

68W High Performance Stereo Audio Amplifier

The LM3886 is a high-performance audio power amplifier capable of delivering 68W of continuous average power to a 4Ω load and 38W into 8Ω with 0.1% THD+N from 20Hz–20kHz.

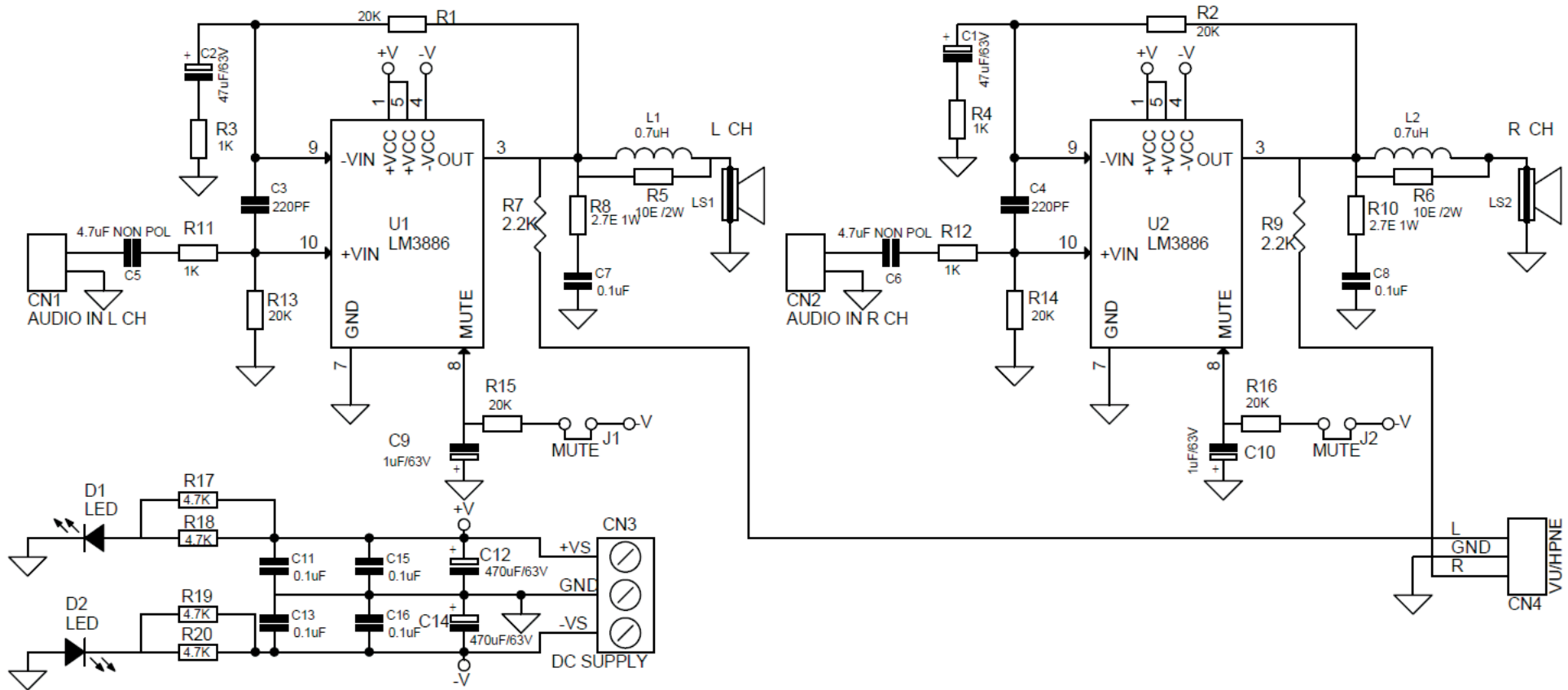
The performance of the LM3886, utilizing its Self Peak Instantaneous Temperature (°Ke) (SPiKe) protection circuitry, puts it in a class above discrete and hybrid amplifiers by providing an inherently, dynamically protected Safe Operating Area (SOA). SPiKe protection means that these parts are completely safeguarded at the output against overvoltage, under voltage, overloads, including shorts to the supplies, thermal runaway, and instantaneous temperature peaks.

The LM3886 maintains an excellent signal-to-noise ratio of greater than 92dB with a typical low noise floor of 2.0μV. It exhibits extremely low THD+N values of 0.03% at the rated output into the rated load over the audio spectrum, and provides excellent linearity with an IMD (SMPTE) typical rating of 0.004%.

Features

- 68W Cont. Avg. Output Power into 4Ω at VCC = ±28V
- 38W Cont. Avg. Output Power into 8Ω at VCC = ±28V
- 50W Cont. Avg. Output Power into 8Ω at VCC = ±35V
- 135W Instantaneous Peak Output Power Capability
- Signal-to-Noise Ratio = 92dB
- An Input Mute Function (J1 & J2 Jumper)
- Output Protection from a Short to Ground or to the Supplies via Inter Circuitry
- Output Over-Voltage Protection against Transients from Inductive Lo
- Supply Under-Voltage Protection, not Allowing Internal Biasing to Oc 12V, thus Eliminating Turn-On and Turn-Off Transients
- Input Slandered Audio Line signal





BOM			
SR.	QNTY.	REF	DESC.
1	1	CN1	2 PIN HEADER
2	1	CN2	2 PIN HEADER
3	1	CN3	3 PIN SCREW TERMINAL
4	1	CN4	3 PIN HEADER
5	2	C1,C2	47uF/63V
6	2	C3,C4	220PF
7	2	C5,C6	4.7uF NON POL
8	6	C7,C8,C11,C13,C15,C16	0.1uF
9	2	C9,C10	1uF/63V
10	2	C12,C14	470uF/63V
11	2	D1,D2	3MM RED & GREEN LED
12	2	J1,J2	2 PIN JUMPER
13	2	LS1,LS2	2 PIN SCREW TERMINAL
14	2	L1,L2	0.7uH/5A AIR INDUCTOR
15	6	R1,R2,R13,R14,R15,R16	20K
16	4	R3,R4,R11,R12	1K
17	2	R5,R6	10E /2W
18	2	R7,R9	2.2K
19	2	R8,R10	2.7E 1W
20	4	R17,R18,R19,R20	4.7K
21	2	U1,U2	LM3886

