,升压和扩频模块控制	16	LX	输入	开关切换管脚,连接外部电感器
				17 (散热片)	PGND	地	功率地

典型应用原理图



summary

CS83705E is a Class R monophonic device suitable for dual-power supply applications powered by single or double-cell lithium batteries and 12V adapters. It has fixed gain, three anti-crack modes, AB/D switching, mute function, and built-in BOOST boost module. Audio power amplifier. When powered by two-cell lithium batteries (7.4V), the CS83705E can drive speakers as low as 2Ω and output a maximum constant power of 26W; the design of the CS83705E AB Class D switchable mode minimizes the impact of the power amplifier in the audio subsystem. FM interference provides the ultimate power output for end products.

The CS83705E's fully differential architecture and extremely high PSRR effectively improve the ability to suppress RF noise. The filter-less PWM modulation structure and built-in BOOST boost module, as well as the CS83705E's proprietary AERC (Adaptive Edge Rate Control) technology, greatly reduce EMI interference within the full audio bandwidth range, and are

suitable for 60cm audio cables. , with a margin of more than 20dB under FCC standards. In addition, CS83705E has built-in overcurrent protection, short circuit protection and overheating protection, which effectively protects the chip from damage under abnormal working conditions.

CS83705E provides a small EQA16L package for customers to choose. The package size is the same as ESOP8, and its rated operating temperature range is -40℃ to 85℃.

application

Portable bluetooth speaker

Trolley speaker